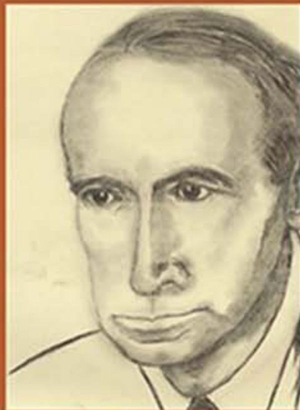
PALGRAVE STUDIES IN ECONOMIC HISTORY

# THE LEGACY OF ROSA LUXEMBURG, OSKAR LANGE AND MICHAŁ KALECKI

## Volume 1 of Essays in Honour of Tadeusz Kowalik

*Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski*

The Legacy of Rosa Luxemburg,
Oskar Lange and Michał Kalecki



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

*Palgrave Studies in the History of Economic Thought Series*

Palgrave Studies in the History of Economic Thought publishes contributions by leading scholars, illuminating key events, theories and individuals that have had a lasting impact on the development of modern-day economics. The topics covered include the development of economies, institutions and theories.

*Titles include:*

*Jan Toporowski (author)*
MICHAŁ KALECKI AN INTELLECTUAL BIOGRAPHY
Volume 1 Rondezvous in Cambridge 1899–1939

*Timothy Shenk (author)*
MAURICE DOBB: Political Economist

*Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski (edited by)*
THE LEGACY OF ROSA LUXEMBURG, OSKAR LANGE AND MICHAŁ KALECKI
Volume 1 of Essays in Honour of Tadeusz Kowalik

*Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski (edited by)*
ECONOMIC CRISIS AND POLITICAL ECONOMY
Volume 2 of Essays in Honour of Tadeusz Kowalik

The full list of titles available is on the website:
www.palgrave.com/economics



---

**Palgrave Studies in the History of Economic Thought Series**
**Series Standing Order ISBN 978–1–137–35018–3**
*(outside North America only)*

You can receive future titles in this series as they are published by placing a standing order. Please contact your bookseller or, in case of difficulty, write to us at the address below with your name and address, the title of the series and the ISBN quoted above.

Customer Services Department, Macmillan Distribution Ltd, Houndmills, Basingstoke, Hampshire RG21 6XS, England

---

# The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki

## Volume 1 of Essays in Honour of Tadeusz Kowalik

Edited by

Riccardo Bellofiore
*Associate Professor of Economic Science, University of Bergamo, Italy*

Ewa Karwowski
*School of Oriental and African Studies, London, UK*

and

Jan Toporowski
*School of Oriental and African Studies, London, UK*

palgrave macmillan

First published 2014 by
PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

Palgrave Macmillan is the global academic imprint of the above companies and has companies and representatives throughout the world.

Palgrave® and Macmillan® are registered trademarks in the United States, the United Kingdom, Europe and other countries

ISBN: 978–1–137–33559–3

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

# Contents







10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# List of Illustrations

## Figure



## Tables







10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# Acknowledgements

The editors of these volumes wish to thank Irena Kowalik and Mateusz Kowalik for their generous support; Taiba Batool and Gemma Shields at Palgrave for their encouragement and understanding; Hanna Szymborska for research assistance; Anita Prażmowska and Giovanna Vertova for their patience; and, above all, Tadeusz Kowalik for his untiring inspiration. Their kindness, and the generosity of the contributors, has made these volumes the outstanding tribute that Tadeusz Kowalik deserves, and leaves the editors with sole responsibility for remaining errors.

# Notes on Contributors

**Riccardo Bellofiore** is Professor of Economics at the University of Bergamo, Italy.

**Meghnad Desai** is Emeritus Professor of Economics at the London School of Economics.

**John Bellamy Foster** is Professor of Sociology at the University of Oregon, USA, and Editor of *Monthly Review*.

**G.C. Harcourt** is Visiting Professorial Fellow at the University of New South Wales, Australia, Emeritus Reader in the History of Economic Theory at the University of Cambridge, UK, and Emeritus Professor of Economics at the University of Adelaide, Australia.

**Ewa Karwowski** is a researcher at the School of Oriental and African Studies, University of London.

**Peter Kriesler** is Associate Professor of Economics at the University of New South Wales, Australia.

**Marcin Kula** is Professor in the Institute of History of Warsaw University, Poland.

**Roberto Lampa** is Full Researcher at CONICET (National Scientific and Technical Research Council) and Adjunct Professor at the University of Buenos Aires, Argentina.

**Noemi Levy-Orlik** is Professor of Economics at the Universidad Nacional Autónoma de México.

**Jo Michell** is Lecturer in Economics at the University of the West of England, UK.

**Gabriele Pastrello** is Professor of Economics at the University of Trieste, Italy.

**Jan Toporowski** is Professor of Economics and Finance at the School of Oriental and African Studies, University of London.

**Andrew B. Trigg** is Senior Lecturer in Economics at the Open University, UK.

**Paul Zarembka** is Professor of Economics at the State University of New York at Buffalo, USA, and Editor of *Research in Political Economy*.





10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# Introduction: Tadeusz Kowalik and the Political Economy of the 20th Century

*Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski*



Tadeusz Kowalik (1926–2012) is best known as the editor of the two great Polish political economists, Michał Kalecki (1899–1970) and Oskar Lange (1904–1965), an advisor to the Polish trades union movement *Solidarity* during the 1980s, when it played a key part in bringing down the Communist Government in Poland, and subsequently a fierce critic of the capitalism established in his country. In his work Kowalik challenged both the commonly accepted view of the 'Keynesian Revolution' and the inability of Polish communists to come to terms with their revolutionary past and find a place for themselves in the modern world.

Tadeusz Kowalik was born on 19 November 1926 in the village of Kajetanówka outside the city of Lublin in Eastern Poland, traditionally the poorer, more backward part of the country. He completed his undergraduate studies in law at Warsaw University with outstanding results in 1951. Supervised by Oskar Lange, he studied for a doctorate in Economics on the work of the Polish sociologist and economist Ludwik Krzywicki; this was awarded to Kowalik in 1958. By then he was already editor of the weekly newspaper *Życie Gospodarcze* (*Economic Life*), where he promoted reform of the over-centralised state economic system. He lasted only two years in this position before being removed when the ruling party started to close down the discussion on reform. However, under the patronage of his supervisor he kept his position as Lecturer in Political Economy at the social science university run for activists in the ruling party, and commenced research for his post-doctoral degree, the *habilitacja*.

During his first visit to the UK, in the early 1960s, Kowalik defended a version of the then fashionable Convergence Thesis, that the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

communist and the capitalist worlds were both gradually becoming welfare technocracies tempered by democracy. In London, Kowalik met Isaac Deutscher, the distinguished Marxist historian and member of the pre-war Communist Party of Poland (KPP). The KPP had been disbanded in 1938 and its leaders executed by Stalin.

In October 1965, Lange died. By then Kowalik was working with Kalecki in criticising the economic policy failures of the government and distortions in economic planning. He was also collaborating with the philosopher Leszek Kołakowski and the economist Włodzimierz Brus, using their party positions to protect dissidents within and outside the ruling party. In the crackdown on Jews and 'revisionists' in 1968, Kowalik was expelled from the Party. The meeting with Deutscher was put forward as evidence of the ideological laxity that needed to be purged, despite the formal rehabilitation of the KPP in 1956. However, Kowalik retained his position at the Polish Academy of Sciences. Much of his output for the next two decades appeared under the name of friendly associates who were not subject to the ban on publication, most notably Edward Lipiński, at that time the oldest and most distinguished Polish economist, who had given Kalecki his first job in 1929. After Kalecki's death in 1970, Kowalik took on the additional responsibility of supervising the editing by Jerzy Osiatyński of the Kalecki *Collected Works*.

From 1968, Tadeusz Kowalik was active in unofficial, dissident, university discussions; wage austerity was reimposed in Poland after 1976, leading to a resumption of strikes. These culminated in the emergence of the *Solidarity* trade union. In 1980 Kowalik travelled to Gdańsk to assist the workers in their negotiations with the Polish government. He wrote and edited prolifically in the underground press in support of Solidarity and its principles of democratic syndicalism. Here he drew on the political programmes and critiques of Soviet industrial organisation put forward in Poland in the 1920s and 1930s by non-Communist Marxists, among them his mentor Oskar Lange. There were also the themes of reformed socialism that Kowalik had been advocating since the 1950s.

## 1 Revising Keynesian political economy

Tadeusz Kowalik's political economy was inspired by his political activism. He had been radicalised by the poverty he experienced in his youth and the struggle against the Nazi occupation of Poland, becoming a member of the Polish Workers' Party in 1948. His economic ideas were formed initially by Oskar Lange, who had encouraged Kowalik to read Marx and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

take seriously all schools of thought in economics. Lange bequeathed to Kowalik something of the characteristic Lange approach to Marxism, according to which economics was losing its ideological character, and 'bourgeois' economics differed only in not being conscious of its socialist potential. Kowalik therefore shared with Lange an openness and non-dogmatic approach to economic analysis that made them both liked and respected by economists of all persuasions.

But whereas Lange formed the style of Tadeusz Kowalik's political ideas, the originality of those ideas came from Kowalik's collaboration with Kalecki and his research on Rosa Luxemburg, which gave Kowalik a radical new approach to the theory of Kalecki – and in turn caused Kalecki himself to review his own work. After the death of John Maynard Keynes in 1946, Joan Robinson advanced the view that Kalecki was the 'more consistent' Keynesian (Robinson, 1969). Among Marxists (with certain notable exceptions, such as Maurice Dobb in Cambridge and Paul Sweezy in the US) Kalecki came to be regarded as a 'Left Keynesian', using essentially Keynesian ideas about the importance of fiscal policy in maintaining a level of aggregate demand appropriate to full employment to argue for socialism (for example, King, 2002). Tadeusz Kowalik was a key figure in challenging the framing of Kalecki within a Keynesian theoretical and policy agenda.

In the early 1960s, Kowalik was asked to contribute a biographical chapter to the *festschrift* that was to celebrate Kalecki's 65th birthday in 1964 (*Problems of Economic Dynamics*, 1964). As part of his preparation for this, Kowalik undertook a series of interviews with Kalecki about his work and his ideas. It is now apparent that these interviews are more than just a record of Kalecki's key publications and his discussions with Keynes; Kowalik took Kalecki back to the debates among radical socialists in Poland during the 1920s and early 1930s, centred on the instability of capitalism, mass unemployment and economic depression. The central ideas in these debates were those of the Austrian Marxist Rudolf Hilferding, Rosa Luxemburg and the Russian Marxist Mikhail Tugan-Baranowski. Following his interviews with Kowalik, Kalecki returned to these authors and went on to publish a paper recording his understanding that Luxemburg and Tugan-Baranowski had both addressed the key issue of aggregate demand in capitalism. However, aggregate demand was not important in just the Keynesian sense that it directly determined the levels of employment; in a capitalist economy the key function of demand is that it is necessary to allow capitalists to realise profits. It is in this context that the problem of aggregate demand is found in Tugan-Baranowski and Rosa Luxemburg; according to Kalecki,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

both had identified the effective constraint on capitalist development. Their theories pointed to the key role of external markets (including armaments) and the absurdity of an antagonistic system in which employment and worker consumption depend on the production of machines for the production of machines (or, worse, production as a means of destruction), both so apparent in post-War US capitalism. But, as Kowalik argued, Kalecki, together with Steindl, presented a more convincing and comprehensive explanation of the failure of capitalism to realise its dynamic prospectus.

Kowalik and Kalecki returned to these ideas after 1968, both of them now disgraced following the anti-semitic, anti-revisionist purges of that year. The outcome was their joint paper *The 'Crucial Reform'* in capitalism, an attempt to make sense of the Keynesian Revolution in economic policy within the framework of those early Marxist discussions about whether free market capitalism could maintain full employment without resorting to fascism or war (Kalecki and Kowalik, 1971). The paper was published in Italy just as workers' strikes in Poland forced a change of government, but without rehabilitating those who had been purged in 1968. But by the time the paper came out, Kalecki was dead. Kowalik retained his position in the Polish Academy of Sciences as editor of the Lange Collected Works; the Academy had an autonomous position among Polish institutions dominated by the communist authorities, and the Lange project was considered of national and international importance. In 1973 the project was expanded to include the publication of a collected edition of Kalecki's writings, under Kowalik's general supervision.

## 2 The political economy of Rosa Luxemburg

A rare exception to the ban on publishing under his own name was made in 1971, when Tadeusz Kowalik's book *Róża Luksemburg Teoria Akumulacji i Imperializmu* was published (Kowalik, 1971). This book is Tadeusz Kowalik's masterpiece. In it he tried to reconstruct the political economy of the first half of the 20th century, a task that Karl Marx had set out to achieve for mid-19th century political economy but never completed.

To understand the true significance of Tadeusz Kowalik's achievement, it is necessary to understand the circumstances under which the book arose and (as in Marx) the political economy of his time. The political conditions that give significance to Tadeusz Kowalik's political economy started in 1938, with the dissolution by the Communist International of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the Polish Communist Party, the KPP, on grounds that the Party had fallen too much under the influence of Rosa Luxemburg and Leon Trotsky. In 1956 the KPP was formally rehabilitated, and in 1963 the first post-war Polish edition of Rosa Luxemburg's *The Accumulation of Capital* appeared (Luxemburg, 1913a). In that same year, Tadeusz Kowalik completed the post-doctoral thesis that was to become *Róża Luksemburg Teoria Akumulacji i Imperializmu*. The starting point for Kowalik's analysis was the Russian Narodniks' explanations as to why, in their view, capitalism could not develop in Russia with the limited markets that the country provided at the end of the 19th century. This led to Tugan-Baranowski's response: his rejection of the underconsumptionist argument on the grounds that capitalism could continue producing machines for the sake of production, irrespective of the state of consumer demand. Almost by stealth, Tugan-Baranowski became a central and deeply ambiguous figure in 20th-century political economy. This was not for his solution of an abstract problem of capitalist accumulation, but for his study of English banking crises (Tugan-Baranowski, 1905). Despite the fact that his work was never translated into English, Tugan-Baranowski's study became a key text on the business cycle and was an important influence on British exponents of the monetary business cycle, among them John Maynard Keynes and Dennis Robertson.[1]

Tadeusz Kowalik thus found the roots of 20th-century political economy in Marx's critique of Say's law and his argument, in Volumes II and III of *Capital*, that capitalist reproduction or growth cannot take place in a way that is stable or crisis-free. The question of external markets then opens the door for Keynesian political economy, constructed around demand deficiency and the state as an external market. For Tadeusz Kowalik, the central figure through whose work all these very different writers are connected is Michał Kalecki. In his *Essays in the Theory of Economic Fluctuations*, published on the eve of the Second World War, Kalecki had expressed the connection as follows: Rosa Luxemburg's 'theory cannot be accepted as a whole, but the necessity of covering the "gap of saving" by home investment or exports was outlined by her perhaps more clearly than anywhere else before the publication of Mr. Keynes's *General Theory*' (Kalecki, 1939b: p. 46; Osiatyński, 1990: p. 446). Inspired by his discussions with Tadeusz Kowalik, Kalecki was to develop this point further in his 1967 paper on Rosa Luxemburg and Tugan-Baranowski. Kowalik worked with Kalecki on his last paper on the 'Crucial Reform' of capitalism, which sets the 'Keynesian Revolution' in the context of those debates around capitalist reproduction (Kalecki, 1967; Kalecki and Kowalik, 1971). The 'revolution' in policy was the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

more effective use of government expenditure as a means of assisting in the realisation of capitalists' surplus.

Kalecki's pioneering work in 20th-century macroeconomics was therefore a recurrent theme in Tadeusz Kowalik's ideas, and he considered Kalecki's business cycle theory as the medium through which Keynesian ideas are linked to those late-19th-century debates on capitalist reproduction. This theme recurs from the Kalecki biographical essay through to Kowalik's last essays on Rosa Luxemburg (Kowalik, 1964a, 2009).[2]

Shortly after publication of his book on Rosa Luxemburg, in two very long entries published only in Italian in the *Enciclopedia Einaudi* ('Capitale', Capital and 'Crisi', Crisis), which in fact form a book together, Kowalik proposed his own broader perspective on capitalism and its development through structural crises. In 'Capitale' he connected the notion of capital to that of socio-economic formation, showing how primary accumulation and the formation of the (national and world) market produced capitalist social relations, thanks to the hegemony that bourgeoisie exercised by various means, including State intervention. The key authors addressed by Kowalik were Marx (stressing the role of alienation in his thought) and Max Weber. The notion that capitalism is a system of rational economic calculation by firms' management is, in Kowalik's view, reductive. It is discredited by the ubiquitous waste in contemporary capitalism, but also by the systematic recurrence of crises. His conclusion, drawn from Kalecki and Lange, is similar to that drawn by the *Monthly Review*, partially from Kalecki, but also from Thorstein Veblen.

In the entry 'Crisi' the discourse is put forward on a larger scale than that of Kowalik's book on Luxemburg, though the key reference (together with Schumpeter) is once again Kalecki. After an historic survey of the (exogenous) crises affecting economies and societies before capitalism, and of the (endogenous) periodic alternation of prosperity and depression in capitalism, he confronted the contradictions and limitations of Keynes and the Keynesian tradition. Business cycles and crises were primarily due to the dual and ambiguous role of investment (the least stable component of effective demand and, along with capitalist consumption, the main autonomous component). Investment is also an activity that adds to productive capacity and must therefore look for ever-expanding markets. A contributing factor to instability is the time discrepancy between the manifestation of the crisis and the delayed effects of the decisions taken to overcome it. The solution to the effective demand problem cannot but lead to the cycle, and the cycle to periodic structural crises.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

In this outlook, neomercantilist export-led growth and Keynesian economic policies are insufficient, and it is understandable why they have led to paradoxical results. The expansion of foreign trade shifted the crises to underdeveloped countries, while deficit spending materialised in armaments and militarism. The key reason for the difficulties, however, has to do with the same nature of capitalism, that is with the intrinsic instability of a system driven by capitalists' investment demand: so much so that capitalist crises cannot be overcome without overcoming capitalism. Full employment can only be temporary, and is regularly reversed. In this way, Kowalik took Kalecki out of left Keynesianism, and located his work firmly within an original development of the Marxian tradition.

## 3 Volumes in honour of Tadeusz Kowalik

The eighth and final volume of the Lange *Collected Works* was published in 1986. But then in 1990, a further two volumes were published, containing selected papers that had been previously edited for political reasons (Hagemejer and Kowalik, 1986). The Lange *Works*, along with his collaboration with Kalecki and his studies of Rosa Luxemburg, remain Kowalik's most monumental achievement. At the time of his death, Kowalik was working on an edition of Lange's voluminous correspondence and an intellectual biography of Lange. Kowalik's last book, *From Solidarity to Sellout: The Restoration of Capitalism in Poland*, was published by New York's Monthly Review Press only days before he died.

In 2010 Tadeusz Kowalik was approached with a proposal for a *festschrift* in his honour. His response was, characteristically, to decline the honour with thanks under the pretext that 'this is not my style'. He requested instead a volume commemorating the thinkers who had so influenced him: Rosa Luxemburg, Oskar Lange and Michał Kalecki. We have been overwhelmed by the generosity of the response to our invitation to contribute. One volume has grown to two full volumes, reflecting the very rich intellectual legacy that Tadeusz Kowalik had inherited from his teachers, and to which he himself contributed.

The chapters in the volumes fall more or less naturally into two categories. The first consists of chapters that examine the ideas of Luxemburg, Lange and Kalecki as they developed them. Key themes in this group of chapters are the theories of Kalecki and Luxemburg as developing the schemes of reproduction that appear in Volume II of Marx's *Capital* (chapters by G.C. Harcourt and Peter Kriesler, Noemi Levy-Orlik, Gabriele Pastrello, Riccardo Bellofiore, John Bellamy Foster



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

and Andrew Trigg), Marxian political economy and the methodology of Oskar Lange (Roberto Lampa, Paul Zarembka and Meghnad Desai), the political economy of developing countries (Marcin Kula), and the relationship between the ideas of Lange and Kalecki and the dominating figure of 20th-century macroeconomics, John Maynard Keynes (Jo Michell and Jan Toporowski). The second group of chapters brings the ideas of Luxemburg, Lange and Kalecki up to date by examining how those ideas illuminate the financial crisis of the 21st century (chapters by Paul Auerbach and Dimitris Sotiropoulos, Edwin Le Heron, Malcolm Sawyer, Kazimierz Łaski and Leon Podkaminer, Alberto Chilosi, Janusz Tomidajewicz and Pat Devine), and how that crisis illuminates those ideas (John King, Gary Dymski, D. Mario Nuti, Alessandro Vercelli, Ewa Karwowski, Paul Mattick and Marc Lavoie).

In sum these chapters cover the political economy of Tadeusz Kowalik, whose purpose was not to interpret the world but to change it with an honest, unsentimental understanding of capitalism and socialism that is shared by the authors and the editors.

Ewa Karwowski, Riccardo Bellofiore and Jan Toporowski

We are grateful to Tadeusz Kowalik for his generous discussion of his scholarship and ideas with us. We thank Alessandro Roncaglia, Julio Lopez, John Bellamy Foster, Hanna Szymborska, Kazimierz Łaski, Geoff Harcourt, John King, Mario Nuti, Leon Podkaminer and Tracy Mott for comments on earlier drafts of this Introduction.

## Notes

1. I find myself in strong sympathy with the school of writers – Tugan-Baranovski, Hull, Spiethoff and Schumpeter – of which Tugan-Baranovski was the first and the most original (Keynes, 1971: pp. 89–90).
2. Some idea of the influence of Michał Kalecki on Tadeusz Kowalik's thinking about Rosa Luxemburg is provided by the paper which Kowalik contributed to the Kalecki festschrift, entitled *R. Luxemburg's Theory of Accumulation and Imperialism (An Attempted Interpretation)*. Kowalik refers to this paper in this book as containing the essential conclusions of his *habilitacja* thesis (see note 14 at the end of the Introduction). But in the earlier paper, Kowalik merely states that Kalecki had resolved the problems in Rosa Luxemburg's analysis, and the paper itself makes much more of Oskar Lange's criticisms of Luxemburg's theory. By the time Kowalik's book came out in 1971, Kalecki had been given a much more central role as the link between the Marxian political economy of Luxemburg, Tugan-Baranowski, Hilferding and so on, and mid-20th-century Keynesian political economy; and Lange himself is reduced to expressing his view that realisation problems are purely monetary phenomena (see note 99 at the end of ch. 4 of Kowalik, 1971).

# 1
# Michał Kalecki and Rosa Luxemburg on Marx's Schemes of Reproduction: Two Incisive Interpreters of Capitalism

*G.C. Harcourt and Peter Kriesler*



## 1.1 Introduction

In addition to his own contributions to economic thought, Tadeusz Kowalik has added substantially to our knowledge of three great Polish economists, Rosa Luxemburg, Oskar Lange and Michał Kalecki. He edited collections of their works and has contributed to our understanding of their contemporary relevance. He co-authored with Kalecki a sequel to the latter's fundamental contribution to political economy, 'Political aspects of full employment' (Kalecki, 1943a), considering the question of whether a crucial reform had occurred in capitalist economies to allow full employment to be maintainable (Kalecki and Kowalik, 1971). Kowalik was joint editor of the Polish editions of the collected works of both Oskar Lange and (with Jerzy Osiatyński) Kalecki, as well as editing a new edition of Rosa Luxemburg's *The Accumulation of Capital*. In addition, he has written extensively on the writings of Kalecki and Luxemburg, arguing that 'Michał Kalecki's theory is the best theoretical continuation and solution to the main problems that Rosa Luxemburg wanted to solve in her *magnus opum*' [sic] (Kowalik, 2009: p. 102).

Because of his fine scholarship, we deemed it most appropriate for us to reconsider the contributions of Kalecki and Luxemburg to our understanding of modern capitalist economies.

In particular, it is appropriate to concentrate on Rosa Luxemburg's *The Accumulation of Capital* (1913a), which is her *magnum opus*. Both Joan Robinson (1951) and Kowalik (2003) have written important



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

introductions to its English translation. Kalecki wrote about its contributions and limitations in an analysis of how capitalism might be expected to develop, comparing her conjectures with those of Tugan-Baranowski (see Kalecki, 1967: pp. 451–458). Luxemburg's book was an important milestone in Joan Robinson's development of her own *magnum opus* of the same title, Joan Robinson (1951). As we have argued elsewhere (Harcourt and Kriesler, 2011; Harcourt and Kerr, 2009), Kalecki was the major influence on the structure of the analysis in her *Accumulation of Capital*.

## 1.2

The starting point for all these authors was their understanding of Marx's schemes of production and reproduction in an analysis of the laws of motion of the capitalist mode of production. Kowalik gives an excellent summary of the analytical similarities of the two:

> As far as theory is concerned, both R.L. and M.K. took from Marx the very notion of capital, and the conviction that the capitalist system polarized society by two antagonistic classes: the capitalists and the workers. Both were interested more in the dynamics of capitalism than in static theory of value and price [...] both used the Marxian reproduction schemata to search for the limits of capitalist accumulation. Using more modern words, they treated capitalism as a system, limited by effective demand, sharply distinguishing the production of commodities from their realization. Of course, both rejected so-called Say's law. Both treated rivalry and instability as permanent features of capitalism. (Kowalik, 2009: p. 111)

However, there also are important points of difference. Both Kalecki and Joan Robinson recognised, as Luxemburg and Tugan-Baranowski seem not to have, the true purpose of the schemes.[1] Luxemburg and Tugan-Baranowski made the same mistake as have many latter-day mainstream economists and many Marxist scholars,[2] in that they interpret the schemes as forerunners of steady-state growth models which nevertheless constitute descriptive analysis of the development of capitalism.[3] Joan Robinson's Golden Ages were never so intended; in contrast, Nicholas Kaldor's growth models of the 1950s and 1960s were; see, for example, Kaldor (1955, 1959) and Kaldor and Mirrlees (1962). Robert Solow (1956) and Trevor Swan (1956) were providing their solutions to problems thrown up by Harrod's seminal article (1939) and book (1948)



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

in explicitly highly abstract theoretical contexts, but their many surrogates proceeded as if they had also provided descriptive analyses.

As Sardoni shows conclusively, and as Joan Robinson and Kalecki had recognised, this was not Marx's purpose. Rather, he was attempting to set out the conditions that had to be satisfied in order that, as we would say now, aggregate demand and aggregate supply and their compositions as created in the three Departments would all match up, that is, be purchased. Marx's purpose was to show how unlikely it was that individual capitalist decision makers left to themselves could collectively bring about these two sets of matches; and if they did not, the sources of instability and crisis in capitalist dynamics would have been revealed. This was also the substance of Joan Robinson's criticism of Harrod, that he had rediscovered Marx vol II without knowing it, a criticism which he gallantly took on board (Robinson, 1953: p. 263). Similarly, Kalecki argued that the 'basic formula of the Harrod-Domar theory … [and] … In fact, many of the contemporary theories of growth are simply variations on the theme of Marxian schemes of expanded reproduction' (Kalecki, 1968a: p. 63). Moreover, as Sardoni argues, even if both sets of conditions were to be satisfied in any one period, this does not imply steady-state growth from period to period. According to Kalecki, equilibrium would require very specific – and unlikely – investment behaviour:

> As regards Marx's schemata, his system can be in equilibrium only when automatic expanded reproduction is assumed, i.e. when there is a complete reinvestment of accumulation. … From the spirit of Marx's analysis, it follows that this reinvestment does not always take place, and hence there is a deviation from his schemata. This deviation, which Marx did not systematically investigate is more consistently emphasised by Rosa Luxemburg. The supply nature of Marx's schemata lies in his assumption of total reinvestment of accumulation. However, from this it follows that the schemata represent a certain ideal equilibrium, which is in contradiction with the fundamental and often-quoted statement of Marx on the incommensurable development of the forces of production and the expansion of purchasing power. Long-run instability appears in the schemata as soon as the automatic reinvestment of accumulation is no longer assumed. (Kalecki, 1965a: p. 559)

## 1.3

Kalecki points out that Tugan-Baranowski and Luxemburg are poles apart in their discussions of how the market operates in the Marxian schemes



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of reproduction. Tugan-Baranowski in effect is a Say's Law person, denying the possibility of a general glut, arguing that what is produced in all Departments will always be purchased, either internally or by the other Departments, so that the only constraint on capitalist development is how fast productive capacity increases in these circumstances.

Luxemburg, in contrast, argues that there is always insufficient aggregate demand in a closed economy, so that to continue to develop, capitalist economies must export to the (non-capitalist) rest of the world, usually through imperialistic conquests, in order to ensure there are markets and supplies of raw material abroad.

*The Accumulation of Capital* represents one of the earliest statements of the stagnationist thesis which was popularised by Kalecki, Steindl, Baran and Sweezy. Underlying this thesis is the argument that 'under monopoly capitalism the laws of capitalist accumulation have been fundamentally changed' (Halevi and Kriesler, 1998: p. 194). Luxemburg demonstrated via Marx's reproduction schemas that capitalism had problems in the long run maintaining sufficient effective demand to avoid stagnation. Ever expanding accumulation requires ever expanding demand, and it is unclear where this demand comes from, as a result of 'the deep and fundamental antagonism between the capacity to consume and the capacity to produce in a capitalist society, a conflict resulting from the very accumulation of capital which periodically bursts out in crises and spurs capital on to a continual extension of the market' (Luxemburg, 1913a: p. 347).

Her solution: external markets – 'buyers outside capitalist society' (Luxemburg, 1913a: p. 350) – that is external to the global capitalist system, and/or armaments expenditures. Kalecki (and Kowalik) clearly understood that this was her important contribution:

> For her, the basic contradiction of capitalism is not disproportion of development of individual branches of industry but the separation between production and market. In her analysis of the divergence between the development of forces of production and relations of production, the main problem is that of realization of the accumulated surplus. (Kalecki and Kowalik, 1971: pp. 469–470)

Kalecki finds it 'most interesting that both authors commit important errors [yet] their theories have a correct picture of some essentials of [the] capitalist economy' (Kalecki, 1967: p. 451). Tugan-Baranowski rightly sees that satisfaction of consumer demand is not the driving force of capitalism, which is characterised by him as 'antagonistic in nature',



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

with the making of profits and the accumulation of capital the ultimate driving forces of capitalist development. So for Tugan-Baranowski (and Kalecki), what has become the central mainstream notion, that it is the consumer queen trying to maximise her expected lifetime utility through consumption and saving that is the driving force, is not in fact to be found in the actual workings of capitalist markets and economies.

Kalecki accepts that Luxemburg's 'external markets', while not the sole driver of capitalist development, are nevertheless an 'important part'. He finds 'a point of intersection' for the two poles apart theories in present day (read 1960s/1970s) capitalism, especially the USA, where the market created by government for production of armaments plays a decisive role (Kalecki, 1967: p. 451).

The error in Tugan-Baranowski's analysis, Kalecki argues, is that he confuses what is possible in development with what must always actually happen. Kalecki's argument has some resemblance to an analysis of the conditions needed for Harrod's warranted rate of growth ($g_w$) to coincide with Harrod's natural rate of growth ($g_n$) and to Harrod's argument as to why, if actual growth ($g_a$) is not equal to $g_w$, the economy will give out signals that, under plausible conditions, leads $g_a$ to depart further and further from $g_w$. So, even if $g_a$ were momentarily to coincide with $g_n$, this would not be a sustainable position. Kalecki argues that accumulation associated with embodying innovations that result from technical progress may produce growth, though not necessarily at such a rate as to eliminate deficient effective demand. This possibility, which is not necessarily a result of 'external markets', provides the starting point for Kalecki's discussion of Luxemburg's analysis.

## 1.4

He first points out that she argues as if the capitalist class as a whole decide collectively how much investment to do. And if the class perceives that there is not a sufficient market for the surplus of goods corresponding to accumulation, it is led to the query: 'So why invest?' (Kalecki, 1967: p. 455). Kalecki's knock-down blow follows immediately: 'Now capitalists do many things as a class, but they certainly do not invest as a class' (Kalecki, 1967: p. 455). If they did, he notes, they may well do so in such a way as to vindicate Tugan-Baranowski's Say's Law analysis.

Because Luxemburg regards exports from the capitalist system as the mainspring of development, she has a pessimistic view of the future of capitalism. As the capitalist system cumulatively creates the rest of the world (including the non-capitalist sectors of its own society) in its own



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

image, it at the same time eliminates the possibility of future development. Allied with her basic view there is, according to Kalecki, a serious over-estimate of the role of 'external markets', in that she identifies the market for the surplus created with *total* exports; whereas, Kalecki argues, it is only *net* exports (induced by the export of capital) that perform this role.

Kalecki points out that Luxemburg did have a role for expenditure on armaments in the process of staving off the decline of capitalism. But, again, she overplayed her hand, in that she did not ask how the expenditure would be financed. Kalecki points out that if taxation is the source of finance, its incidence ultimately falls on wage-earners and their consumption expenditure, so largely offsetting the expansionary effects of expenditure on armaments and its role in absorbing the surplus of goods associated with the process of accumulation – a balanced budget multiplier type of argument. Only if armaments are purchased from the proceeds of the issue of government bonds (or by writing cheques on the central bank) will their greatest potential impact be realised.

Kalecki also argued that Luxemburg missed an important extension of her armaments argument, which was applicable to government expenditure in general. Government expenditure is an 'external market' with respect to the capitalist production.[4] However, as with armaments, it is only government expenditure which is not offset by taxes (particularly on the working class), so it is either 'financed' by the central bank or by the sale of government securities to the private sector. As 'capital is here being "exported" to the "foreign market" created by the government' (Kalecki, 1967: p. 457) so government expenditure acts as an '*internal export*... It is *internal* to the closed economy, but it is *external* to the capitalist area' (Bellofiore, 2009b: p. 60, emphasis in original). In addition, Kalecki extends the analysis of 'external' factors which can explain accumulation to include 'semi-autonomous' influences such as innovation (Kalecki, 1968a; see also Steindl, 1981: p. 148).

Kalecki concludes that although there are serious errors in the theories of both Tugan-Baranowski and Luxemburg, both showed 'a striking perspicacity' in their evaluation of certain basic elements of late stage capitalism, so contributing to 'the understanding of the perverse world in which we are living' (Kalecki, 1967: p. 458). This view is reinforced by Darity's argument that, given the political limits to the attainment of full employment discussed in Kalecki (1943), imperialism and external markets may prove an expedient politically acceptable strategy for dealing 'with crises of effective demand' (Darity, 1979–1980: p. 229).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

## 1.5

Kalecki published his article on Tugan-Baranowski and Luxemburg in 1967. In 1968 he followed it up with an article, 'The Marxian equations of reproduction and modern economics', Kalecki (1968a), in which he drew on the arguments of his preceding article and related his take on modern steady-state growth theory emanating from Harrod's and Domar's seminal contributions to discussions of Marxian schemes of reproduction.

On his interpretation, (the then) modern growth theory often did a Tugan-Baranowski, that is to say, argued that there was no problem of effective demand to be faced in the long-run development of capitalism. (Such a delusion has been sustained, but even more so, in modern endogenous growth theory. The following quote from Robert Lucas illustrates this well: 'The balanced growth path will be a good approximation to any actual path "most of the time" [...] exactly the reason why the balanced path is interesting to us', Lucas, 1988: p. 11). Kalecki argued that in arriving at this finding the authors concerned had been hoodwinked by the impact of expenditure on armaments and investment expenditure embodying technical progress in the temporary solution of Luxemburg's problem into believing that full employment growth was an inevitable outcome. That is to say, they produced the same argument that 'Jean Baptiste' Kaldor had concerning the assumption of full employment in his many growth models of the 1950s and 1960s.

Kalecki torpedoed whatever merit could be found in these conclusions with a judicious quote from Marx's third volume concerning the realisation problem: 'The conditions of direct exploitation and those of the realisation of surplus-value are not identical. They are separated not only by time and space but logically as well. The former are limited merely by the productive capacity of society, the latter by the proportions of various branches of production and by consumer power in society' (quoted in Kalecki, 1968a: p. 465). Kalecki notes that Marx has not 'systematically [scrutinized] the process described by [Marx's] reproduction schemes from the point of view of the contradictions inherent in capitalism as a result of the problem of effective demand' (Kalecki, 1968a: p. 465). Luxemburg's 'definite and even extreme' views were meant to tackle this. These elements of this analysis achieved their finest hour in Don Harris's diagram, which is a synthesis of Marx's spheres of production and distribution and exchange in which the latter takes in the Cambridge saving equation and the 'animal spirits' function derived from Keynes, as set out in Joan Robinson's banana diagram (see Harris, 1975; Robinson, 1962: p. 48).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

In his diagram Harris shows that the potential surplus available at a point in time is determined in the sphere of production by the current state of class war, which sets the wage-earners' share of the potential national product, and the current state of techniques of production embodied in the capital stock, which determines total potential production. What proportion of the potential surplus is realised by activity in the sphere of distribution and exchange depends upon the overall level of effective demand. It is determined by the equality of planned accumulation (which Joan Robinson dubbed the 'animal spirits' function, revealing the relationship between the expected rate of profits and planned accumulation) with planned saving. The latter is influenced, in turn, by the distribution of income as well as the level and rate of growth of income, because of different values of the marginal propensity to save by profit-receivers and wage-earners. This Cambridge saving function thus relates actual profits received to actual accumulation occurring, taking into account the current environment concerning the provision of external finance.

## 1.6

Joan Robinson's 1951 Introduction to Rosa Luxemburg's book tells essentially the same story as Kalecki does, albeit in much more detail, as she develops her analysis with many references to Luxemburg's text for the ingredients she discusses. She draws attention to limitations in Luxemburg's analysis, for example, that Luxemburg neglects the rise in real wages that occurs as capitalism develops (until now in the USA and Europe) and denies – perhaps 'ignores' is a better word – the role of technical progress in inducing investment, so that '[s]he is left with only one influence (economic imperialism) to account for continuous capital accumulation' (Robinson, 1951: p. 28). Nevertheless, Joan Robinson's final evaluation is that 'For all its confusions and exaggerations, this book shows more prescience than any orthodox contemporary could claim' (Robinson, 1951: p. 28).

Joan Robinson's reading of Rosa Luxemburg is similar to her reading of Marx: she wished to extract what she thought was their purely analytical, logical structure from the complex interrelated organic make-up of both Marx's and Luxemburg's systems. When Joan Robinson was writing her essay on Marxian economics, published in 1942, she had a voluminous correspondence with Maurice Dobb on the drafts. Dobb repeatedly attempted to point out to her the illegality of what she was trying to do as far as Marx was concerned, but she never took this on board, or



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

indeed understood his patient attempts to persuade her of this point of view; for a full discussion of their exchanges and the points at issue see Harcourt and Kerr (2009: pp. 34–45).[5] She was still unconvinced when she wrote the Introduction to Rosa Luxemburg's book, that is to say, she was still primarily concerned about finding the 'Keynesian' element (Robinson, 1960: p. vii) in both authors.

## 1.7

Kalecki always argued that accumulation was the most vital factor in determining how capitalism develops over the decades. He put forward increasingly sophisticated and insightful theories of investment decision making and implementation – what he called 'the *pièce de resistance* of economics' (Kalecki, 1968b: p. 435, emphasis in original) – but he was never satisfied with his theories. His last version is in his 1968 *Economic Journal* article. Very early on he had also recognised the key role which sources of finance play in imposing the ultimate constraints on how much investment can actually be realised when other relevant factors have been taken into account. But perhaps even more important is that the 1968 article contains his major methodological conclusion that the trend and cycle are indissolubly mixed, that the trend is but a statistical outcome of the factors responsible for accumulation and the cycle, resulting in a theory of cyclical growth similar to Richard Goodwin's many seminal articles on this theme (see Harcourt, 2012). The key quote is: 'In fact, the long-run trend is only a slowly changing component of a chain of short-period situations; it has no independent entity' (Kalecki, 1968b: p. 435).

With this decisive argument, Kalecki has removed a major problem that still bugs modern mainstream analysis – the incoherence of the mainstream's understanding of the supposed medium term between their analysis of the short run and the long run, with the factors determining the last two being regarded as independent of one another. With Kalecki's and Goodwin's (also Joan Robinson's) insight, this becomes a non-existent problem. We conjecture that it was Kalecki's criticism of the then modern theories of growth emanating from Harrod, Domar and the post-Keynesian and neoclassical responses to them, that produced his final and definitive stance, alas, only two years before his death in 1970.

## Notes

1. Our understanding of them has been greatly influenced by Claudio Sardoni's definitive article on them (Sardoni, 1981).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

2. For example, Desai (1974: pp. 85–86) makes this error when discussing Luxemburg's critique of Marx; see also Desai and Veneziani (2009).
3. Foremost amongst modern economists who made this mistake was the late Paul Samuelson; see Harcourt (2006: p. 136), for evidence of this in Samuelson's articles on Marx and in various editions of his textbook.
4. He also referred to government expenditure as 'domestic exports' (Darity, 1979–1980: p. 224).
5. The argument in Harcourt and Kerr (2009) is based on Prue's thorough research in the archives.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 2
# The Realisation Problem: A Reappraisal of the Kalecki and Luxemburg Discussion on the Schemes of Reproduction

*Noemi Levy-Orlik*



## 2.1 Introduction

Rosa Luxemburg and Michał Kalecki are two outstanding economists from the first half of the 20th century (although Kalecki published until the end of 1960s) that had several factors in common. First, they shared similar backgrounds; both were Polish-Jewish academics not widely recognised in their countries nor in their schools of thought. Second, they were knowledgeable on Marx's writings which, following the critical tradition, they used to understand and transform the capitalist economic system. Kalecki's particular idea is a development of the effective demand theory that, unlike Keynes's, was based on imperfect competition and non-neoclassical theories of value and price. It employed these in order to highlight that direct cost adjustments (wages and raw materials) and mark-up (capitalist returns) remain relatively constant to price changes; wages are the accommodative variable. Meanwhile Luxemburg introduced the concept of imperialism as a means of showing the unequal relations between countries in which imperialist countries export capital to colonial countries as a way of realising their surplus, provoking social rebellions that can limit the capital reproduction of the entire capitalist system.[1]

Third, both economists, familiar with Marx's schemes of reproduction presented in *Das Kapital*, recognised that it is an important contribution in the development of a modern accounting of Gross Domestic (National) Product or Gross Value Added, which measures income



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

through spending activities (investment and consumption, in closed and pure economies), divided by different social classes (capitalists and workers), in which the workers' income is not equal to the value that they add to production but to the income required to reproduce their working force (including their reproduction needs); while capitalists accrue the remainder. The schemes of reproduction are considered a useful tool to show that it is effective demand rather than total supply that is the driving force of capitalism.

Kalecki and Luxemburg used the schemes of reproduction analysis to show the limitations of expanded capital reproduction, putting forward what has been termed the 'realisation' problem, differing in terms of the source of limitation. Kalecki argues that the main limitation is the insufficiency of capitalist spending (particularly investment), while Luxemburg claims that capitalist economies can realise their profit only if there exist external non-capitalist markets that, once internalised, undermine the reproduction of the capitalist system as a whole.

These authors have different views of capitalism. Kalecki assumes that it is the 'opposite pole to the workers in a polarized society' (Kowalik, 2009: p. 110), and the 'realisation' problem arises due to capitalist partial spending of profits that diminishes workers' employment, independent of the distribution of income.[2] Luxemburg's argument is that the expanded capital reproduction cannot be realised in the context of a closed capitalist economy, arguing that the only way to reproduce capital is by exporting it to colonial countries, along with international loans that will act as the means of realising developed countries' surplus.

In this chapter we argue that the 'realisation' problem is explained by Kalecki on the basis of domestic inequalities that can be neutralised, whereas Luxemburg's focal point is the unequal relation between imperialist countries and colonies, whence arises the concept of imperialism limiting the development of capitalism. Kalecki emphasises profit as the central element of capitalism, capitalist spending being the variable that guarantees the realisation of commodities, assuming a given distribution of income and unused capacities in different economic sectors. Public deficit and net export are key spending activities that accelerate or slow effective demand. Luxemburg, in contrast, shifts the focus of the discussion to the international arena, arguing that capitalist reproduction is based on imperialistic relations and that capitalist survival requires the extraction of profits not only by the capitalist class but also by imperialist countries.

This chapter is divided into four sections. In section two, Kalecki's discussion of the schemes of reproduction is critically analysed. We



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

argue that Kalecki is right in claiming that public (that is, government) policies can shape, under certain limitations, the effects of economic downturns, overlooking the impact of unequal relations in international trade. In section three, the unequal international relations between imperialist countries and colonies are reviewed. Our view is that although imperialism remains as a dominant concept, the way it unfolds has changed over time, and it is based on political rather than economic relations, remaining the relation between oppressor and oppressed countries. In section four the main conclusions are put forward.

## 2.2 Capitalists earn what they spend and workers spend what they earn: a reappraisal of Kalecki's analysis of the schemes of production

Kalecki's explanation of the schemes of reproduction is one of the more complete analyses, due to its detailed construction of income flows that correspond to different activities and the income of different capitalist sectors whose main limitation is effective demand, where investment spending is considered the central factor. Kalecki was interested not only in understanding the operations of the capitalist system 'but also [...] improving their functioning' (Kowalik, 2009: p. 112).

This discussion was known to Kalecki from the 1920s (Kowalik, 2009) through the critiques of Tugan-Baranowski and Luxemburg of Marx's analysis; this was explicitly recognised by Kalecki, in a later paper: *The Problem of Effective Demand with Tugan-Baranovsky and Rosa Luxemburg*, published in 1967. This analysis is used in his discussion of profits, of which there are two versions; the first appeared in 1933 and the second in 1954.

The primary discussion of the schemes of reproduction was put forward by Marx, when he argued that effective demand determines total supply, not the other way round, as argued by Say. Marx also assumed that workers do not save (Kowalik, 2009: p. 103).

Distant, but not ignorant, of the discussions around the determination of surplus value and the capitalist exploitation of workers (wages represent a fraction of the value produced by the workers equivalent to their survival and reproduction needs), Kalecki's contribution was to put investment at the centre of the discussion that determines effective demand, highlighting that investment creates its own profits, savings and finance. The other difference is that the economy is divided into three sectors (instead of the two proposed



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

by Marx), each of these being composed of profits and salaries related to a specific activity. In department I, investment goods are produced and its value added is divided into profits accrued by capitalists and wages paid to workers; capitalist and worker consumption is differentiated, and from there arises departments II and III. These departments also contain profits and wages in relation to their production (see Kalecki, 1968a: p. 459, for further explanation). He also assumes that workers' wages equals workers' consumption, on the basis of which it is proposed that capitalist spending (consumption and investment) determines gross profits, which generate instability in the capitalist system – and that capitalists, instead of spending what they earn, earn (get) what they spend. Therefore the capitalist class determines the realisation of production.[3] However there is nothing in advance that will guarantee that profits (accrued by capitalists) recirculate into the productive system.

Under this condition, gross profits (composed of depreciation and undistributed profits, dividends and withdrawals from unincorporated business, rents and interest; see Kalecki, 1933b: p. 78) are equal to gross investment (fixed capital plus inventories; ibid) and capitalist consumption, (Equation 2.1). The main assumption underlying this assertion is that workers' income is devoted completely to workers' consumption (cancelling out both entrances in the balance sheet, Equation 2.1a). Additionally, the profits of department III are equal to the salaries of departments I and II (Equation 2.2) In turn, the production of workers' consumption goods depends on the salary–income coefficient of each department, which means that income distribution is given (Equation 2.3):

$$P = I + C_k \tag{2.1}$$

because:

$$P_1 + P_2 + P_3 = P_1 + W_1 + P_2 + W_2 \tag{2.1a}$$

since,

$$W_3 = C_w \tag{2.1b}$$

thus,

$$P_3 = W_1 + W_2 \tag{2.2}$$



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

and

$$C_w = (w_1 I + w_2 C_k)/(1 - w_3) \qquad (2.3)$$

$$w_1 = W_1/I;\ w_2 = W_2/C_k;\ w_3 = W_3/C_w$$

P: gross profits; I: investment; $C_K$, capitalist consumption; W: wages; w; wages coefficients.

If capitalist consumption is subtracted from gross profit and from capitalist spending, gross savings become equal to gross investment, with a causality movement going from investment to savings, which means that capitalists decide on savings (see Kalecki, 1933b and 1968a) creating their own finance, provided that the financial institutions advance liquidity.

There are three important clarifications that Kalecki himself points out. The first is related to the subordinate position of the working classes relative to the capitalist classes; the second is in terms of the realisation problem due to profit and capitalist spending gaps, and third, the growth rate of the capitalist spending.

Regarding the first issue, Kalecki (1933b: p. 80) writes that 'the production of department I and department II will also determine the production of department III if the distribution between profits and wages in all departments is given'. Next, he argues that the factors determining the distribution of income, among others, are the degree of monopoly, from where he asserts that 'given that profits are determined by capitalists' consumption and investment, it is the workers' income (equal here to workers' consumption) which is determined by the "distribution factors"' (ibid). He concludes that 'capitalist consumption and investment conjointly with the distribution factors' determines the workers' consumption and consequently the national output and employment (ibid).

Another important issue of this discussion is that department III needs to operate with unused capacities, since higher capitalist spending requires a rise in department III workers consumption to meet higher wages bills of departments I and II. If there is no unused capacity, higher capitalist spending leads to higher prices and reduced participation of wage coefficients in relation to production ($w_1$, $w_2$, $w_3$). It should be stressed that profits remain unchanged, highlighting the dominant position of the capitalist class.

The second issue is related to the 'problem of realisation'. He argues that there is a time lag between profits and capitalist spending. Specifically there is a horizontal distance between investment decisions and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

investment in fixed capital.[4] In Kalecki's words: 'with regard to investment, this follows directly from the time-lag dependent on the period of construction [...and] changes in capitalist consumption also follow those in profits with some delay' (1968a: p. 461). Therefore, capitalist spending can be lower than profits of past periods (especially the immediate past) impeding the realisation of production and reducing profits. This will lead to lower levels of effective demand, hence 'sales and profit in a given period of time cannot be a direct outcome of past decisions: the capitalist can decide how much they will invest and consume next year, but they cannot decide how much they shall sell and profit' (ibid). A major assumption of this analysis is that the distribution of income is given.

The last issue of clarification is related to the effects of different investment spending growth rates. Considering that capital accumulation is composed of the real stock of capital and depreciation, if the rate of growth of both variables is unchanged, everything else being constant,[5] the problem of effective demand does not arise. However, if the rate of growth of fixed investment falls, effective demand slows down as a result of a lower degree of utilisation of equipment. This process is described as follows: if the rate of growth of investment spending slows down, workers in department I are laid off, profit in department I diminishes as does capitalist consumption in department II (after a lag time); and profit in department III declines, further reducing capitalist consumption spending. In Kowalik's words: 'Investments play a stimulating role only when they are realised (built). When accomplished they not only increase the supply of commodities or services, but also sack workers, reducing their purchasing power' (ibid: p. 110). Hence, the rate of growth of investment needs to be constant, and expanded reproduction is not a natural and obvious state of the capitalist system (Kalecki, 1967: p. 457).

Before discussing the factors that stabilise effective demand, there is an important argument referring to investment limits,[6] summarised in the concept of increasing risk. Tracy Mott, an outstanding Kaleckian economist, in his book *Kalecki's Principle of Increasing Risk and Keynesian Economics*, argues that retained profits and the willingness to sink profits in productive capital determines the volume of investment spending, which also depends on the expected profit and realisation. In Mott's words, the principle of increasing risks is defined as follows:

> The willingness to become illiquid, to sink liquid capital into fixed capital, decreases with the amount of one's own funds so invested. Thus, the availability of liquid capital in the aggregate is not solely a



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> function of 'pure' money and credit... It is also affected by the level of own capital or unencumbered funds, i.e., retained profits plus depreciation allowances. (Mott, 2010: p. 8)

Mott's assertion that internal funds limit investment spending, employment and profit creation have an alternative explanation. The size of firms (different amounts of internal funds) induce an unequal distribution of finance, since: 'The access of a firm to the capital market, or in other words the rentier capital it may hope to obtain, is determined to a large extent by the amount of the entrepreneurial capital' (Kalecki, 1937: p. 105), which is summed up by the famous and widely quoted phrase: 'The most important prerequisite for becoming an entrepreneur is the ownership of capital' (ibid: p. 109). Thus, internal funds can explain the limitation that small and medium-sized firms have in expanding their capital accumulation and converting into big enterprises (that is, corporations) and the domination of oligopolistic structures (rather than competitive), which can access unlimited external funds.

In this context, the main difficulty of economic growth is the 'realisation' problem, since banks can create credit so long as expected profits are positive (in Keynes' or Minsky's terms, when the demand is above the supply price). In other words finance is available to all solvent enterprises (Parguez and Seccareccia, 2000, Bellofiore, 2009b).

Raising the assumption of a close and pure economy, Kalecki moves to what he calls a real situation, introducing government deficit[7] (government spending net of direct and indirect taxes, the latter known as government income) and net or surplus exports (imports are deducted from exports because of the negative effect they have on effective demand)[8] as important devices that stabilise effective demand. The income stream of the simplified model discussed above is modified. In the general case, gross domestic product is equal to profits, wages and salaries net of indirect taxes plus transfer, and taxes (indirect and direct); whereas investment, export surplus, budget deficit and capitalist and workers' consumption is also equal to gross domestic product. Hence gross profits net of taxes is equal to gross investment, exports surplus and budget deficit minus workers' saving and plus capitalist consumption. Total gross savings is equal to gross investment, export surplus and budget deficit (capitalists' gross saving and workers' saving). Kalecki's definition of budget deficit and net export is:

> The capitalists of a country which manages to capture foreign markets from other countries are able to increase their profits at the expense of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> capitalists of other countries. [... he goes on stating] A budget deficit has an effect similar to that of export surplus. It also permits profits to increase above the level determined by private investment and capitalists' consumption [...] it can be considered as an artificial export surplus (specifically) In the case of the budget deficit the private sector of the economy receives more from government expenditure than it pays in taxes. (Kalecki, 1933b: p. 85)

From the above, it can be inferred that government net spending is crucial for stabilising effective demand in capitalist economies through activating public investment spending. This public intervention has been also the basis to promote industrialisation in backward economies. A fiscal deficit, *ceteris paribus*, induces private surplus and higher levels of effective demand, so long as the government deficit is not channelled to cancel existing debts. Heterodox economists (including Kalecki) argue that the composition of public spending is very important. Transfers of income, although necessary for improving the demand of lower income sectors and reducing unused capacity, doesn't significantly increase employment; moreover the fiscal deficit used in financial rescues (of financial or non-financial corporations) increases government debts with no expansion in production or income; while higher (fixed) investment spending requires more intermediate goods and more employment (reducing unused production capacities), which increases profits and wages, capitalist spending and workers' consumption, with a given income distribution.

Kalecki recognises that the capitalist system is highly unstable and that capitalist expanded reproduction is by no means a natural phenomenon, arguing that capitalist spending decisions modify effective demand, which can be neutralised through economic policies that neutralise lower capitalist spending, mainly investment spending.

## 2.3 The 'problem' of realisation: R. Luxemburg's definition of imperialism

There are convergent and divergent views between these economists. Kalecki recognises the importance of the external sector. In the paper *The Determination of Profits,* he writes:

> The connection between external profits and imperialism is obvious. The fight for the division of existing foreign markets and the expansion of colonial empires, which provide new opportunities for exports



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> and capital associated with exports, can be viewed as a drive for export surplus, the classical source of 'external' profits. Armaments and wars, usually financed by budget deficits, are also a source of this kind. (Kalecki, 1933b: p. 86)

However, in his paper *The problem of effective Demand with Tugan-Baranovsky and Rosa Luxemburg* he argues that external markets in the Luxemburg analysis are overestimated, because imports are not deducted from exports, not acknowledging that import goods:

> absorb purchasing power just like those home-produced [...] and they do not contribute to the expansion of the markets for national products [...] the net 'external markets' also played their role in the development of capitalism, but a much more modest one than would have been the case if really all exports to the non-capitalist world contributed to the absorption of surpluses corresponding to accumulation. (Kalecki, 1967: p. 456)

The other difference referred to is military spending. There is no doubt 'that the state may create "by sleight of hand" a new purchasing power, which has the same effect as a newly opened market' (Luxemburg, 1913a, cited in Kowalik, 2009: p. 105). The problem with this analysis is that there is no consideration of the way this spending is financed or surplus is absorbed (Kalecki, 1967). Behind this discussion is highlighted that the government deficit instead of government spending is the central issue, and if expenditure is covered by taxes burdening the working class, there is no absorption of effective demand, applying the same argument if it is covered by tax profits, an expropriation of private surplus by the government, limiting further private profit expansion (see Kalecki, 1967: section IV).

In this section we shall concentrate on the discussion of the external sector since the history of capitalism has shown that relations between countries are not even, and this continues until the present day. Imperialist countries have extracted surplus value from backward countries, in different forms. In this context, first we review the Luxemburg concept of imperialism; second we highlight the differences with Lenin's views of capital accumulation, stressing the functions of financial institutions (banks and capital market) in defining the term 'imperialism'; and finally the current state of imperialism is considered.

Luxemburg's discussion of the external sector is based on a theoretical spirit different from that of Kalecki. The external sector is not reduced



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

to exports and imports. Imperialist countries absorb the surplus of non-capitalist countries through international loans (as a means of financing their capital exports) that, on the other hand, destroy the process of primitive accumulation, creating capitalist economies, which have no means of gaining independence from the imperialist countries unless revolutions and other such wars take place. Therefore, the external sector has a double-edged effect. It resolves the imperialist countries' effective demand problem, and in so doing it exhausts non-capitalist markets and creates the condition of a general crisis of capitalism. Luxemburg's hypothesis is that once non-capitalist markets are exhausted the development of capitalism will cease, setting up the stagnation argument. Hence, unlike Kalecki, she is not concerned to improve or counteract downward economic trends, since she assumes that capitalism will fall apart once the non-capitalist sectors are extinguished. In Luxemburg's words:

> The imperialist phase of capital accumulation which implies universal competition comprises the industrialization and capitalist emancipation of the *hinterland,* where capital formerly realized its surplus value. Characteristic of this phase are: lending abroad, railroad constructions, revolutions and wars. (Luxemburg, 1913b: p. 1)

The different phases of the realisation problem are: (i) imperialist countries export capital goods to colonial countries (railroads); (ii) governments of imperialist countries issue international loans; (iii) primitive agriculture (the main activity of non-capitalist societies) is destroyed and replaced by capitalist means of production, with underdeveloped institutions that limit capital accumulation; (iv) colonies import more than they export. This process will lead to economic crises and anti-imperialist movements of the newly industrialised countries, and slow down the accumulation of the capitalist system as a whole. It should be noted that exports of capital commodities and international loans are the main channel through which the surplus of developed countries is absorbed:

> Public loans for railroad building and armaments accompany all stages of the accumulation of capital: the introduction of commodity economy, industrialization of countries, capitalist *revolutionisation* of agriculture as well as the emancipation of young capitalist states. For the accumulation of capital, the loan has various functions: (a) it serves to convert the money of non-capitalist groups into capital i.e.,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> money both as a commodity equivalent (lower middle-class savings); (b) it serves to transform money capital into productive capital by means of state enterprise-railroad building and military supplies; (c) it serves to divert accumulated capital from the old capitalist countries to young ones. (Luxemburg, 1913b: pp. 1–2)

Consequently, external non-capitalist markets are beaten into submission through international competition loans via capital movement into colonies whose counterpart is a rapid increase in overseas exports of imperialist countries, followed by periodical bankruptcies:

> Machinery, materials and the like are supplied by the country where the capital has originated, and the same capital pays for them [...] Capital must purchase the elements of production and thus become productive capital before it operates. (ibid: p. 6)

The second stage of this process, as a result of the destruction of primitive agriculture production in backward economies, is the specialisation of production in raw materials commodities. In backward countries, agriculture is turned into the production of raw material exports. Initially high prices prevail, followed by international demand reductions and widespread economic crisis, leaving the burden of public loans repayment. The Egyptian evolution into the production of cotton is an excellent example of the imperialist process that converts non-capitalist regions into capitalist economies that end up in economic depressions. The conversion of Turkey into a capitalist economy under the dominance of German capital is also widely discussed by Luxemburg, describing a similar experience.

Therefore, the concept of imperialism rests on the idea of international competition through capital movement (international loans) into backward economies, the integration of these economies into the capitalist system, and imperialist countries extracting surplus value that in the end limits the expansion of capitalist reproduction:

> foreign loans played an outstanding part as a means for young capitalist countries to acquire independence [...] Though foreign loans are indispensable for the emancipation of the rising capitalist states, they are yet the surest ties by which the old capitalist states maintain their influence, exercise financial control and exert pressure on the customs, foreign and commercial policy of the young capitalist states [...]



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> These inherent conflicts of the international loan system are a classic example of spatio-temporal divergences between the conditions for the realization of surplus value and the capitalization thereof. While realization of the surplus value requires only the general spreading of commodity production, its capitalization demands the progressive supercession of simple commodity production by capitalist economy, with the corollary that the limits to both the realization and the capitalization of the of surplus value keep contracting even more. (ibid: p. 421)

An alternative concept of imperialism was developed by Lenin in his book *Imperialism the Highest Stage of Capitalism* shifting the importance of external sectors with no references to Luxemburg's views on imperialism. He is more in line with Tugan-Baranowski's idea of 'proportions' and Hilferding's arguments that banks are key institutions that organise capital markets, and come to own stakes in, and often control, large companies. According to Hilferding, banks are crucial in the emergence of monopoly capitalism and the *cartelisation* of capitalist economies. Therefore, loans (and moreover international loans) create large corporations in which real and financial capital is merged and the corporation's returns rise. Lenin's basic arguments on imperialism rests on Hilferding's views, which can be summarised as followed:

> banks not only financed the industrial expansion of capitalism into depended and colonial territories but also restrained competition between capitalist and financed their cartels. If crises arose, they were due to disproportions in production and class struggles. By stabilizing the markets and finances of the capitalists in their cartels, banks were able to shift the costs of those crises onto non-cartelised capitalists. (Toporowski, 2009: p. 3)

Consequently, the dominant view of imperialism changed. Lenin's definition diminishes the importance of uneven international relations between imperialist and colonial countries – and, more importantly, the *stagnationist* argument and the limits of the reproduction of capital accumulation arguments are weakened, 'posing a more benign view of finance' (ibid). Banks and capital markets become the key institutions that issue finance, conforming corporations in which participate financial and real capital.

A further view is proposed in Halevi (2009), who argues that the condition in which imperialism operates changes over the different stages of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

capitalism. The realisation problem (the imperialist economy's need to realise its surplus) is not the dominant form in which imperialist countries dominate the rest of the world. Historically, imperialist countries have been characterised by deficit trade balances, as in the case of Great Britain in the 19th century and the United States economy from the 1970s onwards. Sen, 1992 (cited in Halevi, 2009: p. 118) in relation to the UK imperialist position argues that:

> India produced primary commodities and exported them, and was kept in a status of underdevelopment. Britain used the Home charges (taxes paid by India to London), protectionism against Indian export to the UK, free access to the Indian markets by British industries and, last but not least, control over the London discount rate to siphon off the Indian external surplus and Indian capital in general. [...]
>
> [Whereas the USA can only balance their external balance] by compelling the rest of the world to keep rechanneling the surplus it earns with the US to the US financial system itself. (Halevi, 2009: p. 118)

The main difference between these two imperialist powers is that the UK used a political and institutional mechanism and the so-called economic ones, while the US guaranteed its financial position primarily through political and military actions. The main concern of US imperialism is attracting surplus from the rest of world, shifting its economy from a surplus distributor to a surplus recipient.

Therefore there are major changes in the means of moving financial surpluses into dominant countries. Before the Second War World this was through a mixture of export surpluses into the financial market (the City of London) and the control of the international payment system (the Gold Standard). Then from (1945 to the 1970s, US multinationals had limited operations in Asia, especially in Japan and East Asia (including China, Malaysia, Singapore and Thailand and China) turning the external current account of these economies into a surplus; as a result the US economy was flooded with the exports of these economies. According to Gallicchio (1988) and LaFeber (1997, both cited in Halevi, 2009: p. 122) this implied a change in the international economic relations in which the role of energy and finance became very important.

Consequently, the post-war era led to another stage of US domination. Developed countries (mostly the US) de-industrialised and demanded low-cost imports, especially commodities for worker consumption and the manufacture of intermediate goods. This increased the exports of manufactured goods of developing countries into the US and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

intensified US control of food and raw materials supplies (petrol, food etc.). Additionally, the dollar became the world international currency, and the rest of the world (including Europe) was forced to use this currency in foreign trade, especially in foreign capital movement.

The US financial domination occurred in various stages. The initial step was the construction of the *Bretton Wood System*, which imposed a fixed-rate conversion of gold into US dollars (U$35 per gold ounce). In 1971, this system was dismantled, severing the relation between money and commodities (gold was demonetised); money appeared in its natural form (debt) and the US central bank could increase the issue of dollars regardless of its gold reserves. This gave the US a superior position in relation to other advanced countries, since the rest of the world was forced to use dollars to engage in international trade even when the US was not involved. This became very evident after the 1974 oil crisis, with the agreement signed between the US and the Saudi Arabian Joint Commission on Economic Cooperation, coordinating the purchase of US securities and afterwards accepted by all members of OPEC (Organization of Petroleum Export Countries). In Halevi's words (2009: p. 126) 'These events brought about the recycling of petrodollars into the US banking system at the expense of the Europeans and the Japanese.' The impacts of this new situation can be summarised as follows:

> It marked a change in the US stance from supporting global capitalism to clashing with other capitalisms. And that attitude widened in the 1980s when the US became a globally importing economy generating a systematic external deficit and with growing gaps in its industrial base. [...So] The countries interested in the external markets as a sphere of realization are those of the European Union and Japan. But they are impotent as they do not have the geopolitical capacity to implement a drive towards realization and must adjust to what comes from the USA. (Halevi, 2009: p. 126)

Imperialism in the last three decades changed drastically. The US became the dominant country of the world economy, becoming a surplus collector rather than a surplus distributor via capital exports. So in contrast to what Luxemburg had mooted:

> [I]mperialism cannot be ascribed to the wish to find profitable external market for its own internal potential surplus capacity as thought by Rosa Luxemburg. Nor is the viability of the economy of the country based on securing investment outflows reflecting the need to place



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> somewhere the surplus of money (Lenin and Hobson) [...] the macroeconomic viability of the country is a set of institutions protecting the interest of its own global capital [and] depends much more on the ability to generate (compel) an influx of money from the rest of the world. (Halevi, 2009: p. 120)

## 2.4 Final remarks

Kalecki and Luxemburg shared concerns on how the amplified reproduction of capital takes place. Kalecki's explanation is based on the lack of capitalist spending, fixed investment in particular, because there is nothing which guarantees that the profits of previous periods will be re-invested. Therefore, the scope of government economic policy is very ample and, more importantly, it can neutralise effective downturns in demand (and employment) through higher fixed investment spending, the most effective means of increasing effective demand.

His explanation on profit determination is crucial in the explanation of how capitalism expands. Particularly, the limits of capital accumulation lay in capitalist spending, which reflects the domination of the capitalist class and the subjugation of workers to capitalist decisions. Therefore workers spend what they earn, while capitalists earn what they spend.

Kalecki's arguments on the effects of the external sector on aggregate demand are limited, since he takes domestic net exports in a country's national income as a given, regardless of its development. He does not consider the idea that non-imperialist countries (especially backward economies) are unable to develop fully their domestic capitalist economic and social structures. More importantly, external economic powers can extract other countries' surplus value, limiting their economic development. Even though it was clear to him that there are dominant and dominated countries, he did not pursue this line of thought; in other words, he limited his discussion to the conditions required for government spending to take place.

Luxemburg's analysis is at the other extreme; exploitation takes place within capitalist economies, especially between advanced and backward economies, through capital exports and international loans that transform colonial countries into dependent capitalist economies. Consequently, the external sector is fundamental to the realisation of effective demand, and is a key factor in the explanation of the limits of capital accumulation. She assumes that dominant countries cannot realise their surplus in their domestic economic structures, arguing that



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the capitalist system has a limited possibility of expanded capital reproduction, putting forward the argument of economic stagnation that wrecks the capitalist system.

Her analysis of the 'realisation' problem due to the inability of capitalist spending to absorb the surplus of capital reproduction with advanced economies became highly controversial. She acknowledged that the imperialist countries of her period (Great Britain, Germany) extracted surplus from their colonies not only through external trade but more importantly by means of controlling the international financial system.

The way imperialism has developed in the last four decades is,however, different from Luxemburg's discussions. First of all the US (the sole imperialistic country after the Second World War) uses its power not only to exploit developing economies but also takes advantage of other developed countries such as Japan, and many in Europe. Competition in controlling backward economies has vanished. Second, the financial system (along with political power based on militarism) has been the main channel for imposing the US interests to the rest of the world.

In other words, the US has turned into a surplus-absorbing country and its foreign trade deficit has been used to reduce wage good costs, importing from the rest of the world manufacture at very low cost, based on low wages. This trade has increased the profit margins of the US economic activity, financed by the issue of dollars retained by the rest of the world. As long as the US dollar remains the strongest international means of payment and is considered the most secure form of debt in the world (it has no competition from other currencies such as the euro, yen or yuan) US finance retains its privileged position and imposes its condition of capitalist accumulation.

Finally, it is important to highlight that imperialism is not static. At certain times the US has used the rest of the world to realise their surplus production but in the present era its external trade has turned into deficit, being the most important feature of its dominant position in the financial market.

We finish by stating that higher internal demand can be achieved through government economic policies, limited by the condition that expanded capital reproduction takes place. If external sector operations are limited and the reproduction of capitalism is based on effective demand for domestic production (the import substitution model of reproduction in Latin America, or the Asian reproduction model based on state intervention) and the mobility of private external capital is hindered, then there is ample scope for discretion in economic policy.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

However, once financial capital dominates real capital, the conditions of international markets (interests of the imperialist power) impede the internal conditions of capital reproduction, resulting in deep economic recessions (1929 and 2008) that change the way imperialism unfolds; indeed, this might weaken the capitalist domination itself.

## Notes

1. On the basis of Kalecki's and Keynes' views, ECLAC proposed the centre-periphery duality assuming that backward countries can develop. The Marxist theory of dependency, based on Luxemburg's views, refers to the conflict between developed and under-developed countries in which the later economies cannot be turned into developed countries.
2. The distribution of income is explained in his price theory, and the factors modifying the 'mark up' are approached in his famous articles 'Political factors of full employment' and 'Three ways to full employment'.
3. Keynes (1930) worked on the lines of a similar proposition which he did not pursue further. See Lavoie (2008b) for further discussion.
4. The difference between the decision to invest and the actual fixed investment is 'due to the period of construction, but also reflects such factors as delayed entrepreneurial reactions' (Kalecki, 1943b: p. 110).
5. This means that there is a constant relation between national income and the stock of capital, given $w_1$, $w_2$, $w_3$, there is a given relationship of productive capacity to the stock of capital, and the degree of utilisation of equipment is constant.
6. Capitalist consumption is not included because it is a fraction of gross profits and therefore it is rather stable.
7. The Keynes income multiplier operates in a similar way. Levy (2001), chapter 3, on the basis of Keynes statements, argues that if investment demand price is above its supply price and finance is available, income rises, that is wages and profits savings increases, which enables initial finance to be destroyed, enabling initiation of another economic cycle.
8. Streams of income such as profits and salaries are modified by the introduction of taxes and subsidies. The former applies to all income streams (profit, salaries and wages), and the latter is a form of government income transference to low-income classes (that is, social benefits).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 3

# Luxemburg as an Economist: The Unique Challenge to Marx among Marxists

*Gabriele Pastrello*

## 3.1 Foreword

Considering Rosa Luxemburg as an economist is not intended to be a *diminutio capitis*; quite the opposite. She was a great personality, great politician and great intellectual, in an extraordinary life committed to her ideals. Her masterpiece, *The Accumulation of Capital* (Luxemburg, 1913a), is a prodigy of scholarship on different topics.

Jan Toporowski (2009) has written that Luxemburg's analysis of the financial aspects of the pre-World War I period, discussed in the third part of her book, still illuminate today's global financial problems. The second part, too, is of great interest; indeed, as a detailed discussion of the reproduction problem centred on a crucial topic for Marxists, economic crisis, it is fundamentally a discussion of Say's Law.[1] However, I will focus here on only a very small portion of her work, the first part of the *Accumulation*, devoted to the Problem of the Reproduction, since this part constitutes true hand-to-hand combat with Marx.

Here lies the difference between Luxemburg and the other Marxists. Starting from Kautsky and Lenin onward, Marxist writers on the whole aimed at enlarging Marx's analysis on various topics[2]. All of them took for granted Marx' core analysis, as represented by his published work, the first Volume of *Das Kapital* – supplemented by Engel's edition of the elaborations of Marx's unpublished manuscripts in Volumes 2 and 3. They therefore felt that the core could only be expanded in various directions, but could *not* be elaborated or more rigorously developed. This is exactly what, on the contrary, had been done by Rosa Luxemburg. She was unique in detecting a sort of flaw in Marx's *unendliche* analysis, which was endless, as he could not in the event answer his initial question: where does the money come from? Luxemburg grasped that it was





10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

not so much a question of money-flows as of demand-flows, putting the answer on the right track. However, in so doing she lost sight of Marx's primary problem, the roots of which he could not resolve. Marx's problem was indeed a twin problem, belonging to two domains, money and the real demand. I will attempt to reveal an interconnection between the two problems rooted in Marx's specific approach to the solution of the realisation problem dependent on the smooth implementation of intersectoral transactions. In this light, Marx's own problem will appear as a link in the chain connecting Marx's Reproduction Schemes to Keynes's effective demand.[3]

Hence this chapter will be organised as follows: 3.1. Foreword. 3.2. Marx and Luxemburg: twin approaches to the same problem. 3.3. Marx and Simple Reproduction: discovering and concealing problems; 3.4. Luxemburg and Marx on Enlarged Reproduction: one step forward and one step back; 3.5. Luxemburg, Kalecki and Robinson on autonomous sources of demand; 3.6. The inversion of the receipt-outlay sequence as the clue to Marx's twin problem. 3.7. Interlude: an historical paradox. 3.8. Conclusion: Marx's twin problem re-assessed.

## 3.2 Marx and Luxemburg: two approaches to the same problem

One of the reasons at the root of the differences between Marx and Luxemburg in approaching the problems of the Reproduction Schemes lies in the different paths through which they reached their respective core problem with regard to the Schemes. Briefly, it could be said that Marx tackled to the problem by developing progressively new themes starting from an initial formulation, hence generating new problems. At the end of his exposition Marx formulated his crucial question with regard to the Schemes: where does the money come from? Rosa Luxemburg, instead, asked her fundamental question by means of an opposite approach; she started from a political standpoint, trying to give an ever more sound foundation to her thesis regarding the possibility of the functioning of a capitalist economy – or, rather, its impossibility. En route she posed her crucial question: where does demand come from in the Reproduction Schemes?

I have tried to analyse in detail elsewhere (Pastrello, 2005) the development of Marx's treatment of the 'circulation of capital' from the *Grundrisse* to Manuscript VIII in Marx's *Nachlass*, which is the basis of Engel's account of the Enlarged Reproduction Schemes in Volume II of *Capital*. I will briefly recall here the main points. The *Grundrisse* contain



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

materials concerning *mainly* the circulation of 'individual' capital; there are scant passages devoted to the *Gesamtcirculationprocess*, and nothing that Marx himself could intend to use for the Schemes as he conceived them much later. A step forward is taken in the manuscript of the *Theories of Surplus Value*.[4] There, two exchanges emerge: the first between wage earners and producers – the income-capital swap – and the second between producers – the capital–capital exchange. But the classification of production in two sectors, the consumer good and the means of production sectors, appears only in later Notebooks. And only later on, in June 1863, does the first, although merely descriptive, graphic representation of the global process of circulation appear, conceived in the shadow of Quesnay's *Tableaux*.

However, the real theoretical advance towards the theory of the circulation in the shape we know, after Engel's edition of the second volume of *Capital*, belongs to a block of Notebooks in which a wholly new theme appears: accumulation. Here, two strands are mixed: the accumulation of capital[5] and the circulation of capital as implying the circulation of commodities. The insertion of the 'accumulation' altered the methodological structure of Marx's work, stemming from his early plans and from the work already undertaken.[6] Accumulation implies reproduction of goods, that is circulation, and this factor had been completely excluded in his early methodological approach to the first volume. So it became necessary to neutralise the methodological effects of this insertion. From the unearthed Chapter 6[7] onward, a new assumption is added in order to create a clear distinction between the theory of accumulation in the first book and that of circulation in the second: namely the assumption that circulation is assumed to guarantee the 'material exchange' in the economy – that is capitalists *by assumption* always find the resources they need to carry on their production. Hence, at the beginning of the second volume the statement is made that the subject of this volume is to relax the assumption made in the first with regard to circulation, and to examine the conditions under which 'material exchange' can take place.

However, this is not the end of the story. In all his early treatises, Marx mainly stresses the 'real' side of circulation.[8] However, in his preliminary works, on which the edition of the second volume is based, Manuscripts I–VIII,[9] a new problem emerges. Already, in the paragraphs devoted to Simple Reproduction, the problem arises of the implementation of intersectoral exchanges in a monetary economy. The equilibrium condition between the two sectors warrants the possibility that real exchanges could be performed. But the question arises as to how they could be



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

implemented in money terms. As we will see, in Simple Reproduction the problem finds an apparently satisfactory solution. However, in the treatment of Enlarged Reproduction the problem escalates acutely: the monetary exchanges do not close, and the exchanges of the commodities of the first sector with those of the second are completed thanks only to some implausible assumption, rigorously scrutinised by Luxemburg. Moreover, at each and every round of the expansion the failure to close is amplified. It is in this very context that the specificity of Marx's question arises: where does the money come from in order to settle intersectoral transactions smoothly, to ensure the continuity of expanded reproduction?

Rosa Luxemburg's path to the Schemes is quite different; it stems from the framework of a political divide between her and Lenin. As shown by Tadeusz Kowalik in his book on Luxemburg (Kowalik, 1971), the theoretical divide between Rosa Luxemburg and Lenin has a long history. It begins with Luxemburg's first work on the industrial development of Poland and Lenin's on the development of capitalism in Russia (Luxemburg, 1898; Lenin, 1899). While Luxemburg tries to show that capitalism always needs an external impulse to develop, Lenin, polemicising with Russian economic romanticism,[10] maintains that an autonomous capacity to overcome the conditions of underdevelopment is rooted in capitalism. In so doing, capitalism develops contradictions and is not harmonious; however, it can nevertheless achieve it.

The rift presents itself again in the debate over imperialism.[11] Again for Lenin the imperialistic process is due to a surfeit, the export of capital, while for Luxemburg it is due to a deficiency, a lack of demand, which needs to be made good.[12] Rosa Luxemburg, working her way through the intricacies of the Schemes, discovered that the exchanges which, according to Marx's intention, should close the intersectoral exchanges, were not plausible. It should be recalled that Marx, rooted in Classical political economy, was mainly concerned with what today could be defined as a supply side problem in the sense that, since the quantities to be exchanged are already determined, the only question that can arise is: where does the money come from to fall into the hands of capitalists in order to allow them to buy the goods? Luxemburg's thinking, however, was more modern;[13] the problem for her was that it was not enough that sellers of these commodities should exist. She detected that Marx's solution was not logically watertight. The question arises of who would be willing and able to buy those goods, that is, whence might come the demand for them. Her answer, crowning her debate with Lenin, and thanks to her deepest insight into Marx's Schemes, was that



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the capitalist system is inherently unable to accomplish accumulation; it needs completion from outside. This is the very source of imperialism. This is the core of her *Accumulation*.

## 3.3 Marx and simple reproduction: discovering and concealing problems

The starting point here is a scrutiny of Marx's Schemes in the case of Simple Reproduction, based on their comparison with a modern representation of the overall production process: input–output matrices. Partitioning a closed system by agents – namely firms and households – and then aggregating through industrial sectors, we get the aggregated transactions between firms, and between firms and households, as follows:

$$\begin{array}{ll} IG & FP \\ Y & 0 \end{array} \tag{3.1}$$

Where IG = intermediate goods transactions, FP = final products sales and Y = income. In this scheme intermediate goods transactions are usually consolidated, sales equal purchases among firms; consequently Y = FP[14] is the usual accounting identity equalising incomes and final purchases.

Marx's dissection of the overall process is quite different:

$$\begin{array}{ll} C_1 & C_2 \\ V_1+S_1 & V_2+S_2 \end{array} \tag{3.2}$$

where, as usual, $C_i$ represents the constant capital of the two sectors in the economy – sector I the means of production, and sector II consumer goods. $V_i$ and $S_i$ represent variable capital – wages – of the two sectors, and $S_i$ the *surplus value* of the *surplus product* 'produced' in the two sectors.

The principal, and more relevant, differences between the two structures are: first, the different methods of partitioning of the Input–Output[15] (I–O) matrices and the Simple Reproduction Schemes (SRS): by agents in I–O matrices – firms and households, as against by sectors – the means of production or consumer goods – in the SRS. Second, the kind of objects recorded in the schemes: the objects traded in I–O matrices; goods and services bought and sold – rows and columns. In the SRS, however, the objects recorded have another type of twofold aspect, representing on one hand the *kind* of good produced (and utilised) – $C_i$s, means of production, and $V_i$s and $S_i$s consumer goods; and on the other hand the *sources* by means of which the goods are purchased; that is constant capital advances, $C_i$s buy the means of production, and the variable capital advances, $V_i$'s, buy the consumer goods. Capitalists' expectations of buying consumer goods actually have an ambiguous conceptual status; Marx considers them as money-advances not belonging to the expansion of capital.[16] As we will see, at the root of the problem lies the fact that these expenditures cannot be considered as coming out of surplus value. The problem, concealed in the SSR, will emerge as unmanageable in the Enlarged Reproduction Scheme (ERS).

As a result, this different classification stresses the character of the transaction: either intra-sectoral or inter-sectoral. In contrast to the usual approach, Marx's analysis faces a new problem: whether in a monetary economy all these transactions could be implemented smoothly. Were the answer to be in the affirmative for all the kinds of transactions implied, the difference between the two representations of economy, I–O and SRS, would be merely a question of taste, or of the possibility of sophisticated mathematical treatment.[17] As we will see instead, the fact that the smooth implementation of intersectoral transactions is not guaranteed suggests that Marx's classification exposes a crucial problem that our usual representation, I–O, conceals.[18]

Let us then examine the different kinds of transactions:

- Transactions concerning $C_1$. The firms belonging to sector I use monetary capital advances to buy reciprocally from themselves the means of production needed; in this way they restore in aggregate their capital advances in real and in money terms; these transactions are endogenously self-liquidating;
- Transactions concerning ($V_2$+$S_2$). The workers in sector II use their wages, paid out of monetary capital advances by entrepreneurs in the sector, to buy from them the consumer goods they need. Moreover the capitalists of sector II advance money – not to be considered as capital, according to Marx – the value of which equals the mass of surplus value produced in the sector, to buy goods for their own consumption. In that way they restore in aggregate their advances of variable capital in money terms. Moreover, by selling an amount of consumer goods equal to their surplus value, they realise it in true Marxian terms. Overall, as with sector I, these transactions are endogenously self-liquidating. [19]

Before moving on to intersectoral transaction, some points have to be stressed. First, Marx unwittingly operates a momentous inversion between receipts and outlays with regard to surplus value. In Keynesian parlance, any expenditure whose source is not the already currently



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

earned income is called autonomous expenditure. This is exactly what happens to capitalist expenses in SRS. They spend beforehand, and only afterwards do they get the proceeds; only after they realise their surplus value. Finance, or credit, helps to overcome the time-lag between outlay and receipt. It resembles a Kaleckian world. However, the amount of the surplus value is already determined; only in a very restricted sense do 'they get what they spend'. By defining capitalist expenditure as advances of money and not of capital, Marx conceals the problem he will face in the ERS, namely: how can capitalists spend before earning?

The second point to be stressed is that we should not be misled by thinking about the intersectoral transactions in term of barter of aggregate or equivalent. Indeed, if we think that the exchange may be represented by two symmetrical spot exchanges between the mass of goods on one side and a mass of money on the other, we are actually thinking in barter terms. But Marx thinks in a different way; he repeatedly speaks of transactions as starting autonomously from a multiplicity of independent points – each holding the monetary means to start them – and reaching another set of independent points. Only when all these transactions have been performed smoothly can the match of the aggregates occur and the equality in the values of the masses of goods exchanged make sense.

Now we may consider the intersectoral transactions, remembering that the equilibrium conditions of the Schemes is $C_2 = (V_1+S_1)$, as these transactions must also all be performed, in a sense, simultaneously:[20]

- In transactions concerning $(V_1+S_1)$, the workers belonging to sector I use their wages, paid out from the monetary capital advances of sector entrepreneurs, to buy the consumer goods they need from sector II. Moreover the capitalists of sector I advance money – not to be considered as capital, according to Marx – the value of which equals the mass of surplus value produced in the sector, to buy goods for their own consumption. The capitalists of sector II restore their constant capital advances – $C_2$ – in money terms;
- In transactions concerning $C_2$, the firms of sector II use their advances of capital to buy means of production from sector I. In that way they restore their constant capital in real form; while capitalists of sector I restore their advances of variable capital, $V_1$, in money form. Moreover they realise their surplus value, $S_1$, restoring also their money advances spent in buying consumer goods.

As we have seen, every transaction – whether intra- or inter-sectoral – financed by advances of capital, whether constant or variable,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

may be settled without any problem. A problem could arise, however, with the surplus value which could not be spent before realisation and, at the same time, could not be realised before expenditure. Marx solves the problem by breaking the Classical postulate underlying Say's Law that receipts must precede outlays. Theoretically he retains the postulate; however *de facto* he does not do so. If he had not done so, part of the intersectoral transaction could not have been implemented, blocking the realisation of capital advances, real and monetary, thus jeopardising the continuity of the reproduction process. However, since not only do capitalists hold the money balances needed, but also their level does not change through time, then under these conditions Simple Reproduction can be carried on indefinitely; and the problem is apparently solved.

The above treatment has aimed at showing that in conditions of Simple Reproduction there is already a flaw in the realisation of surplus value, from which stem two problems to which Marx supplied some kind of a solution. But Rosa Luxemburg did not recognise this solution as being the actual origin of her own problem. And this problem, concealed in the SRS, will appear 'enlarged' and unmanageable in conditions of Expanded Reproduction.

## 3.4 Marx and Luxemburg on enlarged reproduction: one step forward and one back

Rosa Luxemburg's analysis of the SRS follows traditional Marxian lines; she followed Marx's guiding light of the material exchange between sectors, dividing her analysis into two parts, the real process and the monetary circulation process (Luxemburg, 1913a). However, in analysing the SRS, she failed to notice two critical points of Marx's theory stemming from the monetary character of the economy.

As a first point, she acknowledged that capitalists must advance money for their consumption. However, she accepted Marx's view that it is only a question of where the money comes from. The capitalists have it already – and she did not notice that the problem is just the same as that which would attract her attention later: whence comes a solvent demand. The second point relates to fixed capital; Marx's analysis stresses that in the case of depreciation and wear and tear a problem arises similar to that of an imbalance between saving and investment in modern terms. Marx recognised that this entails a critical situation that can be made good only by means of export or import,[21] even if the correct proportions between sectors are extant.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Passing to the ERS, Luxemburg followed Marx's steps. Obviously, in order to allow a continuous enlarged reproduction, the proportions between the two sectors must be changed, and she set out from the cases analysed by Marx in his treatment. She stressed a crucial point on which Marx had elaborated at length: that the process of continuous enlargement of the process of production must start simultaneously on both sides, in both sector I and sector II. The capitalists of sector I need additional consumption goods to be available for their additional labour force to buy. At the same time, the capitalists of sector II need an additional means of production to be available in order to increase their process of production. Moreover, each sector must produce the additional goods they both need to expand the process: an additional means of production and additional consumption goods, both to be used in the same producing sector.

Obviously the condition of equilibrium between the two sectors changes dramatically.[22] The capitalist of sector I must not only be able to supply sector II with the means to carry on production at the same level, $C_2$, but also the means of production needed to enlarge the production of sector II, $\Delta C_2$. While sector II must be able to supply sector I with not only the consumer goods corresponding to the variable capital advanced, $V_1$, and to the current consumption of capitalist, here called $S_{10}$,[23] but also the consumption goods corresponding to the increase in wages, $\Delta V_1$, and in capitalists' consumption, $\Delta S_{10}$, following the increase in reproduction. Hence, in equilibrium $(C_2 + \Delta C_2) = [(V_1 + S_{10}) + (\Delta V_1 + \Delta S_{10})]$ must hold; the first component on the left side, and the first two on the right side of the equation are related to the current level of production, while the second on the left side, and the second two on the right, are related to accumulation. This condition is much more complicated than in Simple Reproduction. However, though, in general: $[C_2 \neq (V_1 + S_{10})]$,[24] the two sides of the above equation must match, provided that the right proportions remain between sectors.[25] But even this equality warrants only the possibility of intersectoral exchanges to be performed smoothly; it does not guarantee the implementation of these transactions in a monetary economy in the same way as happened in SRS.

Luxemburg followed Marx on this analysis, elaborating on his numerical examples. The starting point is the above mentioned relation: $[C_2 \neq (V_1 + S_{10})]$.[26] The interesting feature of this relation is that both sides, according to Marx's assumption, are financed ex-ante by means of money advances, whether or not in form of capital advances. We have to recall that circulation of capital, according to Marx, must end where it



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

begins. That is, money advances from both sides; once they come back, restoring money advances to the sectors where they started from,[27] they remain in the same sector and cannot be used, as in Quesnay's *Tableau Économique*, to finance further transactions.[28]

Hence, what remains of the relation mentioned above is $[\Delta C_2 \neq (\Delta V_1 + \Delta S_{10})]$; that is, the increases in production earmarked for accumulation. According to the above, the exchange is financed only in part by means of a money balance equal to $[C_2 - (V_1 + S_{10})]$, a negative or positive differential according to the balance in the hand of the capitalists of sector I or II. However, although what remains does equalise from a real standpoint, capitalists do not hold the money balances by means of which the process of exchanges can be completed. At this point Marx said that the exchange between the two sectors could be performed in real terms, since the two sides of the complete transactions equation are equal. But we still do not know where the money may come from to start the intersectoral exchanges, and we need to find an answer. In fact, Marx closed his analysis of intersectoral exchanges performing an exchange in real terms, though the money balances needed were missing.[29] Apparently, this is what misled most commentators – Tugan-Baranowski and many others[30] – with the notable exception of Luxemburg. It must be added that the same problem, at variance with the SRS, also arises in the ERS in the intra-sectoral exchanges. Capitalists of sectors I and II have surplus product earmarked for accumulation, which they can sell if and only if the surplus values have been monetised and vice versa. In the case of expanded reproduction, the problem of financing transactions is broader than in the case of simple reproduction. But the outcome of the obstruction of the process is the same.

Once Luxemburg[31] reached the point of the analysis where Marx had put forward his question, she drastically changed the theoretical ground, saying that what she had to find out about was not the money to finance the exchanges, but the solvent demand to realise the surplus values in money terms. Accordingly, she formed her more important conclusion thus: since it is not simply a problem of finance but rather of demand, this problem cannot be solved in a closed capitalistic system. This is the root of her theory of imperialism. The importance of her conclusion, as we will see from Kalecki's and Robinson's comments, depends not so much on her alleged impossibility of functioning of a closed capitalistic system as on her being the only one of the Marxists who had detected a flaw in Marx's core analysis, and on her having detected the theoretical character of the solution.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

## 3.5 Luxemburg, Kalecki and Robison on autonomous sources of demand

Rosa Luxemburg reached a clear understanding of her own achievement only after she had worked her way through the intricacies of Marx's Schemes. This is why it was only in the *Anti-critique*, written to answer the numerous obvious misunderstandings of her critics, that she gave the clearest explanations of her own route and of the fundamental points she had made in her critique of Marx. In the first chapter Luxemburg sketches out her theoretical path, ending where she was aiming at; namely that though 'at first glance it [her book – GP] may appear to be a purely theoretical exercise', its practical meaning was its 'connection with the most outstanding fact of our time: imperialism' (Luxemburg, 1921: ch. 1).

She began by stressing that accumulation is possible only if an increasing availability of outlets for expanding production exists. She oscillated between a concept of growing the expected demand necessary to induce new investment – which she calls a new 'field of investment' – and the necessity of outlining the actual demand which can help the monetisation of the *current* surplus. Accordingly she examined the sources of that demand.

Wage-earners cannot supply that demand, for they cannot provide the continuously growing purchasing power required to buy the growing surplus product. Nor can the capitalists, for the same reason. She entered the crucial step of her argument when considering the contribution to the solution of the problem by other social classes in a capitalist society, 'civil servants, military, clerics, academics and artists which can neither be counted among the workers nor the employers' (ibid). What is of utmost interest is that although she gave an incorrect answer as to why they cannot provide the purchasing power, her answer contains the correct theoretical principle.

She begins by saying that these social groups cannot supply the source of demand needed insofar as their incomes depend on the profits of capitalists. What is needed, she added, is an autonomous source of demand. Strangely enough, although government military expenses depend on taxes levied on profits, she considered them instead as an 'autonomous source' of demand because this opens a new 'field of investment'. It is apparent here that, she is resorting to another concept of 'autonomous source' – namely a long-term 'expected demand' – functioning as a kind of 'accelerator'. When she reverted to the short-term demand, she excluded civil servants' expenditure – which in modern terms is



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

considered 'autonomous' demand – as not answering the question of 'who buys them [the goods belonging to the surplus product] from capitalists to help them to transform into money the main part of their profit'. Accordingly, she cannot but answer: 'capitalism expands because of its mutual relationship with non-capitalist social strata and countries, accumulating at their expense', insofar as demand which cannot be supplied from inside must be supplied from outside. It is her different vision which allowed her to detect in Marx's clumsy, though deep, analysis of the Schemes the flaw in demand stemming from the implicitly assumed closure of the circuit; that the whole of *surplus value* buys the whole of *surplus value*.

It is her quite new sensibility to the demand side, as Sweezy put it in his introduction to her book (Sweezy, 1956), that elicited the praise of other modern economists, such as Kalecki and Joan Robinson. Joan Robinson (1951) and Michał Kalecki (1967) appreciated Luxemburg's result: the correct stress on the demand side. However, they skipped the analytical route that led her to her final result – a route which undertakes a detailed and laborious analysis of Marx's Reproduction Schemes and of the monetary transaction which do not match.

Neither Robinson nor Kalecki share any element of her analytical route. Robinson was rooted in Keynesian accounting identities, consolidating all the interindustrial transactions. And Kalecki paved his own way, elaborating identities between incomes and final products, as clearly shown in his reconstruction of Marx's Reproduction Schemes (Kalecki, 1968a), obviously with a keener attention, with respect to Robinson, to the different classes of income earners. Kalecki's reconstruction, indeed, though exhibiting equilibrium conditions hinting at those of Marx, differs fundamentally from those insofar as the monetary interindustrial transactions are cancelled out; this is at odds with Marx's and Luxemburg's approach, as in the Keynesian identities.[32]

Starting from this standpoint, both Kalecki[33] and Robinson were able to detect immediately the potential generality of Luxemburg's solution as well as the actual limits of what she arrived at. Actually, from a strict analytical standpoint, to limit the autonomous source of demand to the possibility of exports is incorrect. Moreover, there is no hint pointing to the multiplier in Luxemburg's arguments. Nevertheless, the existence of an exogenous impulse which makes the system start up is at the heart of any dynamic representation of the multiplier. Hence, the relevance of her achievement stems from her new sensibility about the dynamic factors of capitalist system.[34]



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

## 3.6 The inversion of the receipt-outlay sequence as the clue to Marx's twin problem

Scarcely could two personalities be more different: Karl Marx, the *déraciné*, the impassioned foe of capitalism, the economist rooted in Classical political economy; and John Maynard Keynes, brought up in the educational heartland of the British ruling class, the saviour of capitalism, the anti-Classical economist. For all that, they shared a crucial characteristic in their economic thinking: they were the two economists, in the history of economic thought most sensible to the monetary aspect of the capitalist economy.[35] Keynes had a very superficial, scanty and even prejudiced knowledge of Marx. Yet when he investigated Marx's M-C-M′ cycle, Keynes immediately recognised in it the same kind of thought on how the capitalist system functions to his own thinking.[36] Moreover, in two points elaborated by him there is a not wholly casual convergence with Marx. These two points have to do with the inversion of the relation between receipts and outlays, an inversion which needs to be financed, as already implied in the Simple Reproduction. The fact that Marx did not recognise this inversion as such obstructed his path to the solution of the same problem in the 'Enlarged Reproduction'.

We find the first case in Keynes's discussion of the finance motive,[37] a demand for money connected with the time profile of the money balances[38] needed to fill the gap between outlays and receipts; it is at variance with the properly called transaction money balances, which have to fill the gap between receipts and outlays. The interesting point for us is that the reason for that inversion for Keynes is that money must serve to finance the expansion of the scale of production,[39] the 'enlarged reproduction' in Marx's language. Keynes's balances are nothing more than what are called 'monetary capital advances' by Marx, whose problem in the 'enlarged reproduction' is just how these balances can be enlarged. We should not be surprised by the fact that when thinking about the enlargement of production they were both worried about its financing. Clearly, Keynes did not know anything about Marx's problem. However, assuming the existence of finance balances, in order to fill the gap between outlays and receipts, as Keynes put it, Marx's problem is solved.

We find the second case of convergence with Marx in Keynes's treatment of the financing of the war budget. In a unpublished report (Moggridge, 1982) Keynes suggested inverting the methods of thinking about and planning the financing of the budget; instead of borrowing first and spending later, he suggested spending before, and only



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

borrowing after that.[40] In this case, the inversion on monetary side is parallel to the inversion on the real side, as government expenditure is autonomous par excellence. Robertson reacted tempestuously to that proposal (Robertson, 1939):

'One view is that there is no problem.

You don't know how to manage Looking-glass cakes', the Unicorn [Keynes] remarked. 'Hand it round first, and cut it afterwards'.

In *Through the Looking Glass* (Carroll, 1872) the sequences are inverted, relative to what happens on the side of the glass in which we live. Robertson reaffirmed later, in a correspondence with Harrod,[41] that the right order of the receipt-outlay sequence was not for him an empirical fact, but a 'law of thought', as he said, required to analyse 'economic' behaviour as such.

This inversion is at the heart of what in Keynesian economics is called 'autonomous demand'. Otherwise Say's Law would rule, with its 'usual' receipt–outlay sequence. Though Marx was not aware of it, the 'inversion' was also required by his theory. Indeed, for Marx, the difference between the circulation of money and the circulation of capital is crucial, a difference he perceived after writing the *Grundrisse*. The first circulation is, as it were, a *perpetuum mobile*; once in motion it never ends. The second has the form of a circular movement which flows back to the starting point and then stops.[42] This form of the capital circulation sometimes requires the inversion of the receipt–outlay sequence. This is not always the case, as we have seen, but only when the circuit must be put in motion *ex-novo*, that is in the case of expanding production, accumulation. Most of the critics of Luxemburg who underrated her efforts in trying to realise in money the surplus value produced did not grasp the difference between the two circuits, let alone the necessity of the 'inversion', treating the whole circulation as an endless circulation of money.

We may ask why Keynes could resort to this solution, while Marx could not. The crucial point is a practical historical one, as well as theoretical; Keynes lived during an epoch when the Bank of England was the keeper of the monetary sovereignty, the ultimate issuer of money. Indeed, Keynes criticised the gold standard system insofar as the inelasticity of the supply of coinage could hinder the achievement of domestic economic targets.[43] Marx could not resort to Keynes's solution. He lived under the domination of the gold monetary system. Though he polemicised with Ricardo and the Currency School, the instigator of the most stringent rigidity of the monetary system by the central banking management,[44] he did not accept the view that the central bank could



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

regulate the quantity of currency in circulation.[45] From the theoretical point of view he had assumed the existence of coinage only – with its short-run inelasticity of supply[46] – as the sole means of exchange. He rejected the cases of relaxation of this assumption that he subsequently considered. For he considered the resort to them as mere *adhockery* before finding the solution within the strict limits assumed. To find the means of financing the inverted outlay–receipt sequence was not simply a technical, side aspect of the whole discussion. It was crucial for solving the problem of the implementation of intersectoral transactions; and resorting to the external world, Rosa Luxemburg solved that problem and at the same time removed it.

## 3.7 Interlude: an historical paradox

There are many reasons for the hostility, underrating and misunderstandings met by Rosa Luxemburg's elaboration on Marx's Reproduction Schemes, of which Kowalik gives an almost exhaustive account in his work on Luxemburg (Kowalik, 1971). One of these, passing comparatively unnoticed, is that among the commentators of Marx it is hardly possible to find an appreciation of the high level of the mathematical side of his work on the 'general process of circulation'.[47]

For example, in his discussion of Smith, in the *Theories of Surplus Values*, polemicising with him for the exclusion of 'constant capital' from his national accounting equations, Marx builds the first example in the history of economic thought of a vertically integrated sector, a tool based today on Leontief's I–O analysis,[48] and made widely known more recently by the work of Pasinetti (1973). It must, moreover, be stressed that, even if calculating the proportions between sectors in simple reproduction may be not too problematic, changing them only by means of a numerical calculus to get the new proportions of an expanding system requires some kind of rule of thumb to warrant the convergence of an iteration – a result which has in recent times been warranted by a sequence of pre- and post-matrix multiplications. Moreover, calculating the series of levels of the expanding sector in the process of accumulation implies a rule-of-thumb solution of an *eigen*-vector problem.[49] All this is meant to stress the powerful 'mathematical intuition' implicit in Marx's work,[50] an aspect which could be easily underrated in those times.

It is possible to put forward an hypothesis regarding another possible factor to explain the above-mentioned undervaluation. It would be an historical irony that the followers of these two economists, Marx and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Keynes, with such an acute feeling for the monetary side of capitalism, should not share their sensibility in the same degree, being rather more biased towards the 'real' side of the functioning. This may emerge, for instance, in the stress put by a great many Marxists on the structural, that is 'real', aspects of capitalist economy, as against other aspects, deemed 'cyclical', or at least 'transient' phenomena, mainly related to the monetary side of the economy.

Strangely enough, it is possible to advance such a hypothesis about Keynes's pupils as well. For instance, Joan Robinson, in her groundbreaking *Accumulation of Capital*, took a dominant 'real' standpoint, giving the treatment of the monetary factor a rather secondary position, at variance with, for instance, Keynes's main work, where money and unemployment stand together from the very start.[51] Obviously, it was the 'real' side of the matter that had to be developed, and which required most of her attention, inducing, most likely, a 'real' bias. Meanwhile, Richard Kahn disliked monetary matters so strongly (since he felt their treatment was too much rooted in the Quantitative Theory of Money that he despised) that the forced dismissal of Keynes's first proposal on monetary questions for his doctoral thesis allowed him to devote himself to what became a masterpiece in the 'real' side of Economics, *The Economics of the Short Period* (Marcuzzo, 2002).

The case of Kalecki is similar to that of Joan Robinson. It apparently depends on overconcentration on scientific discovery. In the early thirties, Kalecki was trying to elicit the principle of functioning of a capitalist economy that we, after Keynes, call 'effective demand'. The route leading to that discovery was for Kalecki a 'real' path,[52] and accordingly he did not hesitate to put aside any problem that might threaten to misdirect his line of thought. We must in this way interpret his reconstruction of Marx's Schemes which, being based on *vertically integrated sectors*, could not but cancel Marx's stress on 'constant capital',[53] the existence of which led him to the problem of the financing of intersectoral transactions. Such a problem cannot even be conceived of in a vertically integrated sector,. However, though Kalecki's reconstruction cancels some important aspects of Marx's Schemes, it served to connect them to the 'effective demand' question; an aspect which could not have emerged clearly in the original Schemes. Accordingly, if on one side we owe this important connection to him, we must not on the other overrate his downplaying of the financing of the intersectoral transaction in Marx's analysis. He could not but underrate them, being focused on *his* own problem, a theoretical problem of historical importance.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

## 3.8 Conclusion: Marx's twin problems re-assessed

We have seen that Marx was asking how it could be possible to finance the realisation of the surplus value of the capitalists, enabling, at the same time, the implementation of the intersectoral transactions, in order to have the reproduction process running. Rosa Luxemburg maintained, however, that the problem was not intrinsically the tangle of imbalances arising from the intersectoral transactions as the origin of solvent demand, to finance the realisation of surplus value. Her answer was that demand could only flow from outside; obviously, in this case the problem of smooth intersectoral transaction is simultaneously solved.

Michał Kalecki and Joan Robinson endorsed her solution. Indeed, starting from an 'effective demand' conceptual framework – autonomously elaborated by Kalecki, and rooted in Keynes's teaching of Joan Robinson – they stressed that the 'export' solution was only a specific kind of solution, not a general one. Kalecki, indeed, used the curious expression 'internal export' to stress that the point was that demand must be autonomous, not necessarily from outside.

In fact, the problem may be faced by starting out from two opposing positions. From the first, the positive question is asked as to how an economic system as represented by Marxian Schemes may function. The second position is in a sense a negative one, insofar as it asks why it might not function. The negative standpoint may be more meaningful than the first. In Luxemburg's approach the negative approach is only preliminary to the positive; indeed, she started out by stating that a capitalistic system cannot function insofar as it is a closed one; thereafter she found out how it may function with external aid.

However, at the end of her analysis she abandoned one aspect of Marx's negative answer, namely that without autonomous demand the intersectoral transactions cannot be financed. The monetary side of the problem stands at the root of the impossibility of the intersectoral transactions to be performed, hindering the functioning of the system. Moreover, the greater the scale of reproduction, the more this deficiency grows. The question of where money comes from is not superfluous; it points to a twin problem with respect to the realisation of surplus value: the implementation of the intersectoral transactions. Though facing the first problem in a ground-breaking way, Rosa Luxemburg let the twin problem be cast into oblivion.

The problem for Marx of intersectoral exchange arises from the very fact that Marx, sticking to the Classical approach, implicitly accepts the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

logical postulate underlying Say's Law: that is that the whole product of a period is purchased by means of the income distributed in the same period. That is, the income–product circuit is a closed one; surplus value purchases the final product associated with the expanded reproduction of the period. However, his assumption is countered by Rosa Luxemburg's question: how can surplus value purchase something before being realised in monetary form? – That is, before the same surplus products, which are yet to be purchased, could have been sold. Moreover in an expanding economy such a problem cannot be solved without inverting the receipt–outlay sequence – so breaking Say's Law – not only on the real side, but also on the monetary. This inversion is clearly connected with Marx's distinction between circulation of money and capital, a distinction crucial to the understanding of the functioning of the capitalist economy.

Here we may see clearly the difference with Keynes. At the outset of his *General Theory* he simply sets aside Say's Law; whereas Marx, through his cumbrous analysis of the Schemes, has, unknowingly, shown that a system in which Say's Law is assumed to hold cannot in fact function. Accordingly, we may say that only Karl Marx's analysis may supply a stronger rejection of Say's Law than simply assuming that it does not hold. Marx's analysis of the Schemes may be considered the starting point for the formulation of an impossibility theorem[54] regarding Say's Law, adding that it was Luxemburg's analysis of his Schemes that helped focus on this point.

## Notes

1. Say appears as a *dramatis persona* only in the first interchange of Luxemburg's reappraisal of the discussion. To that part is logically linked also the Appendix, an anti-critique of the shallow misunderstanding of her work by the then leading Marxist theoreticians. As a general rule I will not discuss here opponents' critiques of Luxemburg's *Accumulation*, apart from some specific points where needed.
2. Kautsky dealt with the peasant problems (Kautsky, 1899), and imperialism (Kautsky, 1914); Lenin with the so-called 'romantic' critique of capitalism (Lenin, 1897) and the capitalist development in Russia (Lenin, 1899); those who wrote on imperialism included Luxemburg (1913a), Lenin (1917), Bukharin (1926), and many others; Bernstein (1899) and Tugan-Baranowski (1905) credited the idea that 'crisis' could not necessarily accompany capitalism; Hilferding (1910) enlarged the Marxist approach to *Finanzkapital*; Bauer (1913), Sternberg (1926) and Grossmann (1929b) laid down the first very modern models of accumulation, while more recently Baran and Sweezy (1966a) endeavoured to adjust Marxian analysis to the conditions of modern times.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

3. My attempt has nothing to do with the usual contention that Marx's 'realisation problem' is almost equivalent to the 'effective demand' problem; see Sardoni (1987), and Robinson (1949). Rather, in my opinion, in Keynesian terms Marx's problem may be more correctly defined as one of expectations fulfilled, taking as given and and solved Keynes' own problem, the level of overall production. The level of production in Marx's approach may be taken as given, as in the Reproduction Schemes; or it may be taken as the maximum feasible level, according to his famous remark in the first volume, 'Accumulate, Accumulate', and so on. However, this level is never put under scrutiny in order to explain the forces which determine it, apart from some rare *obiter dicta* on the role of orders in determining the quantity to be produced. Hence, as there are two different problems, a question of a link between the two theories arises.
4. Being the content of Notebooks VI–XV belonging to the 1475-page manuscript written in the years 1861–1863 encompassing XXIII Notebooks, as described by Engels in his Preface to the second volume of *Capital*.
5. As we know from section VII, *The process of accumulation of capital*, of the first volume of Marx's *Capital*, while in chapters XXI and XXII, the standpoint is that of the accumulation of 'individual' capital, in chapter XXIII it becomes the relation of 'capital as whole' and the labour-force as a whole.
6. The question of the reasons underlying Marx's change of plan for his main work, *Capital*, with respect to the previous works contained in his *Grundrisse* (1857–1859), has been raised by Grossmann (1929a), and discussed at length by Rosdolsky (1969).
7. See Marx, 1933. In this chapter, written between 1863 and 1866, unpublished and discovered only in 1933, Marx sums up the result of his analysis of the 'process of production of capital', deferring the analysis of the 'circulation process'.
8. Since he is concentrating on the so-called *Stoffwechsel*, the 'material exchange' of society.
9. The first of which was written between 1864 and 1865, and the last in 1878.
10. Actually, Kowalik plays down the acuteness of their contrast; see Kowalik (1971), chapter I. Some points of his book are reassessed in his more recent Introduction to *The Accumulation of Capital*, see Kowalik (2003).
11. See Kowalik (1971): Part II, *Theories of Accumulation and Imperialism*. See also Kemp, 1967: chapters IV and V.
12. In terms of modern national accounting the two facts are but the two sides of the same phenomenon, the surplus on the current account being associated with a surplus on the capital account. Obviously the question remains open as to which of the two sides the dynamic impulse for the motion of the whole system stems from.
13. As recognised by Sweezy in his Introduction to the *Accumulation* (Sweezy, 1956).
14. Obviously this a telegraphic way of speaking, insofar as Y and PF are abbreviations for vectors, and what is meant is the derived – by pre-multiplication with 'unity diagonal vectors' – expression: $\Sigma Y_j = \Sigma C_i + \Sigma I_i$, where 'i' is the row indices, 'j' the column indices, $C_i$ and $I_i$ the consumer goods and investment goods (capital goods in Classical parlance).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

15. From here onward, for sake of brevity, the expression ‘Input–Output’ and ‘[Simple or Enlarged] Reproduction Schemes’ will be indicated, respectively, with the acronyms: I-O, RS, and SRS or ERS.
16. As explained by Marx In Paragraph V of the Chapter XX, Simple Reproduction, of the third section of Volume II of *Capital*; Marx, 1885.
17. In a paper in preparation, I have tried to couch Marx’s Schemes in matrix language. Unfortunately, for reasons of space, some of the conclusions of the paper can be reported here only in literary form.
18. There is a huge number of works, starting from Lange (1965) and including: Harris (1972), Roemer (1978), Sardoni (1981), Campbell (1998), Lapavitsas (2000), Nell (1988 and 2002), Trigg (2009), in which linear algebra has been used to explore possible developments of Marx’s Schemes. This is not, however, the route chosen here. For all their interesting outcomes, these works, in my opinion, miss the point made here. An analysis which treads a similar path to the one tried here may be in Nell (1988); however his analysis, though interesting, takes too many liberties with regard to Marx’ assumptions relating to monetary transactions to be useful in this context.
19. Obviously this is true only in the aggregate. However the sub-sectoral imbalances which necessarily arise do not in themselves hinder the process, insofar as they make good by means of the completion of all the transactions. This is exactly the problem concealed in the use of I-O matrices, in which the consolidation of the intra-firms transaction is taken for granted. This is true only in the aggregate; however, for every individual industrial sector in which the balance of intermediate goods bought and sold is in the negative, the financial balancing of the intermediate transactions of the sector requires the completion of all the transactions of the sector.
20. Where ‘simultaneous’ does not necessarily mean ‘spot’, but can mean that they occur independently during a span of time during which they must match
21. Marx (1885): Vol. II, chapter XX, § XI. Unfortunately Luxemburg does not grasp this extremely significant point, which Joan Robinson was to notice, see Luxemburg (1913a): chapter V. See also Joan Robinson’s chapter VI, on effective demand (Robinson, 1949).
22. It is possible to find one of the first mathematical analyses of this condition in Lange’s *Theory of Reproduction and Accumulation* (Lange, 1965: chapter 2).
23. Here defined as in Lange (1965).
24. See Lange (1965): chapter 2.
25. For the elaboration of these conditions, see Lange (1965): chapter 2.
26. In her analysis of Marx’s second numerical example of expanded reproduction, Rosa Luxemburg, as Bukharin would also do, assumed that [$\Delta C_2 = (\Delta V_1 + \Delta S_{10})$]. But this is not true in the general case, depending from heroic assumptions valid only in some special cases; see Luxemburg, 1913: chapter VII.
27. The Circuit Approach has elaborated at length on this point. However, their elaboration and the present one are not *in pari materia*. For a circuit analysis applied to Rosa Luxemburg, see Bellofiore (2009b).
28. Obviously it is not necessary that the mass of money in circulation be equal the mass of the product to be realised, as the whole Marx’s analysis in the second Section of the second Volume, dedicated to the circulation of capital, shows.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

29. In my above mentioned paper, I have commented on Marx's attempt to solve the problem introducing gold production. Only one point must be stressed here. The introduction of gold has been often treated by commentators of Marx's Schemes as a problem of how to treat the sector to which its production belongs. This is a side problem for Marx. Obviously it has to be solved. However, the meaning of gold production for the analysis of ERS lies in the fact that gold production eliminates the problem of the transformation of part of the surplus product into money, being itself money, under the assumptions of the Schemes. See also Robinson (1949): chapter VI.
30. The misunderstanding has lingered on; Sweezy (1942) puts forward an incredibly cavalier treatment of Luxemburg's *Accumulation*. Indeed, in his account of Marx's analysis of expanded reproduction he maintains that the bare existence of a surplus production of consumer goods is a sufficient condition to warrant that the additional labour force will be able to buy it, without even suspecting that the question must be asked: how can they do it?
31. Rosa Luxemburg performs her critique of Marx's attempts of a solution of the problems arising in the ERS, mainly in chapters VIII and IX of her *Accumulation* (Luxemburg, 1913a).
32. See Kalecki (1968a). Kowalik summarised his approach on two occasions (Kowalik, 1971, and Kowalik, 2009).
33. Indeed, in Kalecki, reconstruction holds three accounting identities which in usual national accounting schemes – related to I–O representation – do n ot:$Z_1+S_1=I, Z_2+S_2=K, Z_3+S_3=R$which means that the value added in each of the three sectors equals the value of the *net product* of the sector: investments, wage goods, luxury goods. From these identities is derived the crucial equation in Kalecki's reconstruction$Z_3=S_1+S_2$that is, that the profits of Sector 3 equal wages of Sector 1 and 2. This is the straightforward consequence of using the vertically integrated sectors in which inter-sectoral transactions become intra-sectoral and are cancelled out. A simple inspection shows this equation to be quite different from Marx's equilibrium condition in Simple Reproduction:$C_2 = (V_1+S_1)$, in which 'intermediate' goods, $C_2$, perform a crucial role.
34. On Luxemburg's dynamics, see Bellofiore (2009a).
35. The extreme opposite position is that of the Austrian School. Its members, from Menger to von Mises and von Hayek, all thought that the functioning of a capitalist economy could be understood as if it were a barter economy; moreover, that economic authorities should and could drive the system in such a way as to purge it from money effects making it stray from the barter path. They may be deemed to be blind to a crucial aspect of capitalism which, according to Marx and Keynes, cannot be put aside, neither theoretically nor practically – its monetary side.
36. As witnessed in the unpublished chapters of the *General Theory*, in which he elaborates on this point, see Moggridge (1979).
37. A discussion of which Graziani gave a rather Robertsonian account, instead making Keynes' point one of a problem of restoring the money balances necessary to pay back the credit advanced by the banks (Graziani, 1984).
38. The time profile of money balances is examined by Marx in Volume II of *Capital*, section II, in chapter XIV. The money balance time profile is also examined by Phillips (1921), and quoted approvingly by Keynes in his *Treatise*.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

39. It must be stressed that in that discussion a misunderstanding arose that could not be made good. Keynes was focusing on an expansion in production, both in consumer and investment goods, which had to be financed on the side of 'producers', that is of the sellers of both consumer and capital goods. His discussants instead, Robertson above all, were concerned with the problem of financing 'investments' on the side of the buyers of capital goods. See Moggridge (1973).
40. What is relevant here is the fact of the inversion; much less so, though still interesting, are the reasons in terms of the cost of financing the budget (Moggridge, 1982).
41. See Letter of Dennis Robertson to Roy Harrod, May 19th, 1936, quoted in Besomi (2003).
42. There are pages and pages, in Marx's unpublished Manuscripts devoted to the *Refluxbewegung*, the flow-back-movement. In his interesting analysis of the circuit of monetary transactions in Marx' Schemes, Nell (1988) misses the point.
43. This critique began in his *Tract on Monetary Reform*, and was pursued through his *Treatise* then the *General Theory*, till the last gasp, at Bretton Woods.
44. As realised in the ill-famed Bank Charter Act of 1844.
45. See, for instance, the discussion in chapter II of the *Grundrisse* with the Proudhonian Alfred Darimon who, though superficially, defended this thesis (Marx, 1939).
46. Made good only by precious metal production.
47. This case has nothing to do with his highly controversial manuscripts on the foundation of 'differential calculus' (Marx, 1968).
48. I-O analysis was preceded by the graph representation of the circulation process made by Quesnay in his *Tableau Économique*, Quesnay (1958) elaborated in 1758, much appreciated by Marx as the *first* representation of the global economic process; afterward by a different graph-representation of the global process made by Hobson in his *Physiology of Industry* (Hobson and Mummery, 1889).
49. All Marx's solutions are indeed equilibrium solutions in modern matrix terms.
50. Indeed, although the Cramer rule was known from the 18th century, the mathematical techniques needed to solve these problems were only under development in Marx's times, so he could not have been acquainted with the rule. The mathematician Sylvester introduced the term 'matrix' in 1848, and only after 1858 was the *Theory of Matrices* developed by Cayley and others.
51. See Robinson (1956). This phenomenon has a long story: it may be deemed to begin with Quesnay (1958) and his shift from the monetary to the 'real' aspect of the economy. Another outstanding example is showed by Smith and his simplistic views on money as compared to the rich account of James Steuart on monetary phenomena.
52. While Keynes reached it starting from the monetary side of the economy.
53. In a recent interview Łaski, the pupil of Kalecki, reminds that he stressed this point to Kalecki, receiving a rebuke, the rightness of which he found convincing. My analysis tries to show that his reservations on this point were not fully unsound; see Łaski (2006).
54. In the sense that for every representation of the system, be it by means of I–O matrices, or of Marx's RS – which means different underlying assumptions about the transactions – there are some transactions which do not match.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 4

# Marxist Political Economy without Hegel: Contrasting Marx and Luxemburg with Plekhanov and Lenin

*Paul Zarembka*

## 4.1 Introduction

No one contests the early influence of Hegel on Marx. Yet some act as if Hegel was to be always important for Marx. Furthermore, certain popular renderings even use a simplistic caricature of Hegel such as the thesis–antithesis–synthesis formulary and, taking that to belong to Marx as well, attack Marx through caricature. Meanwhile, the question is infrequently posed whether Hegel's influence persisted for Marx, and if Marx himself, as his work deepened, defended the necessity of Hegel's philosophy for his political economy. We shall demonstrate, with considerable evidence from Marx himself, the declining need for Hegelian philosophy in Marx's evolving understanding of political economy.

One piece of evidence we shall develop is the appreciation by Marx of a book by Nikolai Sieber published in 1871, an appreciation which is well known – while the fact that Sieber expressed a clear aversion to Hegel passes unnoticed. Actually, it is nothing less than astonishing that Sieber's discussion of Marx did not appear in any translation until 2001, 130 years after the event. With Marx's reaction as evidence of the evolving nature of Marx's own thought, the long-term absence of a translation appears to have been a political decision with deep roots in the early intellectual history of Marxism, thus a history of a particular suppression, perhaps partly unconscious. This early history intertwines with major issues in Marxism in the late 19th and early

20th centuries, leading to inclusion in this chapter of a discussion of Plekhanov, Lenin, and Luxemburg.

Louis Althusser (1977b[1969]: p. 90) argued that Marx was driven 'irresistibly to the *radical* abandonment of every shade of Hegelian influence'. *Capital*, said Althusser, still included traces of Hegelian influence – in his vocabulary of use-value and value while describing two entirely different things, in a reference to 'negation of the negation', and in the theory of fetishism. Only in 1875, in his *Critique of the Gotha Program* and thereafter, was Marx's intellectual process regarding Hegel completed. Althusser has been sharply criticised by some, even for Stalinism. We will not pursue Althusser's argumentation here.

James White (1996) takes a quite different approach by very carefully examining intellectual history. We are referring to his *Karl Marx and the Intellectual Origins of Dialectical Materialism*. White addresses wide-ranging German and Russian sources in circumstances in which 'it is essential to verify everything, wherever possible, with first-hand materials' (p. 19). In our opinion, White's book is too little known and appreciated. The present author reviewed it positively (Zarembka, 2001), responding to a negative review by Sean Sayer. The journal involved, *Historical Materialism*, gave Sayer space to rebut the support of White's work – but no space was provided to White as the author of the book, even after a request.

We proceed to survey the development of Marx's own political economy from 1867 onward in order to reach our conclusion, and then turn to the early history after Marx's death.

## 4.2 *Capital*, volume 1, first edition

The first edition of Marx's *Capital, Volume 1* was of course published in 1867, the result of a long, intense project. Although it can be argued that it was less influenced by Hegel than earlier work, this first edition had certain Hegelian formulations, and, indeed, philosophical words were even italicised and there were considerable references to Hegel, particularly in the first part. As described by White (1996: pp. 20–23), that edition contained references to major philosophical concepts from Kant and Hegel such as the universal and the particular. A draft outline written by Marx a decade earlier for his overall project, published in the 20th century in the *Grundrisse*, was even organised around the concepts of the universal and the particular, as well as individuality (White, 1996: p. 161).

In the proofs for the first edition of *Capital*, Marx was cautioned by Engels about the difficulty of Hegelian language. Marx responded by



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

including a simplification in an Appendix on the 'value form'. Still, when published, Marx received criticisms for Hegelianisms. Perhaps as a defensive reaction to these criticisms, Marx mentioned in a letter to Joseph Dietzgen on 9 May 1868 that he wanted to write on dialectics.[1] In other words, it seems that in 1868 Marx wanted to explain himself in regard to the Hegelian issue, a desire that was not to be implemented, probably for reasons that we are developing.

In 1868 Marx moved away from the British context that had underlain *Capital*, and moved toward a study of Germany and then, later, Russia. For Germany, Marx read Georg Maurer's works, writing to Engels that his books are 'extraordinarily important'. From Maurer, Marx learned that communal organisation in agriculture had been important in early Germanic history and even that aspects of it still persisted. Marx came to the view that force was needed to destroy it (White, 1996: pp. 206–207). Thus for Marx, only the British case was becoming the British case, rather than some kind of universal. Turning shortly thereafter toward Russia, including learning its language and history, only reinforced his intellectual development. These researches were significant background, as Marx corrected and began publishing the first French edition, as well as the second German edition, of *Capital*.

## 4.3 New editions of *Capital*, volume 1: changes from first edition

The French edition prepared under Marx's direct supervision was published in serial form from 18 March 1872 to 28 April 1875. Many of the changes from the first edition, but not all, were concomitant with changes in the second German edition of 1872. Indeed, Marx's 'Afterword' to the French edition suggests as much: 'Having once undertaken this work of revision, I was led to apply it also to the basic original text (the second German edition)'. With this in mind, we will be referring to either the French or the second German for early sections of *Capital*, keeping in mind that the full German second edition came out before the later parts of the French, giving Marx time to make further changes for the French – time which he utilised.

Besides White, there seems to be too little consideration for these changes made by Marx. White himself argues that Marx ran into a theoretical problem when relying upon Hegel as a basis for the understanding of historical development, and so had Hegelian language removed and 15 references to Hegel in the first edition halved in later editions. Thus the changes made by Marx would not, for White, be an issue of Marx



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

feeling misunderstood, but rather focused on Marx's increasing understanding of Germany and then Russia. Abandoning Hegelian concepts,

> Marx never employed the terms Universality, Particularity or Individuality again in his writings, and henceforth he turned his attention increasingly to the study of agrarian communities, especially those in Russia [...]. In this edition [the second German], the first chapter was substantially altered in such a way as to reduce drastically the occurrence of philosophical terminology, and render what remained inessential to the argument. (White, 1996: p. 207)

For the editions of *Capital* after the first German, the prior appendix on the 'value form' was moved up to replace the prior first chapter and was also rewritten. An important change in the serialised French edition (but not in the second German, probably because this portion of the French was published well after the second German) was the elimination by Marx of the reference to 'classic form' – which suggests universality – in discussing primitive accumulation in Part VIII, and substituting language referring only to Western Europe. Unfortunately, Engels failed to incorporate this important change in the third and fourth German editions, even as some other changes from the French were included. Anderson (1983: pp. 76–77) states that Engel's failure in this respect was 'perhaps most important of all', persisting even in the modern Fowkes English edition (translated from an East German edition).

It is also significant that the French edition, for the first time, and not in the first, second or even later German editions, separates Part VIII, 'The So-called Primitive Accumulation' from its location in German editions. In German, it is included in Part VII, 'The Accumulation of Capital', and splitting it off seems to reduce any suggestion of historical sequence. A related change was made in the chapter on 'Simple Reproduction' in which Marx's solution to the problem of ascertaining the origin of primitive accumulation is provisionally indicated (Zarembka, 2001: pp. 360–361).

Althusser goes so far as to claim that this Part VIII contains the second of two great discoveries by Marx, the second in importance after that of 'surplus value':

> The second is the discovery of the incredible means used to achieve the 'primitive accumulation' thanks to which capitalism was 'born' and grew in Western societies, helped also by the existence of a mass of 'free labourers' (that is labourers stripped of means of labour) and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> technological discoveries. This means was the most brutal violence: the thefts and massacres which cleared capitalism's royal road into human history. This last chapter contains a prodigious wealth which has not yet been exploited: in particular the thesis (which we shall have to develop) that capitalism has always used and, in the 'margins' of its metropolitan existence – i.e. in the colonial and ex-colonial countries – is still using well into the twentieth century, *the most brutally violent means*. (Althusser, 1977a[1969]: p. 85, italics in original)

Readers may note shades of Rosa Luxemburg's similar exposition in her 1913 *The Accumulation of Capital*.

I. I. Rubin noted that for the later parts of the French edition Marx 'introduced those changes which he had not been able to include in the second German edition. On this basis Marx assigned to the French edition of *Capital* an independent scientific value parallel with that of the German original' (Rubin, 1972[1928]: p. 148). Indeed, Marx's afterword of 28 April 1875 to the French edition says much the same, and perhaps even somewhat stronger: 'whatever the literary defects of this French edition may be, it possesses a scientific value independent of the original and should be consulted even by readers familiar with the German'.

Regarding the French edition, White concludes that:

> Marx rewrote several sections and took the opportunity to bring to a logical conclusion the changes he had made in the second German edition. Thus, in the French version any trace which remained of philosophical vocabulary performed a purely stylistic function.... The second German edition and the French translation of *Capital Volume I* continued a process that had begun in the preparation of the first edition, that of eliminating the philosophical structure which had been built up in earlier drafts. (White, 1996: pp. 208–210)

Evidence of Marx reducing the importance of Hegel for his theory does not by any means end with a discussion of changes after the first German edition. We must continue. But before we do so, it is worth mentioning that Raya Dunayevskaya claimed that Part VIII of *Capital* was integrated by Marx into Part VII after the first two German editions, and that this integration reflected a deeper Hegelian approach in the French edition. In fact, however, in the German editions the texts were always integrated within one part. The parts were only *separated* for the French, then the English, editions (Zarembka, 2001: p. 360).[2] By Dunayevskaya's



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

logic, a correct argument would point to a decline in Hegelian importance rather than an affirmation of it.

## 4.4 Sieber's 1871 book on Ricardo and Marx

In 1871 Nikolai Sieber in Kiev published in Russian his Master's dissertation entitled *David Ricardo's Theory of Value and Capital in Connection with the Latest Contributions and Interpretations*. He discussed Marx extensively, particularly Marx's early chapters, based of course upon consideration of Marx's first edition of *Capital*. In Russia, Sieber's was the first introduction to Marx's work, and will have considerable importance.

While noting 'the peculiar language and the quite laconic manner of expression' in Marx's *Capital* (first edition), Sieber wrote that 'as far as the *theory* itself is concerned, Marx's method is the deductive method of the whole English school, and both its faults and its merits are those shared by the best of the theoretical economists' (Sieber, 2001[1871]: p. 30, italics in original). Not until 130 years later was Sieber's commentary on Marx first translated from the Russian. That long delay, given Marx's published appreciation, reproduced below, astonishes this author.

Marx had been interested enough in Russia to learn its language in 1870. He used that knowledge to good effect in reading Sieber's book in December 1872–January 1873, *after* the beginning of the serial publication of the French edition and *after* the completed second German edition. Marx's 'Afterword' to the second German edition, dated 24 January 1873 included an important passage about Sieber:

> As early as 1871, N. Sieber, Professor of Political Economy in the University of Kiev, in his work *David Ricardo's Theory of Value and of Capital*, referred to my theory of value, of money and of capital, as in its fundamentals a necessary sequel to the teaching of Smith and Ricardo. That which astonishes the Western European in the reading of this excellent work, is the author's consistent and firm grasp of the purely theoretical position.

Even though Sieber's work describing Marx's work exhibited no support for Hegel nor for those philosophical concepts included in the first edition, Marx offered no objection whatsoever to their absence. Still, Marx did affirm in this same 'Afterword' that he had a dialectical method adequately described in an 1872 article in the *European Messenger,* published in St. Petersburg. He translated the description and noted that his method was the direct opposite of Hegel's. And he clarified it by saying that his first edition of *Capital* in the chapter on value had 'coquetted with the modes of expression peculiar to [Hegel].[3]

## 4.5 Russian translation of *Capital*, 1872; Sieber, Mikhailovsky and Marx, 1874–1877

A Russian translation of Marx's Volume 1 appeared in 1872 based upon the first German edition with its Hegelian philosophical language. This edition, the first non-German full edition of *Capital*, Volume 1, was quite popular, and set the stage for decades of Russians who wished to read *Capital*. (To provide a perspective for subsequent discussion here, at the time Lenin and Luxemburg were babies while Plekhanov was 16.) Not until 1898 did the next Russian language translation of *Capital*, based on a later edition, appear (Resis, 1970: p. 223). Therefore, we are able to know what was actually being read in Russia when Vera Zasulich (1983[1881]: p. 98) was to write Marx in early 1881,

> You are not unaware that your Capital enjoys great popularity in Russia. Although the edition has been confiscated, the few remaining copies are read and re-read by the mass of more or less educated in our country; serious men are studying it.

In 1874 in the Russian journal *Znanie*, Sieber published an article, 'Marx's Economic Theory'. Referring to Marx's reception in Russia in reading the translation of the first German edition, Sieber reported that some

> are put off by the unaccustomed complexity of the subject and the ponderous argumentation encased in the impenetrable armor of Hegelian contradictions. [...] In order to render Marx's most important theoretical tenets [...] more understandable for the Russian public, we are taking on ourselves the task of writing some essays. [...] The objectives will be: (1) to explain Marx's significance as an original economist; (2) to present his theories of value, money, and capital in a form freed from metaphysical subtleties, so that they will no longer cause the reader difficulty. (Sieber, 2011[1874]: pp. 156–157)

Sieber's critique of Marx's own theory is also not trivial. After expositing on Marx's work for ten pages, Sieber writes,

> Hitherto we have agreed completely with Marx; but here, or rather, somewhat further on, we shall in part disagree with him, and not

> so much on the essence of the matter, as on the form, the methods and approaches by which he conducts his investigations. First of all we would inquire of Marx why he has to begin his study of capital with the examination of the most complex forms of human economy – which capitalist production is – and moreover with the abstractions of value and utility, rather than with the real relations, which underlie these abstractions, than with the simpler forms or the forms of all-human economy? [...] Moreover, the entire corpus of Marx's investigations clearly shows that real relations, in his opinion, precede abstract ones, and act as the root and the raison d'être of the latter. But in the given case, he leaves reality aside, and although he returns to it later, the reader nevertheless is unable to free himself from the idea that for Marx it is the abstractions of use-value and exchange-value, and not the phenomena, of which they are more or less successful labels that are the real point.... In any event, the investigation of real relations ought to have *preceded* the analysis of abstractions, and not *followed* it. (pp. 164–165, italics in original)

Sieber used no Hegelian language in his exposition of Marx's value theory and is somewhat critical of the approach Marx makes to his subject matter. Still, Sieber does note that 'Marx himself in the aforementioned postscript to the second edition of *Capital* rebuts the accusation that he has made use of the Hegelian method' (p. 164).

We should mention that Sieber does go on to propose an addition to Marx's value theory claiming that Marx 'wrongly attributes in the whole doctrine of the forms of value too great a weight to the concept of labour alone, leaving out consumption' (p. 187). Since Sieber's proposal has been unknown except to a few Russian readers, no one has subsequently even considered Sieber's proposal for an evaluation.

Marx read this article by Sieber, yet only objected to a separate matter distinct from Hegel or consumption needing consideration (White, 1996: p. 234).

In 1877 Sieber published a significant reply to a position taken by Yu. G. Zhukovsky. The latter thought that Marx was much influenced by Hegel, while arguing, in contrast, that capitalism was not a necessary historical stage in human development, but was fortuitous. Sieber replied that the necessity for capitalism was universal. Given his work on Marx's *Capital* with Marx's known approval, Sieber's position could be considered by Russians – at least for a time – to be also Marx's own, and all the more so given the wording of the available Russian version of *Capital* based upon the first German edition.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

N. K. Mikhailovsky also commented on Zhukovsky, applying a similar understanding of Marx to the necessity of a capitalist stage as Sieber had. Mikhailovsky criticised belief in such a necessity (White, 1996: pp. 235–240).

Marx received all of this, and in November 1877 prepared a reply to Mikhailovsky. He complained of the metamorphosis of his 'historical sketch of the genesis of capitalism in Western Europe into a historico-philosophical theory of the universal path every people is fated to tread' (White, 1996: pp. 241–242). Apparently upon the advice of others, Marx did not send it in for publication. His reply did appear in Russian translation, but only in 1886 and 1888 (and in New York in German in 1887, and in the original French in 1902). The delay meant that the universal need for a capitalist stage could persist for a time as Marx's own, even after Marx had drafted a denial. After its publication, populists in Russia cited Marx's reply (Walicki, 1979: p. 408, footnote 6). Notably, however, Plekhanov chose *not* to publish Marx's reply, although Engels had sent it to him in 1884.

## 4.6 Marx's 1881 comment about Sieber and an 1881 reply to Zasulich

In a private 1881 letter, Marx commented on a book by Adolf Wagner that

> Mr. Wagner could have familiarised himself with the difference between me and Ricardo both from *Capital* and from *Sieber's work* (if he knew Russian). Ricardo did indeed concern himself with labour solely as a *measure of the magnitude of value*, and was therefore unable to find any link between his theory of value and the nature of money. (Marx, 1989[1881]: p. 233, italics in original)

We can conclude that from 1873 to 1881 Marx continued to credit Sieber's non-Hegelian reading of *Capital* with an understanding of him. Surely, it could help answer criticisms being made of a claimed dependence of Marx upon Hegel – if Marx's remarks had been known at the time.

Of incidental interest, Sieber did begin to show interest in Hegel, but an elementary one: according to Mikhailovsky, who met Sieber in early 1878, 'An outstanding specialist in his field, Sieber struck me as a complete novice in philosophy, in which he was attracted to Hegel via Marx and Engels [...]. As a novice in Hegelianism he was relentless [...]'



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

(cited in White, 1996: p. 338). We have no record of whether Marx knew of this interest, but the full text does also reaffirm Mikhailovsky's own perception of Marx's connection to Hegel, although it does not need to be reproduced here.

In February 1881 Vera Zasulich wrote to Marx from Geneva asking his opinion about the future of the Russian commune, an opinion she wished to publish. After several drafts (see Wada in Shanin, 1983: pp. 64–69; White, 1996: pp. 273–280), Marx replied in March, although not for publication. In the case of the Russian peasants, in contrast to the Western case, he wrote her that

> *their communal property* would have to be *transformed into private property*.
>
> The analysis in *Capital* therefore provides no reasons either for or against the vitality of the rural commune. But the special study I have made of it, including a search for original source-material, has convinced me that the commune is the fulcrum for social regeneration in Russia. But in order that it might function as such, the harmful influences assailing it on all sides must first be eliminated, and it must then be assured the normal conditions for spontaneous development. (Wada in Shanin, 1983: p. 124, italics in original)

While Marx's reply to Zasulich was known privately to persons such as Georgi Plekhanov, at that time also in Geneva, it was not published until 1924. Strangely, both Plekhanov and Zasulich denied to many, including in 1911 to David Ryazanov, [4] even the existence of any reply whatsoever from Marx (Wada and Ryazanov, in Shanin: pp. 41, 127).

Marx died in March 1883. White argues that

> at the end of his life Marx was still in the process of learning about the evolution of society and its relation to economics. Yet the more he relied on empirical studies like Kovalevsky's or Morgan's the less applicable his original theoretical framework became. But, at the same time, one had to assume that every empirical study would be supplanted by another and so *ad infinitum*. One encountered the limitations of knowledge based on experience that the German philosophical tradition had tried to overcome. (White, 1996: p. 280)

While it is not difficult to make a case that Marx *had* thought of capitalism as a universal stage of human societies, we have enough evidence



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of Marx changing his mind after 1868, arguably reinforcing the argument that a Hegelian conception was leading him nowhere.

When Marx died, Vladimir Lenin and Rosa Luxemburg were both children aged 12 (Lenin close to 13, while Luxemburg had just turned 12) and both native Russian speakers.[5] In that year of 1883, in exile in Geneva, Georgi Plekhanov (born 1856), and others including Zasulich, established the first Russian Marxist group, 'Emancipation of Labour'. Sieber would shortly publish a new book. We turn to political economy after Marx's death.

## 4.7 Sieber's importance and developments after his death

White (2001a: p. 11) reports that 'it was from Sieber that Plekhanov, Lenin and much of the revolutionary generation in Russia learnt their Marxism'.[6] In what was to be his last work, Sieber published *David Ricardo and Karl Marx in their Socio-Economic Investigations* in 1885. Although starting from his 1871 book, it includes more material on Marx's work, including the material that Marx had been sent from 1872 onward, especially the article from 1874, discussed above, that had initiated a series. The book did have a couple of references to Hegel, but did not include a discussion of Hegelian philosophy or of dialectics.

At that time, Sieber can be considered the most important presenter in Russia of Marx's work, apart from the Russian edition of *Capital*. It so happened that Sieber died in 1888 at age 44 of a debilitating illness, facilitating his subsequent downgrading as a scholar of Marx's work by interested parties.

The first English edition of Volume 1, published in 1887, is based upon the third German edition but included some changes resulting from the French. Although Engels supervised it and mentions the French edition, he is rather unclear regarding the choices he had made for the changes that Marx had explicitly told Engels that he wanted to be copied from the French edition into the English. Still, the English edition did, as in the French, include the separation of primitive accumulation from the part on *Accumulation of Capital* (even though Engels had not done that for the third German edition).

Russians were the last after German, French and English readers to have Marx's Volume I with its first edition Hegelian language still included. Indeed, a new Russian translation, based upon a later German edition, was not to appear until 1898. This fact seems important for the Russian context, which, as it happened, becomes a crucial context for the development of Marxist thought.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Plekhanov's first reading of *Capital* may have been from the first Russian translation, or possibly from the French edition (since Plekhanov had already arrived in Geneva in 1880), but at the beginning of 1882 his knowledge of German was not very good (White, 1996: p. 308). Whatever the case, he must have been aware of the Russian readership using the translation of the first German edition, the one with the most Hegelian language.

Lenin's reading of Marx in late 1888 included Marx's Volume I (White, 2001b: p. 30). Much later, his wife would report that by 1893:

> *Lenin had a wonderful knowledge of Marx*. In 1893, when he came to St. Petersburg, he astonished all of us who were Marxists at the time with his tremendous knowledge of the works of Marx and Engels.
>
> In the nineties, when Marxist circles began to be formed, it was chiefly the first volume of *Capital* which was studied. It was possible to obtain *Capital*, although with great difficulties. But matters were extremely bad with regard to the other works of Marx. Most of the members of the circles had not even read the 'Communist Manifesto' [...].
>
> Lenin understood foreign languages, and he did his best to dig out everything that he could by Marx and Engels in German and French. Anna Ilyinishna tells how he read *The Poverty of Philosophy* in French together with his sister, Olga. He had to read most in German. (Krupskaya, 1933)

Basically, Lenin was fluent in all the languages that were relevant, and he used that skill to great advantage.

Luxemburg almost certainly did not read *Capital* in the Russian translation (according to a private message to this author from the co-editor of her letters, Annelies Laschitza, 6 March 2012). Actually, she had already learnt German while still in Poland, and we only need to recall that Marx's second German edition had been published in 1872.

## 4.8 Plekhanov's influence

Plekhanov is well known to have influenced Lenin. Plekhanov, at least initially, was also an influence on Luxemburg. In fact, she even wrote to a friend in 1891 from Switzerland that Plekhanov 'knows everything better than I do' (Ettinger, 1986: p. 45). Nevertheless, within a year Plekhanov was no longer held in high regard by Luxemburg (nor by Leo Jogiches, her lover, who became particularly hostile).

Plekhanov's political agenda after 1882 would find that Hegel could be useful. That agenda asserted that revolution had to come from the workers rather than peasants, yet the conditions were not ripe for anything but the establishment of capitalism in Russia. Hegel's concept of motion could thus prove useful in justifying patience or explaining the futility of an overthrow of the Russian state in the then existing conditions of extreme capitalist underdevelopment.

In 1891 Plekhanov published an article in *Neue Zeit* using for the first time the term 'dialectical materialism', tying Marx to Hegel more than Marx himself had done (Plekhanov, 1961: pp. 401–426). An 1896 comment even referred to Marx as 'the father of present-day dialectical materialism' (Plekhanov, 1976a[1896], p. 136). Although Lenin was not yet in Switzerland, Rosa Luxemburg was in Geneva and had probably heard the phrase 'dialectical materialism' directly from Plekhanov.

How much of Hegel's work did Plekhanov know at the time? White explains:

> The main Hegelian work that Plekhanov refers to in this article is the *Philosophy of History* which he thinks is reminiscent of Marx's scheme in *Contribution to the Critique of Political Economy*. In other words, Plekhanov has very little idea of what Hegel is about, but he gets away with it because nobody else has much idea either. (private message to this author, 24 January 2012)

Plekhanov did have the support of Engels, however.

Plekhanov's views on the importance of Hegel for Marxism were later summarised in his 1908 pamphlet 'Fundamental Problems of Marxism' (1976b: pp. 117–183). His indebtedness to Engels, rather than Marx, is clear. While mentioning some of Marx's early work, Plekhanov only cites Marx's second edition 'Afterword' and 'the numerous remarks [concerning Hegel] made *en passant* in the same volume'. The accuracy of the remark would seem more correct for the first edition of *Capital* and the first Russian translation, and seems to reflect Plekhanov's lack of attention to changes that Marx had made in editions after the first. Yet, while Hegel was still useful for the same agenda that Plekhanov had had back in the 1880s and 1890s, 'dialectical materialism' only appears in one early footnote – in contrast, as we shall see, to Lenin's later extensive use of it. (By the time of the appearance of that article in 1908, Plekhanov had broken with Lenin.)

## 4.9 Lenin on dialectical materialism

Lenin came to Marxism around 1889 and adopted Plekhanov's *narodnik* position in 1892, albeit with different argumentation. In 1894, Lenin



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

wrote and circulated *What the 'Friends of the People' Are*, which, in a dozen pages (pp. 163–174), deals with the difference between Marx's and Hegel's dialectic, but not from reading Hegel, rather from reading Marx's 'Afterword' and Engels' *Anti-Dühring* and *Feuerbach and the End of Classical German Philosophy*. Lenin is not too concerned with Hegel, and says that critics

> fastened on Marx's manner of expression and attacked the origin of the theory, thinking thereby to undermine its essence [...] [I]nsistence on dialectics, the selection of examples to demonstrate the correction of the [Hegelian] triad, is nothing but a relic of the Hegelianism out of which scientific socialism has grown, a relic of its manner of expression. (Lenin, 1960: pp. 163–164; see also, Althusser (1977a[1969]: p. 107)

While Lenin makes a reference to 'dialectical materialism', it appears casually. It can therefore be concluded that at that time Hegel was unnecessary to Lenin's understanding of Marx – an interpretation that would be consistent with Sieber's publications.

After Engels' death in 1895, Karl Kautsky in Germany and Plekhanov in Russian exile were the acknowledged leaders of Marxism. Kautsky had not followed Plekhanov on 'dialectical materialism' and initially, Lenin had not done so either. Lenin was to meet Plekhanov for the first time in 1895, while visiting Geneva.

In 1909, still not having read Hegel, Lenin (1972a[1908]) published a long work, *Materialism and Empirio-Criticism*. Relying upon Engels but now upgrading the importance of dialectics, Lenin refers negatively to those who undertake a 'complete renunciation of dialectical materialism, that is, of Marxism'.[7] For Lenin, what changed in 1909 that was not at stake for him in 1894? It was Marxism itself (in his interpretation). That is, Lenin had a choice of staying at his 1894 position, *or* of defending 'dialectical materialism' as such. He now chose the latter.

In 1914, Lenin finally read Hegel and made extensive notes on Hegel's *Science of Logic*. Lenin then claims that 'It is impossible completely to understand Marx's *Capital*, and especially its first chapter, without having thoroughly studied and understood the *whole* of Hegel's *Logic*' (Lenin, 1972b: p. 180). Recall, however, that Lenin had read Sieber's non-Hegelian understanding of Marx, and had also read Marx's 1873 high opinion of Sieber's book. Back in 1894, Lenin's position had seemed consistent enough with Sieber's opinion and with that of Marx. Could it have been easier politically for Lenin to maintain the complete



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

connection of Engels to Marx, as Plekhanov had done, rather than allow a certain separation in their thoughts? To allow some separation would open the door to wider interpretations of Marx, just as was happening with those persons (such as Bogdanov) who had been chosen as the objects of criticism in Lenin's *Materialism and Empirio-Criticism.* It was a kind of 'all or nothing' strategy of intellectual conquest: 'I know the Marxist truth.'

Beginning from a decade earlier, Lenin had been succeeding with a similar strategy, then centred upon political economy:

> Lenin emphasizes and re-emphasizes his claim that his economics *is* the Marxist theory, although *Theories of Surplus Value* and some other works of Marx were unpublished when Lenin was writing in the 1890s. Is Lenin correct? Contemporaries such as Karl Kautsky, Rosa Luxemburg, Nicolai Bukharin, and Henryk Grossman did not take on Lenin's economic theory, either before or after 1917. The first of Lenin's important economic works was unpublished, and others were only in the Russian original; this can somewhat explain the lack of attention. Lenin's own critical readings of Luxemburg and Bukharin could have stimulated controversy, but were left uncompleted in the form of marginal notes. Lenin did write favorable reviews of some of Kautsky's work, to which Kautsky naturally did not object. Later, Stalinism would not countenance the idea of critical work on Lenin's economics. (Zarembka, 2003: pp. 277–278)

Lenin was now using a similar strategy of conquest for philosophical questions; his philosophy was indeed Marxist and should not be doubted.

## 4.10 Luxemburg supports Hegel…for a time

In Luxemburg's work, support for the importance of Hegel for Marx is not well-established, but has been offered by Göçmen (2007). While he acknowledges (p. 379) that Luxemburg's writings were directed against Kantian and neo-Kantian philosophers, he does point to references to Hegel. Thus, Göçmen (2007: p. 389) reports that in 1898,

> Luxemburg recommends to Georg Gradnauer to read Hegel or at least Engels on the dialectic of quantity and quality. She says: 'has comrade 'GR' forgotten his Hegel, so we recommend him to consult at least the splendid chapter on quantity and quality from Engels' *Anti-Dühring*,

> to convince himself that catastrophes do not present opposition to development, but are a moment, a phase' of development.

And in 1899 Luxemburg wrote of Marx and Hegel:

> Philosophy, especially its sociological part, undergoes an evolution similar to that of national economy. Just as classical economics through Smith and Ricardo, so classical philosophy through Hegel and Feuerbach, leads logically to Marx, dialectics and materialism to the materialist conception of history. Thus, in complete analogy with the 'overcoming' of the research methods of the classics of economics, the main results of classical philosophy: dialectics and materialism, are also overcome. As the philosophical route from Hegel leads inevitably to the most dangerous robber dens of Feuerbach and Marx, there was nothing else the bourgeois philosophers could do but simply remove Hegel from the development of philosophy by decree and have scholarship return 'to Kant'. (Göçmen 2007: p. 381, citing from Luxemburg in 'Empty Nuts', although he cites only the last sentence; the full translation here and the next translation are by J. D. White for this author)

Not much else in Luxemburg's work explicitly refers to Hegel, but there is a bit more, which is telling for our understanding of her own intellectual evolution. In connection with early Marx when Hegel's influence is not in much dispute, in 1901 Luxemburg nevertheless wrote that Hegel, even then, was not always particularly important for Marx:

> Mehring is quite right in saying that Marx was no longer prepared to adopt the Hegelian standpoint for the last article about the purely economic question of the division of peasant land he planned for the *Rheinische Zeitung*, but did not write. In fact he had already been let down by this standpoint in the practical questions he had addressed earlier. Certainly, it was the cutting weapon of the Hegelian dialectic that he deployed so brilliantly in his critical demolition of the proceedings of the Rheinland provincial assembly concerning the freedom of the press and for the pilfering of wood. But it was only the *dialectics*, the *method* of thought, that was of service to him; as for the *viewpoint* itself, it seems to us that Marx already here, as he stood up for the freedom of the press and the right of poor peasants to gather wood freely in the forest, rather imposed his own point of view on the Hegelian philosophy of law and the state, than derived his point

> of view from it. It was first and foremost, as Mehring himself said, the deep and true sympathy that Marx felt for the 'politically and socially deprived masses', it was 'the heart' that drove him already in his idealist stage into the struggle and determined the side that he took in it. (Luxemburg, in 'Aus dem Nachlaß unserer Meister')

We have cited this passage in full, while Göçmen cites only the phrase 'cutting weapon of Hegelian dialectic', a phrase even used by Göçmen for a section titling of his article (2007: p. 381). He also mentions Hegel's unities of opposites.

Göçmen offers contradiction and motion as Hegel's contribution almost as if Hegel had owned or invented those words. However, cannot capital and labour, for example, be said by any Marxist to be in 'contradiction' without having any Hegelian connotation whatsoever?

Göçmen's article (2007: p. 379) does allege a citation of Hegel in Luxemburg's *Accumulation of Capital*. But the passage is actually within her unpublished textbook on political economy, a draft of which she began around 1908.[8] The passage is not telling regarding Marx. That is, she writes, 'The great philosopher Hegel said: "the contradiction is the force that moves forward". And this motion in permanent contradictions is the real way of development in human history' (Göçmen, 2007: p. 383). This seems to be her only remark regarding Hegel from 1901 until, as we shall see shortly, 1917. In sum, while early remarks by Luxemburg can be claimed to support beliefs about the importance of Hegel for Marx, the evidence is not deep.

In 1913 Luxemburg published her book *Accumulation of Capital*. In confronting a necessity to write this book, itself a result of a problem in writing her textbook, Kowalik (2009: p. 103) has concluded that Luxemburg 'passed from being an orthodox Marxist to a creative one [...]. Now she unexpectedly realised that Marx's theories are not the last word, but should be treated as great inspiration'. This perspective may help explain an eventual change in Luxemburg's views about the utility of Hegelian philosophy for Marxism.

In 1917 Luxemburg wrote very differently about Hegel's impact than theretofore. To Hans Diefenbach she wrote on 8 March, the very day that turned out to be the beginning of the February Revolution in Russia:

> In theoretical work as in art, I value only the simple, the tranquil and the bold. This is why, for example, the famous first volume of Marx's *Capital*, with its profuse rococo ornamentation in the Hegelian style, now seems an abomination to me (for which, from the Party

> standpoint, I must get 5 years' hard labour and 10 years' loss of civil rights). (Bronner, 1978: p. 185)

By this remark, Luxemburg shows her opposition to party wisdom, the wisdom that Hegelian philosophy is essential to the understanding of Marx. But not only regarding the party ... even regarding Marx having flirted with Hegel's language.

## 4.11 Lenin's hegemony and the submerging of Luxemburg

Lenin lived to become leader of the Soviet Union in 1917. If history is written by the victor, could it be argued that Marxist thought was written by the Soviets? Did subsequent Marxist thought inherit from Lenin and from Soviet Marxist culture the claim of the necessity of Hegel to Marxism? Maybe this inheritance includes the value-form approach to Marxism arising from Soviet work of Rubin (1972[1928]),[9] and the promotion later of Marx's *Grundrisse* arising from work of the Ukrainian Roman Rosdolsky (a supporter of Trotsky).

Like Lenin, Luxemburg was in an anti-war party formation. Yet she was in quite a different circumstance, albeit a more favourable one on a classical Marxist understanding (a much larger working class). She was murdered early in 1919 without any working-class victory that could be associated with her.

Lenin wrote in 1922 that Luxemburg was wrong on the accumulation of capital and many other things. Rosdolsky would claim that her theory reflected lack of sufficient understanding of Hegel. Attacks on Luxemburg's *Accumulation of Capital* were widespread (Zarembka, 2002).

## 4.12 Kalecki and political economists thereafter

Many political economists have been instrumental in simply ignoring Hegel and getting on with their class analyses. In the 1930s Michał Kalecki (born in 1899 in Russian-occupied Poland) was one example of those early independent thinkers, influenced by Luxemburg (Kowalik, 2009). Following Luxemburg's discussion of military expenditures, Kalecki, for example, argued for the importance of such expenditures in sustaining demand, even though their being government-determined meant their being outside the circuit of capital.

Paul Sweezy (born 1910 in the US) was another example. And an up-to-date expression of Marxist political economists ignoring Hegel can be seen in *The Elgar Companion to Marxist Economics* (Fine and Saad-Filho, 2012).[10]

From the 1960s, Marxism has been struggling in many ways to survive without Hegel. The works of Louis Althusser and of those associated with him were a banner for the rethinking of the Hegelian issue. Of course, ignoring Hegel solves nothing; it only opens doors for the further development of Marxism. One such line of work, suggested by James White is that Marx's failure to complete *Capital* in his lifetime was not due to ill health or other pressures, but rather that he faced a major theoretical problem in connecting Volume II to Volume I. It was a problem that Hegelian thought could not help solve, and arose due to Marx's investigations of Russia and even Germany.

In any case, the main issue at hand should be deepening the theory of social development originating from Marx, while recognising Marx's own theoretical evolution.

## Notes

1. Marx and Engels (1964: p. 456). In 1876 Dietzgen was to report this letter by Marx, leading some to say it had been written that year. Stuart Hall (2003: p. 114) cites Marx's letter with that date, in turn citing page 61 of Sidney Hook's *From Hegel to Marx*, where 1876 had erroneously been given as the year of the letter.
2. My 2001 article needs a correction insofar as all German editions, in fact, persisted in the lack of separation.
3. Carchedi (2011) offers an original view of dialectics, arguing his own as a crystallisation of Marx's and not obtainable when reading Marx through a Hegelian lens. He offers his interpretation as the deeper meaning of Marx's passages we have just discussed. Hegel's universality, particularity, and individuality do not appear in Carchedi's argumentation. If formal logic is the alternative, Carchedi offers an important challenge when he writes that 'acceptance of formal logic as the method of social analysis excludes the analysis of social change. The banning of dialectics cannot but result in a static and thus conservative view' (p. 42). For Carchedi, formal logic does retain importance as an auxiliary method but not as primary (p. 43).
4. Incidentally, Bergman (1983: pp. 76–77, footnote *), citing a 1959 Russian source, improbably asserts that Marx 'wrote the letter only with the prior stipulation that Zasulich agreed beforehand not to publish it'.
5. Luxemburg was from Russian-occupied Poland.
6. On the other hand, Luxemburg did read Sieber, but was unimpressed ('I'm also working on the theory of value. I have already read carefully through Ziber. He has given me little, and all in all, I'm disappointed in him. I can use him only as a reference book when I have to look up some economist or another' – Letter to Jogiches, 12 December 1898, in Luxemburg (2011: p. 98).
7. The editor's note to the title of the 1972 Progress edition claims that this work by Lenin 'enabled the philosophical ideas of Marxism to spread widely

among the mass of party members and helped the party activists and progressive workers to master dialectical and historical materialism'. In truth, the work is so complicated that it is beyond the reach of virtually everyone.

8. The claim by Göçmen (2007) is in his footnote 10 but is actually to the same page as correctly cited in his footnote 29 for her unpublished book.
9. As presented by the value-form theorists, there would be no alternative offered for the penetration of appearances, whether labelled empiricist or economistic, except via Hegel using a form-content dichotomy.
10. An exception is an entry on the 'value-form approach'.

# 5
# Luxemburg and Kalecki: The Actuality of Tadeusz Kowalik's Reading of the *Accumulation of Capital*

*Riccardo Bellofiore*

> Once again, the self-pitying will bewail the fact that 'Marxists are arguing amongst themselves', that tried and tested 'authorities' are being contested. But Marxism is not a dozen people who ascribe the right to 'expert knowledge' to each other and before whom the mass of faithful Moslems must prostrate themselves in blind trust. Marxism is a revolutionary world outlook which must always strive for new discoveries, which more than anything else dislikes formulations valid once and forever, and whose living force is best preserved in the clash of self-criticism and in the lights and thunders of history.
>
> Rosa Luxemburg (1921)

## 5.1 Introduction

In December 1976 I presented my dissertation on Rosa Luxemburg and the Marxian theory of crisis for my university degree, under the supervision of Claudio Napoleoni. The timing was desperately unlucky. In January 1977 Tadeusz Kowalik's book on Luxemburg, published in Poland in 1971, appeared in the Italian translation by Gabriele Pastrello under the title *Il pensiero economico di Rosa Luxemburg* (*The Economic Thinking of Rosa Luxemburg*). I could not take advantage of what is by far the best and most complete interpretation of Luxemburg's theories of accumulation and imperialism. So, this is a late and overdue encounter: more than an homage to Kowalik, it is something from which I profit the most in rethinking my first love in critical political economy.

As Toporowski (2012a) reminds us, Kowalik's book had its origin in his doctoral studies, under the supervision of Oskar Lange. When Kowalik told Lange that the topic he had chosen for his research was Rosa Luxemburg, Lange replied: 'The topic is interesting. But it will do you no good at all.' The habilitation (post-doctoral) thesis was completed in 1963, and presented in 1964. The book has unfortunately still not been translated into English and, as Lange had expected, had difficulty in finding a publisher in Poland. Kowalik presented the material to the Italian reader as incomplete relative to his original project (something which was confirmed to this author by the first reading of the book, but not by the second, which revealed an erstwhile hidden tight logical coherence and structure). Kowalik came back to consider Luxemburg several times in his life, in English as well; recently in a contribution to a conference I organised in Bergamo in 2004, and before that in an introduction to the reprint of the Routledge translation of the *Accumulation of Capital* (Kowalik, 2003).

This chapter not only surveys the decisive contribution by Kowalik on a most controversial author; I want also to show that Kowalik put forward a *dual* reading of Luxemburg (1913a) – maybe as a consequence of his dialogue with Kalecki. On the one hand, his book is a textually rigorous enquiry into Luxemburg's economic writings, contextualising them in the debates before and after the publication of that book. Here we find, in the first part of the book, the discussion about Tugan-Baranowski and Lenin on realisation crisis, but also the discussion about Hilferding on financial capital and Lenin on imperialism. The book is also a masterful exercise in what I would call a 'backward-looking' history of economic analysis; by this term, I mean a questioning of an author of the past from the vantage point of later developments, a methodological perspective adopted to solve (or at least redefine) the problematical nature of the issues dealt with, so that new analytical scenarios are opened. Here the key author for Kowalik was Michał Kalecki, for his enquiry into the role of effective demand in capitalist accumulation, a perspective which had its starting point in Marx's schemes of reproduction. As, again, Toporowski (2012a) reports in his obituary, this was very much helped by the conversations that Kowalik had with Kalecki for the *festschrift* for the latter's 65th birthday in 1964 – interviews which, we shall see, had an influence on Kalecki, too.

As Michail Bachtin says, truth is not to be found inside the head of an individual person; it is born between people, in the process of their



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

dialogic interaction. In this chapter, then, I wish to engage in a critical dialogue with Kowalik on some elements of (Marx's and) Luxemburg's problematics that remain underdeveloped in Kowalik's (and Kalecki's) perspective, or on which they are silent.

This involves three dimensions. First, the form of the relation of Luxemburg's approach in her 1913 book with some of her prior writings, especially *Social Reform or Revolution?* (Luxemburg, 1899) and the *Introduction to Political Economy* (Luxemburg, 1921). Second, the re-reading that Luxemburg herself provided of her own argument in term of a macromonetary circuit model in the *Anti-Critique* (Luxemburg, 1921). Third and last, in what way the labour theory of value was an essential starting point in Luxemburg's writings, partially obscured by developments. I wish also to show how the acquisitions and limits of Kowalik's perspective on Luxemburg may be useful to evaluate some key papers of Kalecki on capitalism. I think especially of his 1943 article on *The Political Aspects of Full Employment* (Kalecki, 1943a) and of his 1969–1970 paper with Kowalik on the 'crucial reform' (Kalecki and Kowalik, 1971). In the conclusion I shall discuss if and how Kalecki (and Luxemburg) are useful in reading the current, new, 'great crisis' in capitalism we are living in.

## 5.2 Luxemburg before Kalecki: *The Accumulation of Capital* rescued from the critics

Kowalik's supervisor, Oskar Lange, thus wrote in his 1965 lectures on *The Theory of Reproduction and Accumulation*, where he gave a mathematical development of Marx's schemes of reproduction:

> At first no attention was paid to Marx's two- and three-branch schemes. Only toward the end of the last century has the discussion on this subject begun. Lenin published at that time (1893) the study 'On the so-called Market Problem' in which he argued against the views expounded by the Narodniks that in Russia the developments of capitalism is impossible because there is no market. In this study Lenin used Marx's schemes of reproduction in the analysis of the problem of accumulation and of development of the economy. A little later, the well-known Russian economist, Tugan-Baranowski, tried to prove, on the basis of the Marxian schemes, that capitalism as an economic system has unlimited possibilities of development. The discussion around these views and on the importance of Marxian schemes of expanded reproduction in asserting the prospects of

> development of the capitalist system of production lasted 30 years. It has not led to any conclusion because, as it turned out, the schemes of production of equilibrium do not suffice for solving the problem which was the subject of this discussion. (Lange, 1965: p. 43)

A very similar picture comes out of an entry on 'Political Economy' for *Encyklopedia Współczesna*, in which Lange recorded a revival of Marxist political economy in connection, in Germany, with new phenomena such as the emergence of cartels and trusts, State intervention, the rise in real wages, and the easing of crises. These had sparkled the debate on revisionism, and in Russia about whether capitalism could master Russia's economy, raising it from economic and social backwardness. Transition to a monopolist-imperialist phase and wars between capitalist powers was the context in which Hilferding's *Finance Capital*, Luxemburg's *Accumulation of Capital*, and Lenin's *Imperialism as the Highest Stage of Capitalism*, were written (Lange, 1970: pp. 169–170).

In *Social Reform or Revolution?* Luxemburg considered the changes in capitalism since the times of Marx, and hence radical change in the form of competition and credit (trusts, cartels, and the new shape of banking). In opposition to Bernstein, Luxemburg upheld the idea of a 'collapse' of capitalism: but breakdown theory had to be understood as underlining a limiting case, not as providing a forecast of the imminent fate of the system. She was more interested in showing the increasing severity of economic contradictions than in offering a mechanical view of capitalist tendencies. This fundamental conception of capitalist dynamics had no empirical counterpart: Luxemburg is adamant that the world market was far from an accomplished reality in her time, and that she expected the 'impure' state of capitalism to last for a while: a lively capitalist growth was about to continue, though on a downward trend. Capitalism, however, was living a transition phase from the vibrant phase of 'free competition' to a third and final phase which will be marked by a tendency to stagnation (here, Kowalik insists, we have a convergence with Lenin's opinion). Lack of outlets grows out from monopoly capital: as a consequence ever more violent crises will erupt, as old markets shrink and new ones becomes scarce.

The stress relating to the role of external markets was already at the heart of Luxemburg's dissertation on the industrial development of Poland (Luxemburg, 1898). In that historical experience, exports towards the Eastern neighbourhood were a crucial factor, together with customs policy. It was however only in the *Introduction to Political Economy* that she realised there was an unresolved 'difficulty' in Marx: before, in a



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

1903 paper on 'Stagnation and Progress in Marxism' she went as far as to write that Marx, in his scientific writings, 'outstripped us as a party of practical fighters. It is not true that Marx no longer suffices for our needs. On the contrary, our needs are not yet adequate for the utilisation of Marx's ideas'.

The problem she stumbled upon had to do with Marx's elaboration of the schemes of reproduction in Volume II of *Capital*. To expose, elaborate and solve that 'difficulty' she hastily wrote the *Accumulation of Capital* in only four months, and as if in a state of trance. The book met with an immediate and almost unanimous harsh criticism from everywhere – sometimes affected by male chauvinism. Kowalik gives a detailed account of the reactions by Kautsky, Bauer, Sternberg, Bukharin, and later by Sweezy; he also provides a discussion of the methodological remarks by Grossmann and Lange on the schemes. If Kowalik's interpretation of Rosa Luxemburg goes back to all these debates, it is indisputable that the main reference background for the debate (as Lange's quotes reveal) was the 'controversy over markets' in Russia, and especially the positions taken by Tugan-Baranowski and Lenin.

The position by Tugan-Baranowski was taken as a view looking at capitalism as a 'harmonious' regime from the point of view of its economic dynamics. Capitalist accumulation was, for him, capable of infinite growth: the only limits were technical barriers, not consumption (either as an absolute amount, or as a share in income). Any potential realisation gap coming from a fall in consumer demand is always compensated by an adequate increase in the demand for means of production. If social consumption is constant, and if capital is accumulated, this cannot but mean that there is an ever-increasing share of means of production: means of production are employed to produce means of production, and so on. The progressive rise of 'machines' (the output of the first sector in the schemes) relative to consumption goods (the output of the second sector in the schemes) gives rise to a strange, 'crazy' world: it is 'production for production's sake' – which, however, precisely expresses the 'alienation' that characterises capitalism.

A position like this, Kowalik comments, is certainly extreme and unilateral, but it is not false. This judgement will be clearer after we let Kalecki come into the argument. For the moment, let us just remark that Tugan-Baranowski and Luxemburg reproduce, after Marx, an analogous disagreement before Marx, represented on the one side by Ricardo, and on the other side by Malthus and Sismondi: the antagonism between the claim that the aggregate equilibrium between supply and demand is guaranteed (so that only crises due to disporportionalities may be



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

admitted, with excess supply in one sector matched by an equivalent excess demand in another one), and the opposing claim that equilibrium is a logical impossibility and a 'glut' of commodities in general exchange a certain occurrence, as a consequence of an unavoidable lack of effective demand (a position which sometimes takes the form of a crude underconsumptionism).

It is here that the young Lenin's position can be usefully introduced into the discussion. The first, and maybe the most interesting, of his writings was *On the So-called Market Question* (Lenin, 1893), which was published before the publication of *Capital*, Volume III. In that book Marx presented a more complete treatment of capitalist crisis. It is enough to remind us that in Volume III Marx presented his version of tendency of the rate of profit to fall, and wrote his famous remarks according to which low consumption by the masses is the ultimate cause of crises. Later, between 1894 and 1899, Lenin wrote a series of interventions against what he labelled as economic romanticism (Lenin, 1897), that is the idea that the gap between production and consumption is sufficient as a cause of crisis. Lenin used Tugan-Baranowski against the populists, to argue that the market demand for capitalist production springs internally from capital itself. Indeed, if we look at the schemes of reproduction, we see that this point is actually embodied in them: any (value and use value) component of the scheme expresses an element of supply and an element of demand at the same time. The process of accumulation of capital itself, Lenin insisted, goes on through a deepening 'social division of labour' – meaning that thanks to specialisation there occurs not only an expansion of existing firms and industries but also the continuous birth of new firms and industries. Nodes of supply are nodes of demand, and while producing more commodities to be sold, industrial capitalists buy more commodities. Lenin also agreed with Tugan-Baranowski that capitalist accumulation means a more rapid growth of the sector producing means of production relative to the sector producing consumption goods. According to Kowalik, however, it would be an error to conflate Lenin with Tugan-Baranowski: Lenin's work on this issues must be concretely rooted in the specific historic situation of early capitalist development in Russia; and he was absolutely right that the internal dynamic forces were not blocked by underconsumption in itself. It is interesting that with the exception of Lenin's 1893 essay – which was written before reading Volume III, and which was actually published in 1937, after his death – none of the other economic writings makes an explicit reference to the schemes of reproduction.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik remembers that some Marxist theoreticians put forward an explicit underconsumption approach. He refers to Kautsky's *Krisentheorien* (Kautsky, 1901–1902), which is probably the most important influence on Sweezy; but also to Louis Boudin (a Russian-born US Marxist). Both authors denied that there was in capitalism a 'law' of a higher growth of the first sector relative to the second sector: a point which was instead affirmed by Rosa Luxemburg as well, but she 'naturalised' it as a meta-historical law, not confined to the bourgeois mode of production. For Kautsky and Boudin, the tendencies to depression and to the economic breakdown are linked to the squeeze in wage workers' purchasing power, which restricts 'internal' markets in a way that cannot be compensated by a growing market for means of production. 'External' markets are needed. As long as there is a widening of production, there must be a widening of the outlet: but the former eventually will exceed the latter. The exhaustion of the external markets initiates the crisis.

We are, of course, not too far from the terrain explored by Luxemburg in her *Accumulation of Capital*: but we are not actually there. She was bolder and more profound in her propositions, and she dared to criticise the Master himself. Though the argument she advanced stresses the inescapable realisation problem of capital, she cannot be categorised as underconsumptionist – she is, rather, proposing a theory of underinvestment. That is also why Kowalik begins his discussion on Luxemburg by neatly distancing himself from the usual Marxist criticism of her, which is untenable, even in the case of Dobb and Sweezy (the dissociation from Sweezy, an author that Kowalik respected very much, is recurrent in the book). An interesting point of divergence – which is coherent with his 'backward-looking' Kaleckian reading of Luxemburg on which I will insist later – is that it is plainly wrong to affirm that Luxemburg's *Accumulation of Capital* was a contribution to the 'theory of crisis'. This view he disparages as ungrounded and paradoxical. He means that her book is not a contribution to the literature about the 'conjuncture', or an understanding of the business cycles, or even an explanation of the long waves punctuating the history of capitalism. The object of her analysis is instead the *trend* of capitalist accumulation, and on that basis only it is an enquiry about the deviations, or the eventual (logical) breakdown. A confirmation of this point – which is, of course, once again very relevant in comparison with Kalecki – is precisely the abstraction from cartels, monopolies, and the like. She well knew how important these changes were in the world in which she lived. And we saw how the tendency of the capitalist economy to create forms of imperfect competition was crucial in her rebuttal of Bernstein. The point is that Luxemburg's



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

theoretical effort is all about a general theory of capitalist development. Crisis and collapse, as well as imperialism as the search for net exports, are included only as long as they are implied in the abstract theory of capitalist reproduction.

Kowalik is also right in rejecting the too-cavalier criticism inflicted by Bukharin (1924), unfortunately supported by Sweezy (1967), according to which Luxemburg did not perceive that since firms invest part of the surplus value in additional variable capital, capitalist-enlarged reproduction implies a rise in worker consumption. Her error is thus supposedly reproached by the joke that if you exclude enlarged reproduction at the beginning of an argument it is easy to let it disappear at the end of it. Luxemburg, however, knew this, and she insisted that the accumulation of capital normally entails higher real wages. It is the 'relative wage' – namely, the ratio of the value of labour power to surplus value – which is declining. We can add two more points to Kowalik's complaint: (i) that Bukharin's and Sweezy's criticism completely misses one of Luxemburg's key points, that to accumulate capital the firm sector has to realise surplus value in monetary circulation; and (ii) that the solution, for her, cannot be found in an increase in consumption, but in capitalist investment itself. These points are absent also in the Kowalik/Kalecki perspective, and we will turn back to this later.

Kowalik states, correctly, that the Marxist critics stick to the (then) traditional reading of the schemes of reproduction in a way that while rejecting her solution, prevents them from understanding her problem. This blind attitude can be understood, since it is easy to be trapped in the plethora of detail and confusion marring Luxemburg's torrential exposition. Instead, it is essential to see that Luxemburg's distinction between the monetary *realisation* of surplus value (its metamorphosis into money as the universal equivalent), on the one hand, and its *accumulation* or 'capitalisation' (its transformation in real productive capital), on the other hand – in other terms, after the end of a circuit of the valorisation process, the conversion of use value as bearer of value into exchange value, and of exchange value back again into use value as technical ingredient of a new circuit in the valorisation process – helps to isolate a more fundamental difficulty: the 'translation' of savings into investments. The question arises about what may guarantee that there is not just an adequate source of effective demand in the current period, realising value and surplus value, but also a *continuous* increase of that effective demand in the *following* periods. Seen this way, the problem is not so much that a failure in selling the current output induces negative expectations on future outlets – the difficulty is the other way



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

round: there will probably be a lack of *incentives*, or *motives*, to accumulate. It is a weakening of the 'capitalisation' of surplus value, of accumulation, which leads to the realisation crisis.

This is hardly an 'underconsumptionist' perspective, even though the decrease of (workers') consumption as a share in income is part of the story. It is instead an 'underinvestment' theory. The key element is what we would nowadays define as a collapse of investments 'autonomous' demand, a fall which cannot but be influenced by the forecasts about the future expansion of the 'market'. Luxemburg's split between the two acts – the first, realisation, involving the transformation of commodity surplus into money gross profits; the second, accumulation, the transformation of the money gross profits into 'functioning' capital – opens up a new theoretical continent. But this move extracts a heavy price, since she very often confuses the second problem with the first, so that the critics' attacks, though ungenerous, are not completely unfounded.

It seems to me that Kowalik's interpretation of Luxemburg, though he never declares it openly, is actually very close to, though not identical with, the one we read in Joan Robinson's introduction to the 1951 Routledge translation (Robinson, 1951). And it cannot be pure chance that Robinson's book of 1956 bore the same title as Luxemburg's. In her introduction, Joan Robinson tried to put the main thread of Rosa Luxemburg's argument into simpler terms. For her, the Polish revolutionary was concerned with the 'inducement to invest', with the motive for capitalists to enlarge their stock of real capital, which she saw as a function of the prospective future demand for the commodities to be produced by the new capital: 'Investment can take place in an ever-accumulating stock of capital only if the capitalists are assured of an *ever-expanding* market for the goods which the capital will produce [...] she is looking for *ex ante* prospects of *increased* demand for commodities' (Robinson, 1956: pp. xxix–xxx, my italics). That is why Luxemburg's numerical handling of the schemes leads nowhere, since those manipulations are about *ex post* quantities. With all her shortcomings, however, the clue of the 'real contradiction' in capitalism is that there is no guarantee that total accumulation and total savings fit together (Robinson, 1956: p. xxxiv).

## 5.3 Luxemburg after Kalecki: the schemes of reproduction and the principle of effective demand

It is from here that we can put Kalecki into Kowalik's re-reading of Rosa Luxemburg. Indeed, in Lange's entry on Political Economy that we mentioned earlier, he wrote:



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> Special mention is due to the works of M. Kalecki, *Studies in the Theory of Business Cycles 1933–1939*, and others, who taking the Marxist theory of reproduction as a point of departure formulated the theory of the business cycle in an original way and explained the source of instability of the capitalist system. His explanation is somewhat similar to R. Luxemburg's theory of accumulation. (Lange, 1970: p. 182)

Toporowski (2012a) testifies that after his interviews with Kowalik, Kalecki came back to consider the debate between Luxemburg and Tugan-Baranowski. The relevant essay here is 'The Problem of Effective Demand with Tugan-Baranovsky and Rosa Luxemburg' (Kalecki, 1967). However, to understand Kowalik's backward reading of the *Accumulation of Capital* the fundamental paper is probably 'The Marxian Equations of Reproduction and Modern Economics' (Kalecki, 1968a). This latter actually forms the backbone of Chapter 4 of Kowalik's book. Below, I will show how these two interventions are part of a common argument, which helps us to understand the way Kowalik used them to rescue Luxemburg's problematics from the confusion surrounding her original formulation.

In a pure Marxian fashion, Kalecki assumes a closed economy without government revenue and expenditure. There are only two classes: workers, who consume all their wages, and capitalists, who partly invest and partly consume their gross profits. The economy is divided into three vertically integrated 'departments': Department 1 produces the total value of gross investment goods, Department 2 produces consumer goods for the capitalist class, Department 3 produces wage goods. As a consequence, in each sector the value added (national income) and final production coincides. Stockpiling of unsold commodities is transitory, and is drawn on: hence, all commodities brought to the market are sold.

$$W_1 + P_1 = I \tag{5.1}$$

$$W_2 + P_2 = C_k \tag{5.2}$$

$$W_3 + P_3 = C_w \tag{5.3}$$

where P are profits, W are wages, and the subscripts refer to the departments; I are investments, $C_k$ is capitalist consumption, $C_w$ is wage-earner consumptions.

The basic Marxian 'equation of exchange' comes out neatly. The profits of Department 3 have the material form of wage goods which have to be sold to the workers employed in Departments 1 and 2.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

$$P_3 = C_w - W_3 = W_1 + W_2 \quad (5.4)$$

If the profits of the Departments 1 and 2 are added together, we have the so-called Kalecki (fundamental) equation

$$P_1 + P_2 + P_3 = W_1 + P_1 + W_2 + P_2 \quad (5.5)$$

That is

$$P = I + C_k \quad (5.6)$$

The Kalecki equation may be easily elaborated to show national income as a function of the level of investments and capitalist consumption, given the distribution between wages and profits (which defines the share of total consumption over income).[1] Kalecki in fact repeated in this 1968 paper the same argument he had already advanced in 1933,[2] when he had not yet read the *Accumulation of Capital,* in *Essay on the Business Cycle Theory*, that

> capitalists, as a whole, determine their own profits by the extent of their investment and personal consumption. In a way they are masters of their fate; but how they master it is determined by objective factors, so that fluctuations of profits appear after all to be unavoidable. (Kalecki, 1933a: pp. 79–80)

In the current period, investments (because of the time-lag dependent on the period of construction) and capitalist consumption (whose changes follow those of profits) originate from past decisions, and are therefore taken as given. Sales and profits, on the contrary, 'cannot be a direct outcome of past decisions: the capitalists can decide how much they will invest and consume next year, but they cannot decide how much they shall sell and profit' (Kalecki, 1968a: p. 461). If there is unused capacity, a rise in investments and capitalist consumption results in an increase in workers' consumption goods.

The schemes of reproduction are dealt in a way that show the contradictions inherent to capitalism because of the problem of effective demand. The decisive, independent ('autonomous') variables are investment and capitalist consumption, made in real rather than in money terms. Kalecki submits that in these propositions derived from Marx's Volume II – once they free themselves from the straitjacket of balanced uniform growth – we have the 'gist of the modern theory of effective



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

demand' (Kalecki, 1968a: p. 462). If the equations are employed considering the accumulation of capital in a process of uniform expansion, we can also derive the conclusions of most contemporary theories of economic growth, which again are 'simply variations on the themes of Marxian schemes of expanded reproduction' (Kalecki, 1968a: p. 463).

Another conclusion of the 1933 *Essay* must be quoted:

> The question may still arise of where capitalists find the means to increase the production of investment goods or their personal consumption. *If we abstract from the 'technical' elements of the money market*, we may say that capitalists as a whole do not need money in order to achieve in order to achieve this since, as shown above, the expenditure of some capitalists is converted into profits for others [...] If during a particular period more money is spent, e.g. out of bank deposits, then *pro tanto* more money flows back into the banks in the form of realized profits, so that the sum of deposits remains unchanged. (Kalecki, 1933a: p. 80, my italics)

Autonomous expenditures are, in other words, 'self-financing'. Overcoming a non-productive opposition of the two points of view, Kalecki juxtaposed them as unilateral extreme positions. Each of the two authors has committed serious errors, yet gives a correct picture of a contradictory antagonistic mode of production. Tugan-Baranowski is right that consumption is not the aim of capitalist production, but he mistakes a possibility for a necessity. There is no argument why capitalists should continue to invest in the amount needed to maintain those appropriate proportions which guarantee that the problem of effective demand does not arise. If this does not happen, the capitalist process becomes unstable. Expanded reproduction (with full or constant utilisation of resources) may of course be propelled by some Schumpeterian wave of innovations fuelled by inter-capitalist competition (notoriously, it is here that we find the Marxian input for the author of the *Theory of Economic Development*). This occurrence cannot be taken for granted: though in the 1967–1968 papers Kalecki limits himself to advancing doubts based on a 'sociological' argument about the possible change in the structure of capitalist class. We may add that the dual nature of investment – at the same time, a component of the effective demand in the current period, but also an addition to productive capacity in the following one – means that the difficulty (and instability) will reappear.

If this reasoning justifies Kalecki's conclusion that 'expanded reproduction is not a natural and obvious state of the capitalist system' (Kalecki,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

1967: p. 455), it does not make Luxemburg's 'impossibility thesis' about capitalist accumulation true if there are no 'external' markets. The ultimate mistake committed by Luxemburg was to assume that investment decisions are taken by the capitalist class in its entirety, so that that class anticipates the shrinking of markets in the future. 'Now capitalists do many things as a class, but they certainly do not invest as a class. And if that were the case, they might do it just in the way prescribed by Tugan-Baranovsky' (Kalecki, 1967: p. 455). Indeed, as an historical fact, external markets may contribute to solving the lack of effective demand for the capitalist world. The argument must however be refined relative to the original Luxemburg point, because it is not the total exports but only the excess of exports over imports that adds net purchasing power: otherwise there would be just a *pro rata* substitution of internal for foreign demand. For net exports to exist, the capital exports are necessary: in this way, Kalecki clarified a blind spot in Luxemburg about the financing of foreign demand, and provided a bridge with Lenin.

Kalecki also broadened the meaning of 'external' markets to include government expenditure. This can also be found in Luxemburg's argument about armament orders; she insisted that militarism has a positive effect on accumulation – even if military expenditures are financed through a compression of workers' purchasing power, either through taxes or inflation. For Kalecki, however, armaments must be financed by loans or taxation of the capitalists to have positive effects on accumulation. Either the financial capitalists extend credit to the government, with which the latter buys 'surplus' goods from the industrial capitalists, or the profits for the capitalists producing the commodities for the military sector have to come (at least partly) from the capitalists producing the other commodities. Paradoxically, here Kalecki does not *explicitly* consider government deficits financed through new central bank money inflows: bank loans suffice to advance the realisation of potential savings, since autonomous demand finances itself. The only limit to the (bank) credit supply is connected to the 'principle of increasing risk'.

In the first part of his book – in the second half of Chapter 4, and appendix 1 – Kowalik may read Luxemburg 'backwards' only thanks to Kalecki's interpretation of the schemes, and Kowalik's judgement parallels the assessment of the Tugan-Baranowski–Luxemburg controversy provided by Kalecki. And vice versa: Kowalik's depth of historical knowledge – 'you know so well who said what on a given subject' (Kowalik, 1991: p. 614), Kalecki said to the younger researcher when they wrote the paper on the 'crucial reform' – ultimately clarified the issues for Kalecki, at least relative to his understanding. Indeed, Kalecki is openly



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

introduced by Kowalik as the second protagonist of the book, and the *Accumulation of Capital* is evaluated going through Kalecki's theory of the dynamics of capitalism. Just as Hobson can be profitably reread 'after Keynes', so Luxemburg can be read 'after Kalecki'.

In the first half of Chapter 4 Kowalik gives a detailed analysis of Luxemburg's own criticisms of the original formulation of Marx's schemes. The criticisms relate to the identity of production and realisation, the neglect of the monetary dimension of the latter, the assumption of a constant composition of capital, the pure capitalist setting of the argument. He surveys her attempt to 'complete' the schemes, taking into account on the one hand an increase of constant capital (relative to variable capital as well as to the new value produced in the period), and on the other, a rise in the rate of surplus value: technical progress and exploitation, the two endogenous twins in capitalist accumulation. The outcome of this completion is inevitably an excess supply of consumer goods, which is of course matched by a corresponding excess demand for means of production: a typical disproportionality crisis. Though this is presented by critics, including Kowalik, as a weak point, I think this was exactly what Luxemburg had wanted, as a kind of intermediate step which obliged a departure from the pure capitalist abstraction and an 'opening' of the theoretical landscape so that the non-capitalist areas give accumulation some room to move, without a straitjacket. The alleged overdetermination of her schemes due to the fact that the increment of capital within each department must equal the savings in the same department so that there is no lending (in kind) between sectors (Robinson, 1956: pp. xxxiii–xxxiv) is another customary complaint against Luxemburg. Here again, in my view, the critics have probably missed the exact terms of the monetary aspects of the *Accumulation of Capital*. The merit of this theoretical construction for Kowalik was to be the first published exercise in introducing technical change in growth theory – although Lenin had tried something along those lines in the 1893 manuscript on the so-called market question.

To solve Luxemburg's new problematic, what was needed was not to manipulate the schemes so that meaningful disproportions resulted, leading to the non-realisation of part of surplus value, but to interpret them differently, so that the inner connection between production and the realisation of (surplus) value was explained. The issue may be clarified once again in Joan Robinson's words. In a survey of theoretical development in the 1960s she wrote that in what is in general a most admirable book, *Theories of Value and Distribution since Adam Smith*, Maurice Dobb 'seems to suggest that exploitation could somehow exist independently



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of realisation, and accuse the post-Keynesian of regarding realisation as independent of exploitation, but, obviously, neither can exist without the other' (Robinson, 1975: p. 122; in fact the same point is found in Chapter 4 of Luxemburg's *Introduction to Political Economy*, as in Marx himself). It is here that the role of Kalecki is crucial. He saw that the schemes might be the starting point for the solution of the problem of connecting effective demand and capital accumulation, a problem that Marx left rather vague and that Luxemburg was unable to solve. Kowalik shows that Kalecki's views are, in crucial theoretical junctures, a continuation of Luxemburg and a rewriting of her argument.

Contrary to what Kowalik himself says, this is also true of the second part of his book dedicated to Luxemburg's theory of accumulation and imperialism. It is true, as he says, that in that part the background to assess Luxemburg's contribution is given by Hilferding's *Monopoly Capital* and Lenin's *Imperialism*. The reasons why Kowalik concentrates on them, however, are twofold. The first is that even though Luxemburg well knew the relevance of cartels and trusts in the capitalism of her time, she (rightly) excluded an explicit consideration of monopolies in her book, which was devoted to a theoretical problem at a higher level of abstraction. That is why Hilferding is so important: to reintroduce monopolies and finance capital. The second reason is that Kowalik's aim is to propose an integration of Luxemburg's and Lenin's views on imperialism, and for Lenin imperialism was another name for the monopolistic phase of capitalism. That is why Lenin is so important: to connect monopoly and imperialism. Both are seen as complementary to Luxemburg. It is clear that this stress on 'imperfect competition' comes to Kowalik from Kalecki again.

As stated above, we may wonder how much in Kalecki does not come from the dialogue with Kowalik. In the introduction Kowalik remembers that the first version of the materials for the book (written in 1963) was presented as dissertation for habilitation, the discussants being Oskar Lange and Jerzy Tepicht; but then he presented an English summary of the argument in various places, the first being the volume of essays in honour of Kalecki. The 1967 and 1968 papers by Kalecki could not but be very much influenced by this input; and those papers, as we saw, retroacted on the evolution of Kowalik's interpretation, and became the backbone of the published book. Luxemburg was right in thinking, like Kalecki, that the 'fundamental contradiction' of capitalism was that unless it was driven by some semi-exogenous factor (innovations, or net exports towards other areas, or 'internal exports' like armament expenditure) it would be trapped in a stationary position of simple reproduction.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Long-term growth is not intrinsic to capital. Unused capacity (rather than a 'glut' of commodities on the market, as in Marxist authors) is typical in developed capitalism. 'Lack' of effective demand means the difficulty in 'realising' the value of the commodities which could be (but are not) produced with the current productive capacity.

Kowalik's criticisms of Luxemburg are the same as those by Kalecki. A fundamental point of Luxemburg's approach was to rescue Marx's 'macro' analysis of capitalist reproduction. She had committed, however, a methodological error in thinking that social capital and surplus value, as aggregated entities, had a real and objective existence. Kalecki showed instead that there are possible contradictions between the whole and the parts. Whatever its form, competition is of the essence of capital. It is inter-capitalist competition which may push investment on. And, although Luxemburg was right in insisting on the importance of the motives to invest, she produced, like Tugan-Baranowski, a theory based on the same assumption, that capitalists' decisions are made on a class basis. But 'capitalists do many things as a class, but they certainly do not invest as a class. And if that *were* the case, they might do it just in the way prescribed by Tugan-Baranovsky' (Kalecki, 1967: p. 457).

After this methodological point, two other Kowalik criticisms stem from Kalecki. Even though Luxemburg had realised that the increase in worker consumption favours the accumulation of capital, she did not see that this is even more true for the consumption of capitalists. And Kowalik, like Kalecki, tends to dismiss Luxemburg's argument that before 'accumulation' properly speaking – that is before the advance of surplus value to buy new elements of constant capital and additional labour power – there must be the monetary 'realisation' of prior surplus value. This argument, for Kowalik as well as for Kalecki, is a technical point about the money market, which does not therefore entail a serious difficulty. Money is relevant for Kalecki because – as Kowalik writes – it allows capitalists either to spend more than their profits or to abstain from investment.

Chapter 5 of the first part of the book is a very effective rebuttal of the facile criticisms launched by authors like Bukharin or Sweezy against Luxemburg's monetary analysis. The first appendix to the first part of the book develops a methodological interpretation of the schemes of reproduction, along the lines of Grossmann and later Lange, according to which they are the most general and fundamental abstraction in *Capital* (in polemic with the point of view of Brus and Sweezy). This perspective was, in a nutshell, present in Luxemburg, and its implication is that this abstraction is valid well beyond capitalism. Kowalik suggests that this is



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

a retreat from the thesis advanced in the *Introduction to Political Economy*, where the 'separate' science of political economy, as well as economic 'laws', are said to die with capitalism. From here Kowalik goes on to consider the (implicit) debate between Bukharin and Lenin on the issue of the persistence of political economy in socialism, and then on how the schemes entered into the Soviet discussion and practice of economic planning. Appendix 2 of the first part is a careful survey of the critics and followers of Luxemburg. I do not treat the second part of the book about theory of accumulation and imperialism – where, as I argued, the protagonists are Hilferding and Lenin, but once again (though implicitly) Kalecki.[3]

## 5.4 A detour: Kalecki and Kowalik on the 'crucial reform'

I can now summarise the core of Kowalik's interpretation of Luxemburg. She must not be judged from the point of view of the results of her analysis, but from the point of view of the novel problematic she opened. Thanks to her view that the 'translation' of (potential) savings into investment was anything but taken for granted, the key role of investment decisions could be highlighted in all its relevance for the accumulation of capital. She was blinded, however, by her insistence that investments were advanced by capitalists as a class. Once the schemes are interpreted in Kalecki's way, the 'fundamental' equation may be enlarged so to consider as determinants of profits not only the net exports (indicated by Rosa Luxemburg), but also the government deficit (Kalecki's internal or domestic exports). This, of course, also opens the way to possible policy solutions of an 'effective demand failure', either through a decrease in income inequality, or an expansionary credit policy and government expenditure (especially armaments orders). We may add that if we allow wage earners to save, an increase in workers' propensity to consume may boost gross profits (as in Steindl).[4] And this means, of course, that indebted consumption may be another way to circumvent the difficulty in realising value and surplus value.

Together with Joan Robinson, Kalecki and Kowalik are by far the most charitable interpreters of Luxemburg's economic writings. Robinson was more willing to find something valuable in the insistence in the *Accumulation of Capital* that 'the excess savings may be "capitalised" if there is an outlet for investment outside the system' (Robinson, 1951: p. xxxiv). Outside a 'supposed logical necessity' proposition, Robinson found plausibility in Luxemburg's hypothesis that the long-run investment opportunities would fade away when capitalist foreign outlets dry



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

up. This was not only an historical reality; it was a theoretical point as well. Moreover, Robinson saw behind Luxemburg's analysis of government expenditure on armaments the argument that this kind of outlet had a positive peculiarity for capital: while providing demand for capitalist producers, it would not originate new productive capacity in the future. On the contrary, capitalist powers struggling against each other would make this a perpetual market, stabilising the economy and avoiding the perverse effect on the motive for investment due to the unending quest to find customers.

The Kowalik–Kalecki–Robinson line of interpretation of Luxemburg's legacy finds in her economic contributions a quite perceptive, if not prophetic, anticipation of the difficulties in which capitalism found itself in the first half of the 20th century (leading to imperialist wars), and of the ways those difficulties were overcome in the following decades (the armament economy): something which makes her alternative 'socialism or barbarism' wholly appropriate. Net exports to the foreign sector and internal exports to the government sector, together with reconstruction after war and its gigantic destruction of capital, go a long way towards a reasonable interpretation of the dynamic features of capitalism in the so-called golden age after the Second World War. All this notwithstanding, I think that an interpretation of this kind misses half of Luxemburg's problematics. The reason is that these interpreters cut Luxemburg's argument out from its essential ground in Marx's labour theory of value, and its specificity of being a theory of exploitation in a monetary economy incorporating an endogenous theory of development and crisis.

Before saying something about this in the next paragraph, we need to take a detour; we have to consider a joint paper of Kowalik and Kalecki, published in Italian in the journal '*Politica ed Economia*' in 1971, but written between September 1969 and January 1970, just before Kalecki's death (Kalecki and Kowalik, 1971). The provocative topic of the paper was a 'crucial reform' which occurred in contemporary capitalism, such that the struggle to change the system mutated immediate and partial goals which, rather than weakening it, stabilised it. As Kowalik later commented, the idea behind the 'crucial reform' (initially called by Kalecki himself 'revolutionary reform') was to recognise the 'unintended effects of the pressure of the working masses on the bourgeois state during periods when the very existence of the system is threatened [... w]hat happened in modern capitalism was more than a reform, although it did not go beyond capitalism' (Kowalik, 1991: p. 614). In contrast to capitalism before the first half of the 20th century, he



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

wrote, imperialist wars would be unthinkable, and crises would not deepen but on the contrary be controlled.

The contribution of Kowalik, as he reconstructs it in his later account, was in putting Kalecki's argument against the background of the classical discussions in historical materialism. Bernstein was the first to put the issue of reformism onto the agenda. But he disregarded the limits that effective demand set on capitalist accumulation. Moreover, he predicted a disappearance of pure profit (which would mean stagnation). Hilferding thought that a general cartel was possible, and it would have eradicated crises (which he saw essentially as disproportions), but not a collapse for social and political reasons, with an intensification of international conflicts leading to anti-capitalist struggles. From a very different economic perspective (that is, stressing the contradiction between production and realisation, and the tendency to break down) Luxemburg arrived at very much the same conclusions: since armament expenditures are non-capitalist markets, the government deficits of military Keynesianism can solve the realisation problem; and fights for non-capitalist markets bring about imperialist conflicts and wars.

The 'crucial reform' of capitalism began tentatively after the 1929–1933 crisis in Germany and the US. A centrally controlled capitalism was at work during World War II. It was followed by a 'capitalist system of large corporations with supplementary markets guaranteed by government purchases, mainly of armaments, which allowed the realisation of accumulated profits' (Kalecki and Kowalik, 1971: p. 472). In post-war 'Keynesian' capitalism, the rate of unemployment dropped lower and lower. The practical realisation of a kind of 'right to work' state, the considerable expansion of social security, and the rise of real wages together with increases in productivity, 'led to a certain transformation of the working class, which on the whole became radically reformist in its attitude toward capitalism. [...] As a result, anti-capitalist attitudes have weakened considerably' (Kalecki and Kowalik, 1971: pp. 472–473). Workers became conformist and did not fight any more, even though they reacted strongly to changes in the new 'rules of the games' in their favour.

The conclusion is straightforward. When military conflicts within the capitalist areas are unlikely, economic crises are blocked by Keynesianism. The world of Classical Marxism has ended, and 'neocapitalism' looks increasingly similar to Kautsky's super-imperialism. A high degree of social conformity has 'relatively' stabilised reformed capitalism, with the only hope for social and political change left to student movements.

There is a paradox here. It can be highlighted by observing that when the authors speak of a weakening of workers' hostility to capitalism, the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

editors of the Kalecki *Collected Works*, Volume II, inserted a reference to Kalecki's famous 1943 'Political Aspects of Full Employment' (Kalecki, 1943a). The paradox is that in the 1943 article the anticipation seems to be the opposite, of the risk of a revival of social and political antagonism to a permanent state of full employment, so that the likely outcome would have been a political-business cycle.

Now, as Kowalik honestly recognises in his answer to Pesenti in that volume, the prognosis of a capitalist stabilisation was dramatically falsified in the 1970s. One of the factors of the Great Stagflation was precisely class struggle, not only in distribution, but in production – again as Kalecki had imagined. After all, the 1943 article appears to provide a more appropriate explanation of the 1970s crisis (which actually began in the mid-1960s); and the 1971 paper with Kowalik appears to be a (partial) rationalisation of the expansionary phase that went on between the Great Crash and the end of the post-war boom. What seems to be common to the 1943 and the 1971 articles are two things: first, the reduction of economic contradiction *only* to the possibility of a lack of effective demand, that is to a realisation crisis; and second, an explanation of the crisis in which the political aspects are *divorced* from the economic aspect (D'Antonio, 1978). This was an attitude alien to Marx and Luxemburg, in whose arguments the two dimensions were indistinguishably fused, and grounded on the foundation of a (monetary) labour theory of value.

## 5.5 Luxemburg beyond Kalecki: some missing Marxian themes

In the last two sections of this chapter my aim is twofold. First, to problematise Kowalik's (and Kalecki's) reading of Luxemburg, showing that they overlook some important Marxian dimensions related to the labour theory of value (for further developments, see Bellofiore, 2009a, b). Second, to provide a preliminary answer to the question as to whether we may detect the relevance of Luxemburg and Kalecki for the understanding of the current crisis (on this see Bellofiore, 2011).

A first missing theme in Kowalik's views is related to Luxemburg's clear vision of Marx's value theory as essentially a value-form approach, and hence possessing a crucial monetary dimension. This is crystal clear already in *Social Reform or Revolution*. There she writes that abstract labour is not an abstraction but a discovery: it does not have an imaginary but a real social existence. It is, in its developed form, money. Unfortunately, Luxemburg – like most of the Marxists of her time – connects this point



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

to a 'money as a commodity' perspective: but it rescues the specificity of Marx, as a monetary labour theorist of value – that is, relative value to value through money.

A second problem with Kowalik's reading of Luxemburg is that he is quite dismissive of the *Anti-Critique*. In its early pages she integrates a value-form perspective with the schemes of reproduction in a way that may perhaps make her the first proponent of a macro-monetary 'circuitist' model of capitalist reproduction. Total capital has to realise an aggregate gross profit in money form. This requires 'finance'; at the opening of the circuit as finance for production, and at the closing of the circuit as finance for demand. In Luxemburg's words: 'From who is the money disbursed?' and 'Where is it recovered?'. The expenditures within the capitalist firm sector are an internal, family matter, and pose no problem at all. The same is true for the money wage bill: even though it flows from the capitalist class to the working class, if workers spend all their income, as Kalecki assumes in his first approximation, this initial finance goes safely back in its entirety to firms as a whole (the same would be true if all workers' savings went into the financial markets). Luxemburg's problem is different: whence comes a *capitalistically productive* monetary demand for the surplus?

The difficulty cannot be reduced, as in Kalecki, to a 'technical' issue. In fact the statements that Luxemburg is advancing are twofold: there must be a monetary inflow at the closing of the circuit; and it must be in the form of capitalist investments. Kalecki's criticism concealed the money game – it is out of sight – whereas Luxemburg put it at the forefront of the drama. Questioning from where 'finance' (in its dual meaning) comes from, she opened the way to the tradition, from Wicksell to Schumpeter and Keynes' *Treatise on Money*, which anticipated the modern 'theory of the monetary circuit'. Her difficulty, the insistence that there must be a monetary realisation of surplus value in its entirety, foreshadowed the two riddles discussed in that approach: one about the monetary realisation of interest to be paid back on bank loans, and the other about the monetary realisation of the total gross profits.

If we take the attitude of freeing the problem from the strictures generated by the primitive form it has in Luxemburg, Kalecki's reprise is once again useful. Paraphrasing Joan Robinson, we merely need to substitute plausible hypotheses to supposed logical necessities. The problem of the monetary realisation of the surplus value may be solved thanks to investments – here we have to remember that total capital is constituted by many capitals in competition. In a first abstraction, investments are financed by the banking sector, but this finance remains safely within



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the aggregate firm sector, so that we may consider it as instantaneously reimbursed in the aggregate: the result is, as in Graziani's model (Graziani, 2003), that the surplus value is realised by 'industrial' capitalists 'as if in kind'. But, as Kalecki and Robinson insist, Luxemburg is right in rejecting the idea that this outcome can be taken for granted – in Marxian terminology, that all potential surplus value is demanded and hence produced. Net exports to the foreign sector (financed by capital exports) and/or internal exports to the government sector (when the State budget deficit is newly financed by the central bank) are logical and historically sensible solutions to her difficulty.

What escapes even the most sympathetic Keynesian/Kaleckian reading of Luxemburg, however, is that there is a reason why she rejects any solution that boils down just to an increase in consumption, including the consumption by capitalists. The Keynesian/Kaleckian outlook is effective in isolating the problem of effective demand. But Luxemburg is thinking of the accumulation of capital in unadultered Marxian fashion, as the reproduction of the 'capital relation'. The point is not just that of realising potential surplus value, but of accumulating it from a surplus value expenditure which is at the same time the first act of a new surplus value producing round. The demand solving her problem *must* be capitalist investments. That is why armament fits her perspective like a glove. As Joan Robinson saw (1951: p. xxxvi), militarism entails capitalist investments which are, yes, productive of surplus value, but whose output is composed of use values that do not enter capitalist reproduction. New, effective demand without new productive capacity.

Another missing Marxian dimension in the Kalecki-biased interpretation by Kowalik is that he gives a very partial account of the *Introduction to Political Economy*. If one reads the chapters of that manuscript available to us, one cannot avoid the impression that the problem she raised in the *Accumulation of Capital* did not pop out from just the demand side, but from the supply side as well. Capital's exploitation, she says, materialises in a law of the fall in the relative wage – that is, the ratio between variable capital and surplus value; or, if you prefer, the share of the value of labour power within the new value produced. This, of course, is nothing but the converse of the relative surplus value extraction – the outcome of the real subsumption of labour to capital with its endogenous drive to revolutionise the organisational and technological setting of the production processes. Luxemburg rightly insists that this dynamics makes it necessary to reject the 'absolute impoverishment' thesis, since real wages may rise, but less than the productive power of labour (something which is not falsified by the so-called Fordist era, if we



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

consider the distinction between productive and unproductive labour). If and when the relative wage is increasing (as a consequence not only of distributive conflicts, but also of workers' struggles in production), this breaks an 'objective' law. It must be prolonged in a 'political exit from capitalism itself (something, again, which was all but disconfirmed by the crisis of the Fordist era).

The 'tendency of the relative wage to fall' is nothing but a squeeze of the share of wages in income, and it therefore widens the effective demand gap to be closed by capitalist investments. This is exactly Luxemburg's problem in the *Accumulation of Capital*. She did not see that Marx had already been there, and that he had developed a specific crisis theory in which relative surplus value extraction, disproportionalities and aggregate demand failures, were connected. The clearest expression of this Marxist line of thought can be found in the *Grundrisse*, which was unknown to her. In some pages of the 1857–1858 Manuscripts, Marx says that the systematic increase of the ratio of surplus value (what he calls the 'disproportion' between surplus labour and necessary labour) constantly upsets the equilibrium ratio which has to be maintained between branches of production for accumulation to proceed smoothly. The revolution in the methods of production is associated with a multiplication of the branches of production, that is to a growth of the demand that capitalist firms provide for each other (Lenin's point). The delinking between production and consumption is further accelerated by credit, banking, and opening up to the world market. This process is not a harmonious one. Sectoral disproportionalities will necessarily appear: equilibrium growth is not a requirement of the system, because universal exchange and endogenous technical progress, though connected, move independently of and 'indifferently' to each other. When excess supply in some sectors (though matched by excess demand in other sectors) becomes widespread in key industries, the price system is unable to overcome the disequilibrium. Firms' demands for means of production collapses, the wage bill starts to implode, and the lack of demand is spread all over the system as though a negative multiplier were in action.

## 5.6 A conclusion: which actuality of Luxemburg and Kalecki in the current crisis?

All these missing dimensions in Kowalik and Kalecki are (as in Joan Robinson) related to Marx's labour theory of value, if the latter is interpreted as a macrosocial theory of exploitation in an essentially monetary



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

economy (Bellofiore, 2004a). I do not enter into any discussion about whether or not Kalecki ever 'abandoned' the Marxian labour theory of value; the point is that it does not play any role in his economic argument. On the contrary, Luxemburg links together a macro circuitist approach with a view of accumulation where endogenous technical change gives way to effective demand failures. I think that a promising research project would be to build a bridge between these two sides of the discourse about capitalist extended reproduction, valorisation, and realisation crisis.

If we combine the Marxian macro-monetary value theory with the Kaleckian re-reading of the schemes of reproduction, the door opens for an interpretation of capitalism and its recurring crises where exploitation and effective demand are both essential in accounting for the ascent and collapses of different forms of capitalism itself. The current crisis is no exception: the more so if we look at it from the point of view of the long-term dynamics of capitalism. The Great Depression of the late 19th century was a profitability crisis which may be imputed to the forces leading to the Marxian 'tendency for a fall in the rate of profit'. Capitalist restructuring, through organisational (Taylor) and technical (Ford) innovations, raised the rate of surplus value, so that the increase in the latter more than compensated for the depressive influence of the rise in capital composition. This, however, created the conditions leading to the Great Crash of the 1930s as a realisation crisis.

The next decades may be easily explained through a Luxemburg–Kalecki model: a deficiency of investments was overcome only through 'internal' or 'domestic' export. Among the many factors leading to the Great Stagflation, a crucial one was that since near-full employment became a lasting feature of the system, as Kalecki himself wrote in 1943, workers 'get out of hand', and captains of industry (but, in fact, the capitalist class altogether) wanted to 'teach them a 'lesson'': the social position of bosses was undermined, and the class consciousness of the working class grew (Kalecki, 1943: pp. 354–355). Kalecki put forward these propositions as a kind of 'sociological' *aperçue*. But this is exactly what one has to expect as an 'economic' consequence of the way capitalist accumulation was fuelled after the Second World War, if one sticks to the Marxian labour theory of value. The realisation problem was avoided through military Keynesianism and 'ancillary', non-targeted government purchases. As a consequence, the pressure over the exploitation of the 'productive' workers was deepened, and the required rate of surplus value had to rise. To avoid a decrease of capacity utilisation, waste and unproductive expenditures had to grow. The system thus



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

depended on a dual requirement: that policy management favoured the realisation on the market of the potential surplus value to be produced, and that the capital relation was reproduced with moderate conflicts, so that in the capitalist labour process that surplus value was actually extracted. It was an unsustainable configuration. Industrial conflicts spread during the second half of the 1960s, and this meant that 'discipline in the factories' was over, as Kalecki prophesied. The tendency of the relative wage to fall was either interrupted or reverted, and political instability won the day.

What is paradoxical is that a 'crucial reform' in capitalism *did* occur, creating social conformism and a weakening of mass struggles, but through a partly different chain of events. The 'reform' was the outcome of the very effective way capitalism reacted to the social conflicts leading to the Great Stagflation: through a 'traumatisation' of workers on the labour market and within the labour process, thanks to a 'centralisation without concentration' of capital; and thanks to a subordinate inclusion of households within money manager capitalism (to employ Minsky's apt terminology) – what I have called elsewhere a real subordination of labour to finance. Also the Great Moderation which followed turned out to be no more sustainable than the Golden Age, though at first the disequilibrium tendencies on the stock exchange, housing markets, and foreign-exchange markets produced a semblance of stability. The ascent of this 'new' capitalism may once again be explained employing a Luxemburg–Kalecki vision, with a Steindl twist. 'Capital market inflation' (Braun, 2012) allowed an unprecedented expansion of indebted consumption through collateral lending. In the 'fundamental equation', the decrease in the propensity to save on income boosted demand in the Anglo-Saxon world (through an eminently political management of monetary policy: the so-called 'privatised Keynesianism'); while other areas of the world solved the realisation problem through neo-mercantilism, that is through net exports.

It is certainly too early to develop this sketch into a full-blown explanation of the crisis and its aftermath. And that explanation requires that all the given traditions need to be reassessed as a consequence of the dramatic changes in capitalist reality. The traditional circuitist model does not capture indebted consumption well, if not very mechanically. The rise in indebtedness was forced onto non-financial businesses, and especially characterising finance and households in the boom, so that the Minskian financial instability hypothesis needed to be redefined relative to the original model. The same Kaleckian tradition needed an input of more sophisticated financial analyses; and the wage-driven



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

recovery in which it usually concluded its economic policy discourse looks like wishful thinking (as the reader of this chapter should easily understand). Academic Marxists seem happy to endlessly debate financialisation and the tendency of the rate of profit to fall, with their policy side very often more moderate than that of the *Financial Times*. There is certainly still plenty of work to do. An open attitude like that of Kowalik cannot but be a lesson to us all: he was Luxemburg's true disciple in disparaging formulations valid once and forever, and in adopting that self-critical attitude that is required for the theoretical and practical challenges in front of us.

## Notes

1. 'This simple outline of analysis must be elaborated by introducing house-building in addition to industrial investment and a budget deficit as boosters to effective demand, variation in the proportion of household consumption to income, the relation of home expenditure in one country to its balance of trade and the effects of continuous inflation. However much it is complicated, the main core of the argument remains valid – in an industrial economy, the flow of gross profits primarily depends on the flow of expenditure on investment' (Robinson, 1979: p. 200).
2. A reference to the schemes of reproduction and Rosa Luxemburg is in Kalecki (1939d: pp. 254–255).
3. As Toporowski (2012b) observes, 'Tadeusz Kowalik was unaware at the time he wrote this book that important financial and monetary aspects of the analyses of Tugan-Baranowski and Rosa Luxemburg also look forward to the work of an American student of Oskar Lange, that critic of late-twentieth century finance capitalism, Hyman P. Minsky [...] Minsky himself, when trying to understand value relations in a capitalist economy, laid out, in his *Stabilizing an Unstable Economy*, a two-sector model of capitalist production that is, in its essentials, the same as the system of capitalist reproduction put forward in Volume II of Marx's *Capital*' (Minsky, 1986). Toporowski (2009) shows that Luxemburg's analysis of international finance foreshadows the international debt crises since the 1980s.
4. See Toporowski (2008b), which also considers the financial implication of reduced workers' saving.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 6
# Polish Marxian Political Economy and US Monopoly Capital Theory: The Influence of Luxemburg, Kalecki and Lange on Baran and Sweezy and *Monthly Review*

*John Bellamy Foster*



## 6.1 Introduction

From the viewpoint of orthodox economists, macroeconomics has no significant historical antecedents prior to the publication of Keynes's *General Theory of Employment, Interest, and Money* in 1936. Theories of aggregate demand before Keynes, such as those associated with Lauderdale, Malthus, and Hobson, were generally weak theoretically. A number of important mainstream economic thinkers raised what would be considered macroeconomic questions in the context of business cycle analysis.[1] But it required Keynes to construct a monetary theory of production that broke decisively with Say's Law (the notion that supply creates its own demand) before economic orthodoxy was able to address macroeconomic questions in a significant way.

Marxian economists, in contrast, had begun to work seriously on macroeconomic theories long before the Keynesian revolution. In the 19th century Marx had provided a critique of Say's Law based on a monetary theory of production, exemplified by his general formula of capital or M-C-M′, in which money (M) was exchanged for a commodity (C) in order to generate more money (M′). Hence, at one and the same time he was able to stress the centrality of money, the possibility of a realisation crisis, and the reality of capital as self-expanding value.[2] Equally important was Marx's construction of his reproduction schemes in Volume II



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of *Capital*. Thus it is hardly surprising that Marxian theory generated what could be considered the first major economic debate on the relation of economic aggregates of investment and consumption – referred to in Marx's schema as Department 1 (capital goods) and Department 2 (consumption goods).

The principal debate in this regard took place between the Russian 'Legal Marxist' Mikhail Tugan-Baranowski and the Polish Marxist Rosa Luxemburg.[3] Tugan-Baranowski was the first to employ Marx's reproduction schemes in the analysis of economic crisis. He sought to argue that economic growth could proceed on the basis of the expansion of Department 1 (or investment) alone, independently of Department 2 (including both working-class consumption and capitalist consumption). Thus all theories of underconsumption and crises of effective-demand, related to the class-distributional characteristics of the system and the limitations this imposed on consumption, were incorrect. Indeed, investment could propel the economy forward even in the face of rapid and absolute declines in consumption. As Tugan-Baranowski put it,

> If all workers except one disappear and are replaced by machines, then this one single worker will place the whole enormous mass of machinery in motion and with its assistance produce new machines – and the consumption goods of the capitalists. The working class will disappear, which will not in the least disturb the self-expansion process [*Verwertungsprozess*] of capital. The capitalists will receive no smaller mass of consumption goods, the entire product of one year will be realised and utilised by the production and consumption of capitalists the following year. Even if the capitalists desire to limit their own consumption, no difficulty is presented; in this case the production of capitalist's consumption goods partially ceases, and an even larger part of the social product consists of means of production, which serve the purpose of further expanding production. For example, iron and coal are produced which serve always to expand the production of iron and coal. The expanded production of iron and coal of each succeeding year uses up the increased mass of products turned out in the preceding year, until the supply of necessary mineral is exhausted. (Tugan-Baranowski, quoted in Sweezy, 1942: p. 168)

Although Tugan-Baranowski's analysis was generally rejected by Marxist theorists, the most powerful and virulent critique came from Luxemburg in *The Accumulation of Capital*. Adopting a position directly opposite to Tugan-Baranowski, Luxemburg argued that a closed capitalist economy



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

was unable to provide the investment outlets necessary to absorb potential savings, and needed the support therefore of 'external markets' such as government spending on armaments and the export of surplus production and profits to non-capitalist economies. For Luxemburg the idea that 'production of means of production is independent of consumption' was nothing but 'a vulgar economic fantasy of Tugan-Baranovsky' (Luxemburg, 1913a: p. 320).[4]

The brilliance of Luxemburg's own analysis was captured by Michał Kalecki in his *Essays in the Theory of Economic Fluctuations* (1939b), where he stressed that the opposite view to that of Tugan-Baranowski was represented by one of Marx's 'eminent pupils, Rosa Luxemburg'. As Kalecki explained:

> In her *Akkumulation des Kapitals* she stressed the point that, if capitalists are saving, their profits can be 'realized' only if a corresponding amount is spent by them on investment. She, however, considered impossible the persistence of net investment (at least in the long run) in a closed capitalist economy [...]. The theory cannot be accepted as a whole, but the necessity of covering the 'gap of saving' by home investment or exports was outlined by her perhaps more clearly than anywhere else before the publication of Mr. Keynes's *General Theory.* (Kalecki, 1939b: pp. 45–46)

In his praise of Luxemburg, however, Kalecki was being, as was his wont, too modest, since there is no doubt that the clearest and most complete treatment of these issues to be found before Keynes was provided by Kalecki himself, who was originally inspired by the classical-Marxian debate between Tugan-Baranowski and Luxemburg. Kalecki's political economy became known only gradually in the West. Originally he had been thought of as a younger, brilliant follower of Keynes, and this is how Keynes himself clearly thought of Kalecki. It wasn't until the late 1940s that Kalecki's independent and prior discovery in the early 1930s of the main theoretical propositions associated with Keynes's *General Theory* – that the savings rate is governed by the investment rate, that money wages govern the price level, and that interest rates are governed by the supply and demand for money – was raised in the English-language literature (Robinson, 1976: pp. 7–13; Robinson, 1969: pp. vii–xii). And it was only in 1966 that some of Kalecki's earliest Polish publications demonstrating this appeared in book form in English in his *Studies in the Theory of Business Cycles, 1933–1939* (Osiatyński, 1990: pp. 436–437).[5] In footnote 1 in the foreword to that book Kalecki stated: 'It is worth



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

noticing that there is a certain affinity between these theories of mine and those of Rosa Luxemburg' (Kalecki, 1966: p. 1).

The argument in this chapter is that the most famous attempt in the 1940s to the 1990s in the United States to integrate Marxian political economy with a macroeconomic critique – linking this also to theories of monopoly capitalism/imperialism – as represented by the work of Paul Baran and Paul Sweezy is best understood as an endeavour to build critically on the work of Luxemburg – only to be modified later on in accord with Kalecki's work (and that of Josef Steindl), likewise rooted in Luxemburg. At the same time, all of these thinkers were heavily influenced by the interrelationship between a macroeconomics based on Marx's reproductive schema (to which the Keynesian aggregates were closely related) and the key parameters of socialist economic planning. These and other elements were to create a strong affinity between Polish-Marxist and US-Marxist political economies.

## 6.2 *The Theory of Capitalist Development*

Sweezy's early work, *The Theory of Capitalist Development: The Principles of Marxian Political Economy* (1942), stood out in the economic literature primarily for two reasons: (1) as an exceptionally brilliant presentation of Marxian economic analysis and (2) as a development of the Marxian 'underconsumptionist' theory of crisis. His approach to 'underconsumptionism' in this work was a product of the discussions of the 1930s through the early 1960s, when the term 'underconsumption' was commonly applied by economists not just to the earliest identification of what later was to be termed the problem of 'realisation' crises by classical thinkers like Sismondi and Malthus, but also, as Joseph Schumpeter emphasised in his *History of Economic Analysis*, to 'non-spending' theories of crisis (that is, theories of insufficient effective demand), as in Keynes. Thus the Keynesian growth theorist Evsey Domar, in his *Essays in the Theory of Economic Growth* (1957) referred to 'those with underconsumptionist leanings, such as Marxists and Keynesians' (Schumpeter, 1954: p. 740; Domar, 1957: pp. 120–121; Foster, 1986: pp. 75–76, 241).

Sweezy's exposition on realisation-crisis theory took the form of, on the one hand, a critique of Tugan-Baranowski's notion of investment as a completely autonomous and self-propelling process logically permitting capitalism to escape crisis tendencies altogether, and, on the other hand, a qualified defence of Luxemburg's position. Tugan-Baranowski was correct in seeing capitalism as a system directed solely at exchange value rather than use value. But capitalism, Sweezy argued, in line with



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Luxemburg, was unable to transcend 'natural-technical' or use-value limits, and was therefore ultimately plagued by realisation difficulties, that is, the inability to realise all of the potential surplus value produced at the level of production (Sweezy, 1942: pp. 171–172).

Yet, in Sweezy's view Luxemburg's response to the challenge represented by Tugan-Baranowski was insufficient. Although Luxemburg was correct in her strong rejection of Tugan-Baranowski's argument and her recognition that a tendency towards realisation crisis was inherent in capitalism – to the extent that Sweezy designated her favourably as 'the queen of underconsumptionists' – still, she was wrong, he insisted, in thinking that the expanded reproduction of capitalism was logically impossible within a closed capitalist economy, that is, without the help of external markets (such as non-capitalist modes of production and military spending). The mistake she made was to retain assumptions associated with simple reproduction when addressing questions that could only be solved at the level of expanded reproduction. If there was an internal contradiction to accumulation, such that any attempt simply to 'build more mills that should make more mills forever' – as J. B. Clark had said and as Tugan-Baranowski had argued – was practically impossible, then this had to be explained more effectively at the level of economic growth theory (Sweezy, 1942: pp. 168–169, 171, 202–207; Sweezy, 1953: pp. 291–294).

What Sweezy himself sought to provide, then, in *The Theory of Capitalist Development*, was a more developed logical refutation (complete with an algebraic appendix) of Tugan-Baranowski's permanently-self-propelling-investment argument. The object was to demonstrate, rather, that there was a continual tendency within capitalism toward a crisis in accumulation arising from the inability to expand Department 1 for long periods of time independently of Department 2. Sweezy's argument here was to have an extraordinary effect on the mainstream economic-growth theory introduced by Domar in the 1950s. In an essay entitled 'The Problem of Capital Accumulation', first published in 1948 in the *American Economic Review*, Domar used Sweezy's formulation in order to develop his own analysis of the tendency to 'excessive accumulation of capital', arguing that Sweezy had in important respects underestimated the challenges to capitalist growth (Domar, 1957: pp. 109–128).

Responding to Domar's development of his argument, Sweezy acknowledged the superiority of Domar's version, observing that this approach provided 'stronger results' than his own earlier attempt. The theory to which this gave rise, Sweezy noted, was now best described as 'a tendency to overaccumulation' rather than 'underconsumption' since



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the emphasis was no longer simply on underconsumption, but focused on the problem of underconsumption and underinvestment (blocked by previous investment, Sweezy, 1953: pp. 358–360). In later years, he was to describe his theory as an 'overaccumulation' approach in this broad sense, emphasising that the use of the term 'underconsumption' in relation to the Marxian theory was 'perhaps unfortunate' as it placed too much emphasis on 'one strand of a complex whole' (Sweezy, 1974b: pp. 53–54; Sweezy, 1981: p. 34).

Domar's heavy reliance on Sweezy in the development of his growth theory (as well as, to a lesser extent, on Marx, Kalecki, and the Soviet economist Feldman) led Oskar Lange to remark in his *Political Economy*:

> The theory of economic growth raises problems which are outside the traditional scope of the subjectivist trend, vulgar economy, and the neoclassical school. It is forced to study the relationship between the development of productive forces and the nature of the relations of production which determine both the possibilities and the incentives of capital accumulation. It must deal with the same questions as Marxist political economy. The theory of economic growth thus needs theoretical instruments for the examination of these problems. Only Marxist political economy has developed instruments of this kind; the traditional trends in bourgeois economic thought do not have them. The [mainstream] theory of economic growth is [therefore] forced to borrow its theoretical tools from Marxist political economy or else make its own – which look very much like those produced by Marxist political economy. (Lange, 1963b: pp. 310–311)

For Sweezy, the purely logical statement on the obstacles to the expansion of Department 1 independently of Department 2 only took one so far. Ultimately his approach, like Luxemburg's, was a *historical* one. That is, while the inability of Department 1 to be self-propelling over the long run presented the system with recurring problems of the realisation of effective demand, nonetheless the working out of this tendency, like any other, depended on its interaction with various countervailing factors that could come to bear. And it was here, in the historical process, that the real issue lay. In this respect, Sweezy's analysis was generally at one with Luxemburg's in focusing on historical issues of military spending and external (imperial) markets, as well as technology and monopoly (Sweezy, 1953: p. 293; Sweezy, 1942: p. 207).

Hence, Sweezy's argument with respect to Tugan-Baranowski and Luxemburg in many ways foreshadowed Kalecki's definitive treatment,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

written a quarter-century later, of 'The Problem of Effective Demand With Tugan-Baranovsky and Rosa Luxemburg'. Kalecki contended that Tugan-Baranowski's virtue was to explain that capitalism was an 'antagonistic' system, while Luxemburg's far greater virtue (despite certain logical errors) was to emphasise that the capitalist system tended toward stagnation due to an inability to find outlets for potential profits – if not propped up by such factors as military spending and an export surplus (both tied to the role of imperialism). Further, as Kalecki's own analysis had shown, the whole problem was made much worse by increasing monopoly power (Kalecki, 1971b: pp. 146–155; see also Kalecki, 1984: pp. 159–166).

Indeed, it was Kalecki's analysis, both directly and via Josef Steindl's *Maturity and Stagnation in American Capitalism* (1952), which led Sweezy to rethink his whole approach, and that was to lead to the more developed theory of monopoly capitalism in Paul A. Baran's *The Political Economy of Growth* (1957) and Baran and Sweezy's *Monopoly Capital* (1966a). In a 1952 review of Steindl's book for *Econometrica*, Sweezy emphasised that 'in successfully linking up the theory of investment with the theory of imperfect competition', Steindl had 'made a contribution of the first importance'. At the same time, Sweezy was clearly influenced by the critical development in *Maturity and Stagnation in American Capitalism* of his own earlier treatment of the Marxian theory of accumulation and crisis in *The Theory of Capitalist Development*, including Steindl's integration of Sweezy's early efforts with the theory of monopoly capitalism as outlined by Kalecki (Sweezy, 1954: pp. 531–533; Steindl, 1952; Foster, 1986: pp. 83–93).

Hence, if the first stage in Sweezy's approach to Marxian political economy was strongly influenced by the general historical thrust of Luxemburg's thought (though rejecting at core points Luxemburg's specific logic with respect to accumulation), in the second, more mature stage (here including as well the work of Paul Baran) the main thrust of the analysis was Kaleckian. In both stages the role of Polish Marxian political economy played a decisive role in the development of the *Monthly Review* tradition. It is the Kaleckian influence, however, that has proven to be of the greatest importance.

## 6.3 *The Political Economy of Growth*

Sweezy's encounter with Kalecki's work was primarily a product of the post-Second World War period, when Kalecki was working for the United Nations in New York from 1946 to 1954, during which time he also played a key role as an advisor to Sweezy and *Monthly Review*



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

(López and Assous, 2010: p. 11). References to discussions with Kalecki frequently appear in Baran and Sweezy's correspondence in this period. Although Sweezy and Kalecki often discussed questions of capitalism in this period, it was Baran, with his even greater familiarity with Polish Marxism, who played perhaps the crucial role in the integration of these ideas into the developing *Monthly Review* perspective.

Baran's background and his relation to Polish Marxism were complex. He was Russian, with a Menshevik father. His parents, seeking to get away from the chaos after the October Revolution, moved to their ancestral home in Vilna, then in Poland, and took on Polish citizenship (with Baran being entered as a minor on his mother's birth certificate). The family later moved to Dresden, and then, in 1925, back to Moscow, where Baran was educated, eventually studying economics at the Plekhanov Institute. He continued his studies in Germany, and became a research assistant in economics to Friederich Pollock at the Institute for Social Research at Frankfurt in Germany. With the rise of Hitler he left for Paris, then Russia, and finally worked for a time in a commercial capacity for relations in Vilna in the timber industry. In 1938 he was sent to London as a representative of Vilna's commercial interests. Deciding to pursue an academic career, he applied to the Harvard economics department. He arrived Harvard in 1939 with a letter of introduction to Sweezy from their mutual friend Lange. Baran and Sweezy became fast friends and gradually emerged as intellectual collaborators. Baran's fluency in Polish, together with his continual interactions and correspondence with both Lange and Kalecki, whose work he followed closely, meant that he was quick to grasp the breakthroughs in Marxian economics originating in Poland, which thus played a formative role in the development of what came to be known as the *Monthly Review* tradition (Sweezy and Huberman, 1965: pp. 28–35, 97).

In the 1950s the work of Baran and Sweezy was heavily influenced by their frequent interchanges and correspondence with Kalecki and Lange, as well as by Steindl's analysis rooted in Kalecki's theory. This relationship deeply affected the critique of monopoly capitalism, in particular, as it emerged in *Monthly Review* at this time, as well as in Baran's *Political Economy of Growth*. A major issue for Baran and Sweezy was the integration of Kalecki's analysis with Marxian theory, including the labour theory of value. On 12 February 1952 Baran wrote, apparently in relation to the manuscript of Kalecki's *Theory of Economic Dynamics* (Kalecki, 1954[1965]):[6]

> Kalecki's manuscript is in parts at least a tough nut to crack. I haven't seen his very last 2 chapters where he deals with development etc.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> You are right it is an odd performance, and the thing that bothered me about it is the strongly classical air about the whole. Somehow or other to treat the capitalist process as purely endogenous, leaving out the government and all that goes with it is a concession to bourgeois economics that one should not make under any circumstances. I think that the Russky's rightly yelled at Varga for his having nicely split economics from politics. Kalecki with all his undeniable masterfulness and brilliance does it – even worse. If he were to try to square his theory with Marx, he would also have to push beyond Marx's classicism and really come to grips with the problem [...of what] it is that makes today's capitalism tick? (Baran to Sweezy, 12 February 1952)[7]

To which Sweezy replied on 4 March 1952:

> My fundamental criticism of Kalecki's manuscript as far as I have gone in it (7 chapters) is not that it leaves the state out but that it fails to make any analytical connections with classical-Marxian theory. Kalecki is contemptuous of value theory, of course, and argues that his system is entirely at variance with the Ricardo-Marx system. This seems to me to be a superficial view. Ricardo-Marx theory in a sense is a special case, but it is a special case which provides the absolutely essential link between the class structure of capitalism and analytical economic theory. Once this link has been firmly established, it is safe to go on, much along Kalecki's lines, to analyse the actual modus operandi of the system. Kalecki's theory, by the way, provides all the openings that are needed for integrating economic and political factors, it seems to me. I tried to present this line of reasoning to Kalecki when I was last in New York, but I did it badly and he wasn't really listening. He's a lovely guy, but I find it almost impossible to carry on a real *two-way* discussion with him. In this connection, incidentally, Schumpeter sensed the essential point – which again shows how much above the level of the vulgar economists he was – when he wrote (in his obituary on Böhm-Bawerk) that "the picture which the theorist paints of the economic process depends in large part on his conception of the value phenomenon" and again that "nearly all of our insight into, and all of our attitude towards, the nature and meaning of capitalism hangs on our view of the meaning and function of interest and profit." *Therefore* we must stick resolutely to the theory of value and surplus value. This Kalecki doesn't see at all, in fact brushes it aside as an irrelevancy. (Sweezy to Baran, 4 March 1952)[8]



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Despite their criticisms of Kalecki's *Theory of Economic Dynamics* (before either had been able to complete their reading of the book), their overall assessment was of course strongly positive, particularly in relation to the closing chapters. From Baran and Sweezy's standpoint, the strength of Kalecki's theory was in its integration of a conception of the class composition of output, with Marx's reproductive schema, and the notion of the degree of monopoly providing an advance in the Marxian theory of accumulation applicable to the monopoly stage (see Foster and Szlajfer, 1984: pp. 11–12). Most important of all Kalecki understood the full extent of the stagnation tendency, going beyond Keynes's notion of underemployment equilibrium. With respect to the stagnation tendency Baran wrote to Sweezy in 28 January 1958:

> All this is entirely clear to Kalecki – the only economist who understood it all, mainly because he did not have to learn from Keynes and the Keynesians. (Baran to Sweezy, 28 January 1958)

Baran and Sweezy worked at getting an arrangement with George Allen and Unwin (with Kalecki's approval) to let Monthly Review Press bring out a US edition of *Theory of Economic Dynamics*. In April 1962, Baran received from Kalecki a copy of the 'tiny book', *Studies in the Theory of Business Cycles* (presumably still in Polish), consisting of his main essays that had anticipated Keynes's *General Theory*. Baran raised the issue with Sweezy of Monthly Review Press publishing the English edition, which however was published in 1966 by Augustus M. Kelley. For Baran the significance of this book was clear: 'Absolutely amazing how clearly and neatly he had all of Keynes before Keynes. And extremely simply written' (Baran to Sweezy, 7 August 1962).[9]

Nevertheless, Baran and Sweezy were concerned with developing Marxian theory as a whole, based on Kalecki and Steindl's theoretical developments. Hence, the struggle to address the two fundamental issues that they had raised with respect to Kalecki's theory in particular – the extension of the theory to the broader political economy and its deepening in terms of Marx's value analysis – was to govern much of Baran and Sweezy's own work, leading up to their joint study, *Monopoly Capital*.

*Monopoly Capital* was preceded by Baran's pathbreaking book, *The Political Economy of Growth* (1957), which is best known for its analysis of economic underdevelopment, making it one of the crucial works in the rise of the Marxian dependency theory tradition. But *The Political Economy of Growth* was in fact much more. Lange referred to it in 1963



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

as 'the only systematic Marxist exposition of the problems of [the] economic theory of growth' in all of its aspects (Lange, 1963b: p. 311). In his short article (and tribute), 'On Paul Baran's *Political Economy of Growth*', Kalecki wrote: 'the most important and original contribution of the book is certainly the characterisation of various economic systems by the way in which the economic surplus is generated and utilized'. Penetrating to the core of Baran's analysis in the critique of economic waste under monopoly capitalism, Kalecki went on to stress that,

> Baran distinguishes between the potential and actual economic surplus, but he does not by any means limit the discussion to the discrepancy of these two values which makes for an underutilization of existing resources. This focal point of the economic discussion in the last thirty years, generated by the Great Depression of the 1930's, accounts for only a part of his argument. He goes far beyond that and concentrates his attention on *how* the economic surplus is being utilized even if it is utilized more or less to the full. And indeed some of the most brilliant pages of his book are devoted to the analysis of the assimilation of the New Deal ideas by monopoly capitalism. From all alternatives of 'filling the gap in effective demand' there emerges as acceptable to the ruling class only that which is most absurd and perverse: the manufacturing of the weapons of destruction as a means of keeping the economy going and enabling people to earn their livelihood. (Kalecki, 1965b: pp. 58–60)

Baran's argument in *The Political Economy of Growth*, as a quick perusal of the text and citations makes clear, owed much in its analysis of advanced capitalism to Kalecki's *Theory of Economic Dynamics,* together with Steindl's *Maturity and Stagnation* – while also drawing on Lange's work (Baran, 1957: p. 72). Where Baran's work struck a different note than Kalecki, however, was in its treatment of government deficits and inflation. In *The Political Economy of Growth* Baran introduced an argument that persistent government deficits, if used to finance unproductive expenditures such as military spending that were disconnected from material consumption and investment, could generate an inflationary 'overhang' of credit/debt, representing potential spending power, on top of underlying conditions of stagnation. Baran argued on this basis that the use of deficit financing was constrained, and likely to be blocked by the capitalist class, except under conditions of war or deep depression. Such views went against Keynesianism, and Joan Robinson was harshly critical of Baran on this score in a review of his book for *The Nation*. Later



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kalecki 'upbraided' Baran in Warsaw for the February 1961 Review of the Month (ROM), entitled 'A New New Deal?' in *Monthly Review*, where the magazine, in one of the few ROMs that Baran had helped write, pointed to the dangers of inflation with persistent deficits (Baran to Sweezy, 22 August 1962; Huberman and Sweezy, 1961: pp. 497–505; Robinson, 1957: pp. 485–486; Sweezy, 1957) [10]. In this case, Baran, however, said that Kalecki was 'right, and we should avoid formulations which put us either in the *Wall Street Journal* class or into that of the Moscow economists'. This did not mean that the argument with respect to inflation was incorrect, but it had to be explained more fully. Seventeen years later, in the stagflation era, Sweezy in an article entitled 'Baran and the Danger of Inflation' was to emphasise the importance of Baran's argument, indicating that 'apart from conservative fundamentalists, Paul Baran was perhaps the first economist to warn of the inflationary danger inherent in in Keynesian fiscal and monetary policies' (Sweezy, 1974a: pp. 11–14).

Despite developing the political economy of imperialism and underdevelopment, Baran's *The Political Economy of Growth* did not draw at all on Luxemburg's work. However, Baran suggested at one point when working on his book that Sweezy had given 'hell to Rosa' in *The Theory of Capitalist Development*, in arguing that the non-capitalist areas failed to ease the realisation-crisis problem as she had raised it. Sweezy stuck by his interpretation. How they worked out their disagreement, which Baran described as 'minor', in the end is not clear from their correspondence. However, Baran refrained from addressing Luxemburg directly in his book (Baran to Sweezy, 15 May 1953; Sweezy to Baran, 24 May 1953).

Nevertheless, the significance of Luxemburg's work continued to be emphasised by *Monthly Review,* which over the years was to publish English translations of both Luxemburg's *The Accumulation of Capital* and her famous *Anti-Critique*, as well as collections of her work. When Baran and Sweezy were approached individually in 1962 to contribute to the *festschrifts* for Kalecki and Lange, Baran suggested that they coauthor an essay on imperialism for the Kalecki volume because of Kalecki's close identification with Rosa Luxemburg, as he had indicated in his *Studies in the Theory of Business Cycles* (Baran to Sweezy, 17 October 1962). However, despite their original intention to highlight Luxemburg, they ended up writing an essay entitled, 'Notes on the Theory of Imperialism', which mentioned Luxemburg in the opening line, but which was concerned much more directly with Lenin's theory – since it focused on the development of the multinational corporation as a manifestation of the monopoly stage of capitalism (Baran and Sweezy, 1966b: pp. 13–25).[11]



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Magdoff, in his *Imperialism: From the Colonial Age to the Present*, was later to provide what was the clearest explanation of this preference for Lenin's theory of imperialism over Luxemburg's – together with the recognition of the crucial importance of Luxemburg's *historical* approach to imperialism – which broadly defined the perspective of Baran, Sweezy and himself (Magdoff, 1978: pp. 262–279).

The most powerful criticism of Baran's Kaleckian-influenced argument on monopoly capitalism in *The Political Economy of Growth* came from Nicholas Kaldor. Pointing to the constancy of the relative shares in national income that had first been pointed out by Kalecki and which at the time was viewed as a truism by Keynesian theory – a proposition, moreover, which Baran had put forward in his book – Kaldor argued that this contradicted the notion of a rising surplus (or rising surplus value), thus invalidating Baran's argument. Apart from the fact that such a constancy in wage share could reflect changes in distribution between workers and managers (who were mixed up in the statistics), Baran argued in response to Kaldor in the foreword to the 1962 printing of *The Political Economy of Growth* that the wage share failed to capture the disguised growth of the surplus in the form of economic waste (and unproductive labour) – which was the main reason why the surplus concept was superior to the Keynesian notion of savings (Kaldor, 1958: pp. 164–170; Baran, 1957: pp. xviii–xxv; Baran to Sweezy, 28 January 1958).

Nevertheless, Baran, as he explained to Sweezy, believed that he had 'made a mistake accepting Kalecki's classical view of the irreducibility of wages [...]. This is wrong, I now think. And surely, there is no point now in talking about the subsistence wage as being the *value* of labour power; I cannot attain any meaning to it'. Hence, one of the key goals in the writing of *Monopoly Capital* became, in Baran's view in particular, the deepening of the Kaleckian approach in terms of Marxian value theory, and specifically the value of labour power, bringing out the more complex nature of the concept implicit in Marx's approach. Only then could the surplus approach be put on a solid footing in terms of the analysis of contemporary monopoly capitalism (Baran and Sweezy, 2012a: p. 69).

## 6.4 *Monopoly Capital*

Baran and Sweezy's *Monopoly Capital*, as they indicated in the work itself, was a product of their dissatisfaction with their earlier work. It represented an attempt to extend and deepen from a Marxian perspective the analysis of monopoly capital and stagnation initiated in the work of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kalecki and Steindl – and by this means develop a more powerful theory of accumulation and crisis applicable to mature capitalism. The distinctiveness of *Monopoly Capital*, Baran and Sweezy explained, lay in its attempt to elucidate the 'mechanism linking the economic foundation of society [under monopoly capitalism] with what Marxists call its political, cultural and ideological superstructure' (Baran and Sweezy, 1966a: p. 8; Sweezy, 1987: pp. 541–544). This was to be achieved through an analysis of the utilisation of economic surplus (corresponding roughly to Kalecki's gross profit margins). The breadth of their approach explained much of the book's success. But as Baran and Sweezy made clear, the foundations for much of their analysis of monopoly capital had been generated elsewhere: '[A]nyone familiar with the work of Kalecki and Steindl will readily recognise that the authors of the present work owe a great deal to them. If we have not quoted them more often or made more direct use of their theoretical formulations, the reason is that for our purposes we have found a different approach and form of presentation more convenient and usable': namely one focusing on the generation and absorption of the economic surplus (Baran and Sweezy, 1966a: p. 56). In subsequent writings on the theory of monopoly capitalism Sweezy again and again emphasised the basis of the analysis in Kalecki and Steindl (with deeper antecedents in Marx and Veblen, see, for example, Sweezy, 1972).

Baran's death in 1964 meant that the scope of *Monopoly Capital* was narrower in the published version than in its original conception. Two of the chapters drafted by Baran were left out of the final book, since they had not passed through the final stages of revision by both authors. One of these was a chapter on culture, the media and mental health ('On The Quality of Monopoly Capitalist Society II', see Foster, 2012: pp. 1–23). The other was a chapter on the theoretical implications of the monopoly capital theory ('Some Theoretical Implications', Baran and Sweezy, 2012b: pp. 24–59). It was the missing theoretical chapter which had been intended to ground the economic surplus concept in Marxian value theory, especially in relation to the value of labour concept. It was here that the monopoly capital theory inspired by Kalecki was to be taken to its deepest level and rooted in a more dynamic conception of the value of labour power derived from Marx. Using Marx's notion of 'profits by deduction', Baran attempted to show that part of the economic surplus was concealed within the wages of workers who were compelled to purchase, as part of wage goods, specifically capitalist use values based on unproductive labour. In this way, Kalecki's famous simplifying notion that wages were equal to wage goods was



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

made consistent with the recognition that some of these wages were in fact concealed surplus (surplus value).

## 6.5 'Economics of Two Worlds'

At Baran's suggestion, the coauthored article that Baran and Sweezy wrote in 1963 for the festschrift for Lange was entitled, 'Economics of Two Worlds' (Baran and Sweezy, 1965: pp. 15–29; Baran to Sweezy, 17 October 1962). This was meant to refer to Lange's great contributions both to bourgeois economics in the West, in which he always nonetheless remained a socialist in his outlook, together with his equally great contributions to socialist economics in Eastern Europe. As Sweezy later stated in his 1971 Marshall Lecture at Cambridge University,

> Oskar Lange [...] was, like his fellow countryman Michał Kalecki, an economist who was perfectly familiar with and indeed made notable contributions to the methods and achievements of bourgeois economics. Neither man hesitated to use whatever he found valuable in this tradition; and yet neither man was overwhelmed or trapped by it. Their basic orientation was and remained Marxian and socialist. They provide, it seems to me, admirable examples for the younger generation of radical economists in the West. (Sweezy, 1972: pp. 47–48)

Both Lange and Kalecki had returned to Poland, Lange in the late 1940s and Kalecki in 1954, where they were engaged with problems of economic planning in post-revolutionary societies. Hence, Baran and Sweezy's 'Economics of Two Worlds' was meant to address the different economic thinking and problems that characterised bourgeois and socialist economics – and also the contrasting concerns of Lange and Kalecki themselves. The point was very similar to that which represented the core thesis of Kalecki's final published article (reprinted in *Monthly Review* shortly after his death), 'Theories of Growth in Different Social Systems'. Adopting an approach at variance with the '*general* theory of growth' propounded in the West, which relied 'on models fairly remote from the realities of the present capitalist, socialist, or "mixed" economies', Kalecki propounded a differentiated theory of growth based 'on the idea that the institutional framework of a social system is a basic element of its economic dynamics and thus of the theory of growth relevant to that system' (Kalecki, 1971c: pp. 72–79).

Baran, Sweezy, and Magdoff (who had a major role as a planner in the US war economy in the 1940s) adopted an approach to economic



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

planning in socialist-type economies that was strongly influenced by that of Lange and Kalecki, and particularly the latter. Sweezy believed that Lange's argument in *On an Economic Theory of Socialism* was the definitive refutation of the Austrian critique of planning as propounded, in different forms, by von Mises and Hayek. He contended that Lange's argument could be applied equally to more centrally planned economies, and thus could be divorced from the institutional framework in which Lange had developed the argument, essentially that of market socialism (Sweezy, 1949; Lange et al., 1938). In 1963 Monthly Review Press published Lange's *Economic Development, Planning, and International Cooperation*, based on three lectures he had delivered in Egypt. Here Lange promoted some of Baran's ideas on the utilisation of economic surplus in underdeveloped economies and articulated principles of socialist planning (Lange, 1963a).

Although by the 1960s ideas of market socialism were already emerging in the Eastern European economies, where many had taken on the Austrian critique, Baran, Sweezy, and Magdoff consistently held to views closely akin to those of Kalecki. For example, in his 1971 article 'Lessons of Poland' – part of his debate on socialist transition with Charles Bettelheim – Sweezy quoted Kalecki's famous point on the increased price flexibility of socialist as compared to capitalist economies, and then went on to argue, in terms similar to Kalecki, that such great economic power could also be abused by an 'irresponsible bureaucracy' as was then the case in Poland where the relative prices between necessities and luxuries were being shifted in favour of the latter (Sweezy, 1971: pp. 93–106; Kalecki, 1954[1965]: p. 63).

The early *Monthly Review* tradition on planning, then, can be seen broadly as belonging to the Kaleckian school in arguing that the problem lay not in central planning itself but in the method utilised, particularly the overemphasis on very rapid growth, investment and, particularly, investment in heavy industry, along with the concomitant de-emphasis (past the initial stage of development) on primary materials production, agriculture and consumption. Coupled with this were problems of the forced drafting of resources, akin to a war economy, with no regard for the long-run consequences. All of these issues were raised by Baran in his discussions of national economic planning in the 1950s and 1960s (Baran, 1969). Kalecki's argument that 'central planning by parameters influencing the market environment' required, if the central planning was to work in the end, a dynamic working relation between workers' councils and central planning, was basic to the *Monthly Review* outlook (Toporowski, 1986: p. 5; see also Kalecki 1986: pp. 25–37). Indeed,



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Magdoff's assessment, in the early 1990s, of the economic contradictions of the Soviet economy, which had led to the stagnation period in that economy, were very similar to the Kaleckian critique, and reflected a view not unlike that put forward in Kalecki's famous 'perspective plan' for Poland (Magdoff, 1990a, b).

But it was Kalecki's contribution to the theory of monopoly capitalism that was of the greatest significance for *Monthly Review* in its critique of the US-dominated global political economy. In publishing in 1972 Kalecki's final book, *The Last Phase in the Transformation of Capitalism*, the English-language edition of which was prepared by his own hands, Monthly Review Press brought together Kalecki's various statements over the years on what he regarded as the fundamental political contradiction of monopoly-capitalist economies: the failure to reach full employment – despite the fact that the means of achieving this were well understood – due to the political-class contradictions of monopoly-capitalist society. Instead, the advanced capitalist economy, exemplified by the United States, attempted to prop up the economy by the regressive means of militarism and imperialism (Kalecki, 1971b; Magdoff and Sweezy, 1971: p. 72). As Włodzimierz Brus explained in the preface to Kalecki's book:

> All of these essays exhibit the same idea, important for the understanding of the world of today: in the last decades the knowledge of economic processes and of techniques of government policy in capitalist countries has developed to the point where it is possible to reach and maintain a high degree of employment of capital equipment and labour. In practice, however, taking advantage of these possibilities encounters obstacles rooted in the social and economic structure of capitalism which involve the dominant position of the monopolistic owners of the basic economic resources. This is reflected in the apparently paradoxical phenomenon of resistance against full employment policies except where the situation involves dangerous social tensions. And the resistance will stop altogether where government economic intervention is based on armament expenditures associated with an imperialist expansion abroad and a consolidation of reactionary forces at home. (Brus, 1971: pp. 61–62)

The parameters of the monopoly-capitalist economy for Kalecki were dictated by its internal class structure, which made a direct full-employment policy a threat to the perpetuation of class rule and, at the same time, made a political-economic strategy of militarism-imperialism the foundation of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

state intervention. In Kalecki's view, like Baran and Sweezy's, 'the hideous and misfired' war on the Vietnamese people was not a product simply (or even mainly) of the Cold War but was part of the logic of imperialism under monopoly capitalism (Kalecki, 1972: p. 112).[12]

## Notes

1. On the contributions of Lauderdale, Malthus, and Hobson to the analysis of aggregate demand, see Alvin Hansen (1951: pp. 229–258). On business cycle theory prior to Keynes, see ibid (pp. 211–228).
2. Keynes was familiar, if only indirectly (via Harlan McCracken), with Marx's general formula for capital (M-C-M′) and his critique of Say's Law. Keynes was thus able to use Marx's general formula in working out his own monetary theory of production in the lectures that led to *The General Theory*. For a detailed analysis of this, see Foster and McChesney (2012: pp. 51–55).
3. Building on Marxian theory, Tugan-Baranowski played a crucial role in the development of modern business cycle analysis, focusing on the formation of new fixed capital as the main determinant of the cycle. As Alvin Hansen wrote, 'His analysis came like a fresh ocean breeze. He placed his finger upon the essential characteristic of the cycle – the fluctuation in the rate of investment. This analysis marks an important turning point in business-cycle theory' (Hansen 1951: pp. 226–227).
4. The translation from Luxemburg used here follows Sweezy (1942: p. 171). Luxemburg's treatment of government spending on armaments is to be found in the powerful concluding chapter, 'Militarism as a Province of Accumulation,' of her treatise, *The Accumulation of Capital* (Luxemburg 1913b: pp. 454–467).
5. *Studies in the Theory of Business Cycles* (Kalecki, 1966) included 'Outline of a Theory of the Business Cycle,' which included key parts of Kalecki's 1933 work (in Polish) *An Essay on the Theory of Business Cycle*.
6. The original first edition was published in London by George Allen and Unwin in 1954.
7. Baran and Sweezy's correspondence cited here and below, is from the archives of the Monthly Review Foundation, New York.
8. Similar observations on Kalecki's attitude to the Marxian theory of value to those articulated by Baran and Sweezy are to be found in Jan Toporowski (2004: pp. 216–217).
9. Although Monthly Review Press did not publish Kalecki's *Studies in the Theory of Business Cycles*, it did publish in 1972 (in addition to *Theory of Economic Dynamics*) Kalecki's final book *The Last Phase in the Transformation of Capitalism*. Harry Magdoff (who was to join Sweezy as *MR* editor in 1968, following Leo Huberman's death) reprinted Kalecki's *Essays in the Theory of Economic Fluctuations* at Russell and Russell, where he was co-owner and manager.
10. This article was actually written by Baran together with Sweezy.
11. The introduction to this volume by Tadeusz Kowalik is one of the best short statements on Kalecki's development as a thinker.
12. On Kalecki's understanding of the limits of 'monopoly-capitalist planning,' see Kalecki (1986: pp. 19–24).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 7
# When Science Meets Revolution: The Influence of Rosa Luxemburg on Oskar Lange's Early Project (1931–1945)

*Roberto Lampa*

## 7.1 Introduction

Oskar Lange's great breadth of interest (in the period 1931–1945) has generally been interpreted as evidence that he was an eclectic economist who cherry-picked between marginal analysis and Marxian economics. However, a consistent and alternative interpretation becomes possible once we take into account that mainstream economic theory and Marxian economics constituted two halves of a unique scientific project which included a relevant critical dimension.

In light of such a premise, this chapter aims first to review the main contents of Lange's scientific (and critical) project and to investigate both its foundations and sources of inspiration. In particular, we are going to develop the (so far) unexplored relationship of Lange's works with those of Rosa Luxemburg, as many clues suggest that – notwithstanding their analytical differences – they share a similar perspective on both the scope and the political implications of economics.

In more detail, in Section 7.2 we expound the features of Lange's scientific and critical project. In Section 7.3 we suggest that Rosa Luxemburg's general beliefs about the role of science in the revolutionary strategy – as expressed in *Introduction to Political Economy* – represented a crucial source of inspiration for such a project. In Section 7.4 we perform a comparative analysis between Lange's theory of crisis (and under-consumption) and Luxemburg's theory, contained in *The Accumulation of Capital*. In Section 7.5, by means of





10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

an unpublished manuscript in the National Archives in Chicago, we highlight the influence played by several of Rosa Luxemburg's works (*Reform or Revolution*, *The Junius Pamphlet*, 'What Does the Spartacus League Want?' and *The Russian Revolution*) on Lange's political and socialist theory. Finally, in Section 7.6, we draw some conclusions about the relationship between the two authors, and also with respect to the existing literature.

## 7.2 Deglamourising Oskar Lange's eclectism

In the first and western part of his life (which ended in 1945), Oskar Lange published an impressive amount of works[1] dealing with economic theory, Marxian economics, welfare economics, socialist theory, politics, statistics and even medieval economic history.

Such an incredible breadth of interest, together with the long-lasting absence of any detailed and comprehensive analysis of his body of literature of the period – except for a series of influential but also synthetic judgements expressed by Prof. Tadeusz Kowalik (1964b, 1994 and 2008) – has resulted in a widespread *common sense* among economists. Accordingly, Lange is simplistically regarded either as an eclectic economist who alternated between neoclassical economics and Marxian analysis (Becker and Baumol, 1952) or as a syncretic marginalist who randomly mixed up Marshallian and Walrasian tools at his convenience (Lendjel, 2001).

In the writer's opinion, neither if these interpretations are convincing, since they completely ignore many textual evidences provided by Lange himself and they do not explore any connection *between* his works. Thus, they inevitably reduce – by means of a truism – this author's complexity into mere syncretism. Furthermore, according to accepted wisdom, it could even be argued that Lange was a sort of Jekyll and Hyde, incapable of reconciling his several personalities corresponding to the different branches of his economic investigation.

Fortunately, many clues suggest that it is possible to provide an alternative and consistent interpretation.

First of all, it is useful to recall a crucial passage included in Lange's 1964 Biography (Kowalik, 1964b). Notwithstanding it was part of his *festschrift* and, therefore, may legitimately be regarded as a 'controversial' source, to us it remains an important document, as it was reviewed and approved by Oskar Lange himself, who was still alive at the time. Talking about the years from 1931 to 1945, the author described his entire body of literature of the period as an attempt to criticise traditional



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

theory – albeit 'from the inside' of its disciplinary boundaries – due to its complete lack of any realism:

> Lange sometimes compares [the theory of automatically obtained economic equilibrium] [...] with the case of an ape's writing the text of the Encyclopaedia Britannica while pounding the keys of a typewriter [...] is it worthwhile to take into account such a highly unlikely contingency? (Kowalik, 1964b: p. 6)

In light of such an eloquent statement, there is no option but to determine, *ex-post*, both the existence and the features of Lange's critique on traditional theory, as well as to study the role of each of his most outstanding contributions to this particular extent.

In previous works, we have already suggested a detailed answer to these crucial questions (Lampa, 2010, 2011). This notwithstanding, it is worthwhile both to recall and to re-formulate the main results of our investigations.

In June 1935, Lange published the article 'Marxian Economics and Modern Economic Theory' on a method which aimed to reconcile his most outstanding issues of research, that is Marxian economics and marginal analysis.

Tacitly assuming that economics is both a social and a theoretical science, his solution consisted of a complementary use of these paradigms, as they deal with two interdependent fields of economic analysis. In fact, marginal analysis investigates the abstract and 'objective' (that is, independent of any institutional data) dimension of this discipline, whereas Marxian economics focuses on the 'macroeconomic' level of analysis, assuming the existence of a capitalist economy and specifying its actual (dis-)functioning:

> The superiority of Marxian economics in analysing Capitalism is not due to the economic concepts used by Marx [...], but to the exact specification of the institutional datum distinguishing Capitalism from the concept of an exchange economy in general. (Lange, 1935: p. 201)

With this idea in mind, a year later Lange finally defined his ambitious research project in the article 'The Place of Interest in the Theory of Production'.

At first sight, it is essentially a *scientific* project, whose first stage is to rewrite the traditional theory of both capital and interest (in order to



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

correct their fallacies). Afterwards, the second stage would have been the introduction of money within such an upgraded framework:

> only after the theory of interest has been established independently of the effects of money creation can a satisfactory elucidation of the influence of money creation on interest and production be achieved. (Lange, 1936a: p. 159)

However, once he has clarified the abstract and objective purposes of any theory of interest (that is the rational allocation of capital resources), Lange introduces the institutional datum represented by a capitalist economy. In this way, he is able to show that capitalist economy is the worst instrument to achieve the abstract goals of the highly economic theory, since capitalism is actually characterised by a chronic scarcity of capital as well as by a permanent sub-optimal allocation of capital resources, whose intensity is measured by the rate of interest:

> as the rate of real interest is an index of the distance of the allocation of the original resources from the allocation maximising net output of the economic system, so the rate of interest on money capital is an index of the distance of the methods of production actually employed from the methods of production which maximise profit for all firms simultaneously. (Lange, 1936a: p. 177)

As a consequence, Lange was able to set the stage for an alternative proposal, represented by the well-known socialist model included in 'On the Economic Theory of Socialism'. Not coincidentally, this article was published in the same year and contained an explanation of the superiority of socialism expressed (also) in terms of the better allocation of capital resources, as saving is performed 'corporately' by a Central Planning Board and not in accordance with consumer preferences.

In other words, by means of an original symbiosis of economic and socialist theories (the two blades of his scissors), Lange aimed to cut any tie between neoclassical economics and its implicit defence of capitalism, widely considered as the best *possible* economic organisation by orthodox economists.

Therefore, his *scientific* project (that is, a critique of mainstream economics from the inside) finally revealed a *critical* dimension of the 'present state of things' as well; its authentic motives, rather than being abstract or idealistic, are clearly aimed at the radical transformation of society.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Despite the analytical distance, in 1938 Lange reaffirmed the validity of this project in 'The Rate of Interest and the Optimum Propensity to Consume', in which he re-formulated his theory of interest along Keynesian lines (Toporowski, 2005: p. 189; Lampa, 2011: pp. 20–22). Also in this case, the work is divided into two parts, depending on the level of abstraction. The first section is based on an abstract analysis (with a generalised theory), whereas the second deals with the case of a capitalist economy, stressing the disturbing role of such an institutional datum in order to achieve the highly abstract purposes of the economic theory. Not coincidentally, 'On the Economic Theory of Socialism' was re-published the same year, in order to provide an alternative institutional solution.

To a great extent, the same rule also applies to the second stage of Lange's scientific project, represented by the 1942 'Say's Law: a Criticism and Restatement', together with the 1944 *Price Flexibility and Employment*.

By way of simplification, in the former Lange showed the abstract conditions of validity of Say's Law, given an equilibrium price system and a barter economy. However – recalling Malthus and Marx – Lange emphasised that once we introduce the existence of a capitalist economy (in his mind, non-neutral money), such conditions are no longer sufficient to attain monetary equilibrium, so that Say's Law will no longer hold and unemployment will arise.

In a similar way, in *Price Flexibility and Employment* Lange first isolated the abstract (and narrow) conditions under which price flexibility is able to automatically restore full employment. This notwithstanding, as he developed the book he provided a sort of 'treatise on the infinite causes that prevent such a market mechanism to operate in a capitalist economy', thus emphasising the necessity of a radical social transformation, namely a transition to socialism.

Finally, as further evidence for the existence of a scientific and critical project, it is worth mentioning that in 1945 Lange published 'The Scope and Method of Economics'. He had intended it to be the first chapter of a broader and systematic treatise on political economy, based on assumptions other than traditional ones. In other words, it represented an attempt to provide a *pars construens* directly related to the previous critique on neoclassical economics (Kowalik, 1964b: p. 11). Not coincidentally, the article contains many themes recurring from the preceding works, such as the definition of economics as both a social and a theoretical science or the objective validity of the abstract dimension of economics and the crucial role played by institutions on a macroeconomic level.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

We can thus sum up that in the period in question Lange focused on the traditional theory, providing a (mild) criticism from the inside, and aiming at generalising its assumptions. On the other hand – on a macroeconomic level – he recurrently focused on the destabilising role of capital accumulation, and attacked the validity of both Say's Law and price flexibility in a monetary economy. Along these lines, he stressed how long-lasting sub-optimal functioning can, in a capitalist economy, easily become both a plausible and an enduring scenario.

In other words, according to Lange, economic theory itself demonstrates the necessity of institutional change; the most evident reasons for socialism are provided by Science, that is by the abstract and universal purposes of the economic theory.

## 7.3 Rosa Luxemburg as a source of inspiration

The discourse developed in the previous section culminated in an important statement: not only did Oskar Lange have a detailed *scientific* project, but such a project also included a radically *critical* dimension. In short, we may even argue that Lange's intention was that 'science meets revolution'.

Inevitably, once we adopt this turn of interpretation it becomes necessary to investigate any possible source of inspiration.

First, the unusual commingling of (revisited) traditional theory, critique of capitalism and reasons for socialism brings to mind the well-known 'socialist calculation debate'. More precisely, after his 1936 article 'On the Economic Theory of Socialism', Lange clearly showed that he had taken up the gauntlet of Mises (but also of Barone and Pareto), reversing the logic of his attack against socialist economies.

From this perspective, as Lange had already proven to be a fine connoisseur of the Austro-Marxist debates (Waldenberg, 1985: pp. 907–912), one may even suppose that he was aware of the previous (and unsuccessful) counter-attacks to Mises' challenge, such as those by Otto Neurath (*Wesen und Wert der Sozialisierung*) and Karl Polanyi ('Sozialistische Rechnungslegung', Marramao, 1977: p. 57 and note 148, p. 125).

This notwithstanding, Lange's combination of Science and Revolution should bring to mind at least another inevitable reference, represented by the works of his fellow countrywoman Rosa Luxemburg.

In the first place, it is commonly accepted that according to the latter all political activity must be based on scientific knowledge, as socialism would have succeeded only if it had been possible to prove *scientifically*



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

both its superiority and capitalism's irremediable contradictions (Frölich, 1972: p. 152).

However, a deeper investigation of Luxemburg's works reveals further analogies with the essentials of Lange's project, even more striking.

In Chapter 1 ('What is economics?') of her *Introduction to Political Economy*, Luxemburg focused on the relationship between Marxist theory and a particular branch of science, namely economics.

In her mind, it was fundamental to study bourgeois economics in depth rather than ignoring it, since economic science and Marxism shared an unusual 'reciprocal relation'. In fact, the critique of political economy provided by Marx should be interpreted essentially as a 'continuation' of the science of economics, which led to opposite conclusions:

> The Marxian doctrine is a child of bourgeois economics, but its birth costs the mother's life. In Marxist theory, economics founds its perfection, but also its end as a science. (Luxemburg, 1970[1925]: p. 248)

According to Rosa Luxemburg, such a reciprocal relation between Science and Marxism arose for two interdependent reasons.

First, after the Paris Commune the bourgeois economists realised that their faith in a future of 'natural social harmony' was completely detached from reality. Thus they became incapable of understanding the real tendencies of capitalism and therefore of developing the scientific contents of economics any further. From this perspective, their contribution to the advancement of the discipline, as a result of its lack of realism, was not even up to the heritage of the 'founding fathers' of economics, like Smith and Ricardo.

As a consequence, bourgeois economists eventually became an obstacle to the improvement of the (economic) *scientific knowledge*, as they limited themselves to an ideological defence of the status quo, regardless of any *scientific* justification:

> Unable to comprehend the teachings of their own great forebears, and even less to accept Marxist teachings [...] the bourgeois professors serve up a tasteless stew made from the leftovers of a hodge-podge of scientific notions [...] they try only to send up a smoke screen for the purpose of defending capitalism as the best of all economic orders, and the only possible one. (Luxemburg, 1970[1925]: p. 249)

On the other hand, through the Marxian theory, scientific knowledge finally became the guiding principle of the revolutionary working class.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Such a special bond between economics and the working class had two crucial implications: firstly, scientific knowledge became the necessary 'basis of the proletarian enlightment'. Secondly and foremost, the working class became the only 'receptive audience' for scientific economics.

In other words – just like Oskar Lange – Rosa Luxemburg emphasised the strict connection between science and the struggle for socialism. On this basis, she is also of the persuasion that economics clearly shows the necessity of a social revolution or, to paraphrase the previous section, that the most evident reasons for socialism are provided by economic science:

> Forgotten and forsaken by bourgeois society, scientific economics can find its listeners only among class-conscious proletarians, to find among them not only theoretical understanding but also concomitant action. The famous saying of Lassalle is applicable first and foremost to economics: 'When science and the workers, these two opposite poles of society, shall embrace, they shall crush in their arms all social obstacles. (Luxemburg, 1970[1925]: p. 249)

It seems superfluous to highlight the similarity between Rosa Luxemburg's beliefs and the foundations of Oskar Lange's project (as set out in the previous section), since both authors emphasise the need for a close relationship between intellectuals and activists, that is between science and revolution.

In this respect, the aforementioned contents of *Introduction to Political Economy* may even be enough to account for a certain familiarity of Lange with Luxemburg's work.

This notwithstanding, we must recognise that any textual evidence explicitly showing Lange's reference to the book is actually missing. Therefore, at this stage of the analysis, our parallelism necessarily remains a conjecture – although a very plausible one – and it still does not amount to proof.

In order to provide an evidence-based assessment of this relationship, in the following two sections we will portray Lange's unquestionable knowledge of (and reference to) almost the whole body of literature of Rosa Luxemburg, both on the economic and on the political ground.

## 7.4 Accumulation, underconsumption and the reformulation of Rosa Luxemburg's issues

In her most prominent work – *The Accumulation of Capital* (1913a) – Rosa Luxemburg raised three crucial and consistent issues related to



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

capitalist dynamics. Stated schematically, they consisted of the process of the valorisation of capital, the need for enough effective demand and the existence of an incentive to accumulate (Bellofiore, 2009a: p. 1).

But after Lenin's harsh rejection of the book, it was blasted by her critics, who, in addition, limited themselves to a purely negative appraisal: since the solution provided by Rosa Luxemburg contained some mistakes, the Marxist readers were generally persuaded that it was not worthwhile to go into depth to answer the questions posed by the Polish intellectual. As a consequence, no scholar except Otto Bauer dealt seriously with its crucial contents until the late 1920s (Kowalik, 1971: p. 147).

Certainly, it was not the case with Oskar Lange, whose works clearly reveal his interest – largely comparable to Kalecki's or Paul Sweezy's – in some of the problems addressed by Rosa Luxemburg. However, his interest is to a large extent hidden, as it did not imply a complete acceptance of all her propositions, neither did it determine the use of the same analytical tools, essentially for two reasons.

In the first place, Lange did not share the same attitude towards the Marxian theory of value. After noting several unsolved analytical problems, he made a clear distinction between the *quantitative* and the *qualitative* aspects of the Marxian 'law of value' (Cavalieri, 1995: p. 24). Further, he ignored any issue connected to the *measure of value* (on the economic ground) and substituted the neo-classical theory of value for the labour theory of value (Lange, 1944: note 2, p. 383; 1945: p. 132), in consequence of its analytical superiority.

Therefore, Lange also ignored the problems connected with the process of the valorisation of capital raised in *The Accumulation of Capital*.

Secondly, and for similar reasons, he did not develop Rosa Luxemburg's analysis of the declining trend of relative wages – and, therefore, of the insufficient level of aggregate demand – as an explanation for underconsumption. To a great extent, this depended on the Walrasian tools adopted by Lange, which prevented him *ipso facto* from elaborating any theoretical improvement of a similar idea, such as the principle of effective demand or the underemployment equilibrium provided by Michał Kalecki and John Maynard Keynes.

This notwithstanding, Lange got closer to the spirit of *The Accumulation of Capital* at least with regard to the third issue raised by Rosa Luxemburg: the pivotal role played by both the accumulation of capital and investment in the capitalist crises.

Similarly to Luxemburg, Lange did not think simplistically that in a capitalist economy crisis originates from disproportionalities, but he



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

was persuaded that disproportionalities are related to the very dynamics of capitalism. Of course, given the (Walrasian) analytical framework adopted, his explanation necessarily implied a reformulation of Luxemburg's problem on an allocative level, as expressed in the traditional terms of equilibrium and disequilibrium.

In greater detail, Lange repeatedly stated that the instability of capitalism comes from the quasi-permanent disequilibrium of the capital goods market, which is in turn induced by the accumulation of capital. In his 1936 article 'The Place of Interest in the Theory of Production', Lange emphasised the disruptive role played by accumulation within capitalist dynamics.

Assuming a Marxian notion of capital meant an essential pre-requisite to production ('a command over means of production'), he attacked the traditional belief that a capitalist economy is always characterised by a perfect saturation with capital, so that any increase in saving automatically implies an increase in investment. Lange believed that capitalism is actually characterised by a chronic shortage of money capital, at least in the short term, and that the very existence of a positive rate of interest clearly indicates the scarcity (that is the sub-optimal allocation) of money capital. Theoretically speaking, it may be legitimate to assume a perfect saturation with capital only in the long term, presupposing a decisive role played by accumulation in this respect:

> The accumulation of capital provides the bridge between short-period equilibrium and long-period equilibrium in the theory of interest. (Lange, 1936a: p. 191)

Nonetheless, he emphasised that the path to long-term equilibrium is actually an obstacle race or, even worse, an *anarchic* law of capitalist expansion. As the annual accumulation of capital is but a small fraction of the existing stock of capital, this movement might be of a secular type. Besides, it could slow down further because of business cycles, extension of the durability of equipment and/or time lag.

Rather than an episodic event, the contents of this article reflected Lange's firm belief that the accumulation of capital constituted an unsolvable and disturbing process within capitalist dynamics. As further evidence, a few years later Lange stated his deepest convictions, drawing even more unquestionable conclusions:

> 'Now, the reason [...] why full employment under capitalism really takes place only during short periods and then which are alternated



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> by periods of large-scale unemployment and depression [...] *is exactly the fact that capitalism has no definite criteria according to which the accumulation of capital would be regulated*.' '[...] there is a certain element of truth in the doctrine about the anarchy of capitalist production and the element of truth is [...] exactly the question of capital accumulation'. (Lange, 1987[1942]: pp. 14–16, emphasis added)

Given this premise, in 1938 Lange was finally able to elaborate a theory of underconsumption. His exposition began with a critique of the idea that total income can be slightly increased by means of an expansion of either investment or consumption. According to Lange, the real issue of any theory of underconsumption should be, instead, that 'investment depends on consumption'.

At a first sight, this remark seems to be addressed solely to Keynes, in light of the contents of his *General Theory* (for example the 'euthanasia of the rentier'). However, on a prophetic note, Lange mentioned another unexpected and 'prominent' intellectual interlocutor:

> Few underconsumption theorists ever maintain that *any* saving discourages investment. [continued in note] The most prominent among those who did so was Rosa Luxemburg in her famous book *Die Akkumulation des Kapitals*. (Lange, 1938: p. 23 and note 2, p. 23)

So Lange is explicitly acknowledging that *The Accumulation of Capital* is an important source of inspiration. We can see that starting from Rosa Luxemburg's misunderstanding, he provided an alternative exposition of the problem of underconsumption. In his mind, the immediate effect of an increase in the propensity to save (that is a decrease in the propensity to consume) is a decrease in consumption, accompanied by a decrease in investment and total income. Subsequently, the decreased level of the rate of interest stimulates investment, consumption and total income. Therefore, the real issue of his underconsumption theory becomes the determination of the *optimum propensity to consume*, so as to balance the two aforementioned effects and to maximise both investment and total income (Lampa, 2011: p. 11).

However, in a capitalist economy the anarchic character of either the accumulation or the allocation of capital resources prevents the attainment of an optimum propensity to consume, so that underconsumption and crisis can plausibly become a long-lasting scenario:



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> In a society where the propensity to save is determined by the individuals, there are no forces at work that keep it automatically at its optimum, and it is well possible, as the underconsumption theorists maintain, that there is a tendency to exceed it. (Lange, 1938: p. 32)

Thus, Lange did not share Luxemburg's assumption that entrepreneurs operate like individual 'collective capitalists'[2] whenever they have to set out the level of investment. Like Michał Kalecki (D'Antonio, 1978: p. 23), he was persuaded that crisis originates from the *individual decisions* of saving and investment. Along this line, the irremediable instability of capitalism becomes strictly related to the separation between *social* and *individual* in the sphere of both production and consumption.

In other words – given the common point of departure, that is the anarchic character of capitalist accumulation – the whole analysis of underconsumption developed by Lange can be interpreted (also) as an attempt to both reformulate and answer some crucial issues previously raised by Rosa Luxemburg in *The Accumulation of Capital*. As further evidence, one may add that he also introduced – at the second stage of his project – non-neutral money, just as Rosa Luxemburg tried to do in her famous book (Bellofiore, 2004b).

Furthermore, 'young' Lange's specific attention to Rosa Luxemburg's review of the reproduction schemes of the Second Book seems to be unquestionable, once we take into account that at the age of 57 he provided the very first exposition of a general theory of reproduction along Marxian lines (Kowalik, 1977: p. 137).

## 7.5 Socialism as an act of revolutionary courage

### 7.5.1 The critique of the reformist socialists

The influence of Rosa Luxemburg becomes self-evident once we investigate both the political assumption and the implications (in terms of socialist theory) of Lange's project.

Starting from the former, we note that in 1931 – during his speech at the VII Conference of the Polish Left-Socialist Youth (ZMSA) – Lange had already exalted Rosa Luxemburg's *Reform or Revolution*, defining it as 'the best manual in Marxist politics' (Waldenberg, 1985: p. 909, originally in Italian). Rather than being a mere appraisal, this judgement actually anticipated Lange's reception of much of the book's contents.

In the first place, it is useful to recall that Luxemburg had clearly stated that the monopolistic and 'senile' phase of capitalism would have



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

implied a severe exacerbation of its crises, because of the greater anarchy of both production and consumption:

> Cartels aggravate the antagonism existing between the mode of production and exchange by sharpening the struggle between the producer and consumer [...]. They aggravate, furthermore, the antagonism existing between the mode of production and the mode of appropriation by opposing, in the most brutal fashion, to the working class the superior force of organised capital, and thus increasing the antagonism between Capital and Labour. (Luxemburg, 1986[1900]: ch. 2)

Given this premise, Rosa Luxemburg harshly condemned both the analysis and the strategy of the German reformist socialists, particularly Eduard Bernstein, according to whom monopolies and cartels had attenuated the internal contradictions of capitalism, thus implying a progressive organisation of the production:

> In other words, when evaluated from the angle of their final effect on capitalist economy, cartels and trusts fail as 'means of adaptation'. They fail to attenuate the contradictions of capitalism. On the contrary, they appear to be an instrument of greater anarchy. They encourage the further development of the internal contradictions of capitalism. They accelerate the coming of a general decline of capitalism. (Luxemburg, 1986[1900]: ch. 2)

In a similar way, Lange laid strong emphasis on the disturbing role of cartels and trusts, in a series of works published in Poland in the early 1930s. In 'The Role of the State under Monopoly Capitalism' (1931), he emphasised that the monopolistic mutation of capitalism was the main cause of the 1929 breakdown, which would probably represent the final collapse of capitalism.

However, the similarity with Luxemburg's analysis is even clearer in 'The Way to the Socialist Planned Economy'. In the first section, Lange (together with Marek Breit) wrote an eloquent analysis of the breakdown of capitalist economies:

> capitalism has transformed itself from freely competing capitalism into monopoly capitalism in which production is regulated by cartels, trusts and syndicates, by large banks, and by the state. [...] Not being a planned economy, monopoly capitalism removed the competition



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> which, to some extent, acted as a substitute for planning in a capitalist economy, automatically adjusting production to the potential market. In this way, monopoly capitalism created economic chaos, which manifests itself in the increasing intensity and length of crises. (Toporowski, 2003: p. 52)

Furthermore, it has to be emphasised that the work was part of a broader political document entitled *Economics, Politics, Tactics, Organization of Socialism* and proposed by the Left-wing minority during the XXIII Conference of the Polish Socialist Party (PPS), held in February 1934. In the prosecution of this discourse Lange explicitly attacked[3] the most prominent reformist socialists of those days, such as Kautsky and Hilferding, because of their conviction that monopoly capitalism was an organised and 'embryonic socialist planned economy'. In contrast, he explicitly ackowledged Rosa Luxemburg as the only genuine follower of Marx's original doctrine among the socialists (Toporowski, 2003: p.55).

Evidently, her effect on Lange's critique of the reformist socialists was both unequivocal and strong; an unpublished manuscript from the National Archives in Chicago[4] also reveals that Lange completely agreed with Rosa Luxemburg's analysis of the First World War. In particular, he explicitly stated that *The Junius Pamphlet* was the clearest exposition of the connection between war and imperialism playing a crucial role in the emergence of the conflict. However, the reformists who voted in favour of the war credits completely missed this crucial relationship:

> The World War (1914–1918) destroyed the Second International and flung its parts against each other. [...] world politics at this time was dominated by Capitalist imperialism and, consequently, each war was to become a link in the major chain of imperialist struggles, whatever its original social and political character might have been. [...] This recognition was expressed most clearly by Rosa Luxemburg in her pamphlet condemning the war policy of the majority of the German Socialists [continue in footnote] *The Crisis of German Social Democracy* [...]. (Lange, 1936–1944: pp. 36–36a)

### 7.5.2 Against bureaucratic socialism

Lange's agreement with many of the political issues raised by Rosa Luxemburg inevitably determined that his socialist theory was also influenced by his fellow countrywoman, at least with regards to three crucial aspects.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

First, he emphasised on many occasions (1936b, 1987 [1942]) the importance of a resolute transition to socialism, in order to prevent a reaction by the capitalists on both political and economic grounds (for instance, by means of damage or sabotage to the expropriated productive plants) similar to those that had taken place in the USSR.

His beliefs were fairly effectively summed up in a definition of socialism as 'a policy of revolutionary courage' and 'not an economic policy for the timid' (Lange, 1936b: pp. 135–136). Far from being a voluntarist deviation from Marxism (as resoluteness follows from a scientific analysis of the economic conjuncture), in the writer's eyes these statements clearly echo the emphasis on action that we can trace in Rosa Luxemburg's programme of the *Spartakusbund*, published on 14 December in *Rote Fahne* and entitled 'What Does the Spartacus League Want?'

In a crucial passage about the transition to socialism, Rosa Luxemburg remarked upon the risk of a capitalist reaction and she emphasised the consequent necessity of a steadfast determination:

> The imperialist capitalist class [...] will mobilize heaven and hell against the proletariat. It will mobilize the peasants against the cities, the backward strata of the working class against the socialist vanguard; it will use officers to instigate atrocities; it will try to paralyze every socialist measure with a thousand methods of passive resistance; it will force a score of Vendées on the revolution; it will invite the foreign enemy [...] All this resistance must be broken step by step, with an iron fist and ruthless energy. The violence of the bourgeois counter-revolution must be confronted with the revolutionary violence of the proletariat. (Luxemburg, 1971[1918]: section III)

From this perspective, it seems superfluous to highlight the analogy with Lange's emphasis on 'revolutionary courage' in order to attain a successful transition to socialism.

Second, a recurrent issue of Lange's socialist theory was represented by his firm distinction between *collectivisation* and *socialisation* of the production.

It was particularly in 'The Economic Operation of a Socialist Society' (Lange, 1987[1942]) that he introduced a detailed explaination that a collectivist economy is simply a system in which production is carried out by public institutions, whereas a socialist economy means that any economic activity is accomplished so as to maximise the welfare of the population. Therefore, in order to attain genuine socialisation, it becomes crucial not only that the ownership of the productive units



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

be public, but also that any productive unit must be autonomous to operate ‘according to certain recognized economic principles’ (Lange, 1987[1942]: p. 5), in order to maximise the welfare of all citizens. Above all, Lange remarked that the main risk is related to political interference by the government or the Party (or both) in the direction of the productive units, as they can easily induce a deviation from their guiding principles for no good reason. In opposition, he emphasised that production should be under ‘direct democratic control’ by, for instance, adopting the proposals of the German Socialisation Commission of 1919, which had (unsuccessfully) suggested a system of socialised enterprises controlled by a council composed of consumers, employees and representatives of the planning agencies.

This reference provides an important clue that reveals much about Lange’s source of inspiration, since the Socialisation Commission represented an attempt to shift the German Revolution in a radical direction, supported by both the left-wing socialists and the *Spartakusbund* and generally obstructed by the social democrats (Lutz, 1967: pp. 168, 247). Luxemburg too had explicitly proposed both the socialisation of the production and the creation of enterprise councils in the aforementioned *Spartakusbund* programme (Luxemburg, 1971[1918]: section III, par. III).

Third and foremost, Lange further developed this latter issue in a series of works explicitly criticising the Soviet Union. On economic grounds, he remarked upon the bureaucratic functioning of the Soviet economy in 1934, assuming that ‘every economic system exists for people, rather than people existing for it’ (Toporowski, 2003: p. 65), He suggested that the Soviet economy should have adopted a series of different basic principles, in order to improve the condition of the people. Along this line, in ‘Marxian Economics in Soviet Union’ (1945) he harshly criticised the Russian economists on the basis that their ‘economic theory does not yet provide an adequate guide for the management of the soviet economy’ (Lange, 1945: p. 133).

However, the aforementioned (unpublished) manuscript in the National Archives in Chicago reveals that Lange’s critique of the USSR was much broader, shedding new light on the influence played by Rosa Luxemburg in this respect.

In fact, Lange stressed that in the Soviet Union bureaucratism had many negative consequences, not solely on economic activity, but extending also to public life and individual freedoms.

In Marxist terms, Lange assumed that such negative consequences-depended on an alleged dichotomy between the dictatorship of the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

proletariat and political democracy; however, as clearly evidenced by Rosa Luxemburg, there must be no contradictions between these two ideas:

> Rosa Luxemburg wrote of the 'dictatorship' of the proletariat: 'This dictatorship consists in the manner in which democracy is employed, not in its abolition.' Thus the idea of the 'dictatorship' of the proletariat [...] does not stand in any contradiction to political democracy. On the contrary, it is an affirmation of the utmost readiness to defend democratic political institutions by all means. In no case does it involve a restriction of democratic liberties, except the liberty to overthrow democracy by force. (Lange, 1936–1944: p. 18)

In the opposite case, the whole system would degenerate into a bureaucratic dictatorship. From this perspective, it geos without question that according to Lange the Soviet Union clearly represents an outstanding and negative example of such a socialist society, which suppressed political liberties in the name of the 'dictatorship' of the proletariat:

> In no case does the 'dictatorship' of the proletariat, as understood by Marx and Engels, imply the subjection of all political life to the monopoly of one party, the political power of which is irrevocable and not subject to democratic control. The legal existence of all political parties which accept the democratic rules of the game and their full participation in political life is inseparable from the concept of 'dictatorship' of the proletariat, as conceived by the Socialists. Otherwise it would degenerate into a bureaucratic dictatorship of a single political party over all, including the proletariat, and finally lead to the totalitarian rule of a small clique or even of a single person, *which has actually happened in the Soviet Union*. (Lange, 1936–1944: pp. 18–19, emphasis added)

Finally, Lange explicitly quotes his source of inspiration, adding a large extract from Luxemburg's *The Russian Revolution* which eloquently sums up his discourse, emphasising the importance of individual freedom, especially in a socialist society:

> In her pamphlet on the Russian Revolution, written in 1917, Rosa Luxemburg denounced the Bolshevik distortion of the 'dictatorship of the proletariat' in the following words: 'Freedom only for the supporters of the government, only for members of one party – however



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> numerous they may be – is no freedom. Freedom is always freedom for those who think differently' [...] 'It is nothing else than the dictatorship of the proletariat' [...] 'Yes, dictatorship. But this dictatorship consists in the manner in which democracy is employed, not in its abolition' [...]. (Lange, 1936–1944: pp. 19–20)

We can thus conclude that the analysis of Lange's unpublished manuscripts clearly reveals the influence played by Rosa Luxemburg, both on political and on socialist grounds. On the other hand, it certainly reinforces the idea of a broader relation between Lange's project and several issues previously raised by Rosa Luxemburg.

## 7.6 Concluding remarks

The analysis developed in this chapter can be interpreted as both a restatement of Oskar Lange's early beliefs and a reconstruction of his sources of inspiration.

With respect to the first point, we have shown that in the period 1931–1945 Lange set up a scientific and critical project. In short, he initially focused on traditional theory, providing a criticism from the inside aimed at generalising its assumptions. Following these lines, he subsequently argued for the sub-optimality of capitalist economies and he endorsed Socialist revolution.

We have also, however, suggested that such an unusual connection between 'Science' and 'Revolution' reflects the influence of Rosa Luxemburg's works on Lange. First, we highlighted his reformulation of some economic issues previously raised by Rosa Luxemburg (accumulation of capital; underconsumption). Secondly, in an unpublished manuscript in the National Archives in Chicago we found evidence of Lange's appraisal of much political analysis provided by Rosa Luxemburg, as well as of her influence on Lange's socialist theory.

We can thus conclude that, together with the Austro-Marxists, Rosa Luxemburg emerges as a crucial source of inspiration for Lange's body of economic and socialist literature, in the period in question.

In turn, this result contributes to a clarification of the 'heterodox' (that is, neither Kautskian nor Leninist) features of Lange's Marxism. From this latter angle, this chapter's contents implicitly put into perspective the main conclusions of the existing literature, which have largely emphasised the non-Marxist roots of Lange's socialist theory (for example Chilosi, 1999).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

## Notes

1. More precisely, Lange published over 42 works (Kowalik, 1964b: pp. 651–653).
2. Rosa Luxemburg originally set out this idea in her book *Reform or Revolution*: 'the economic notion of "capitalist" no longer signifies an isolated individual. The industrial capitalist of today is a collective person composed of hundreds and even of thousands of individuals. The category "capitalist" has itself become a social category. It has become "socialized" – within the frame-work of capitalist society' (Luxemburg, 1986[1900]: ch. 6).
3. This critique was partly anticipated in 'O Pracy Engelsa *Rozwój Socjalizmu od Utopii do Nauki*' ('On Engel's work *Utopian Socialism, Scientific Socialism*') (1933).
4. Through private correspondence with the author, Prof. Tadeusz Kowalik affirmed that he had no access to the manuscript during his last visit in Chicago, dated 1996. The quotations from the following manuscript can therefore be considered the first ever published from the archive; through them, the author wishes both to pay homage to Prof. Kowalik and to (modestly) prosecute his extremely valuable work. The author also wishes to thank Daniel Mayer (Associate Director) and the Special Collections Research Center, University of Chicago Library, for their valuable support to the present research.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 8
# Lange and Keynes

*Jan Toporowski*



## 8.1 Introduction

Oskar Lange was unusual among Marxists in his openness to the ideas of non-Marxist economists and in his willingness to engage with their analysis. Among those non-Marxist economists was John Maynard Keynes; Lange became one of the key interpreters of Keynes's enigmatic *General Theory of Employment, Interest and Money*, and one of the founders of the Neo-Classical Synthesis of Keynesian and pre-Keynesian ideas that was to dominate macroeconomics for 30 years after the death of Keynes. Lange, like Hicks and Samuelson, attempted to adapt Keynes's ideas to his (Lange's) own pre-Keynesian notions of money, saving and investment. This is shown in the first part of this chapter, which discusses Lange's interpretation of Keynes's *General Theory* and the concept of money and interest within which Lange framed Keynesian macroeconomics. Significantly, however, Lange chose to confront Keynes not over his macroeconomics but over Keynes's critique of econometrics.

## 8.2 The interpretation of Keynesian macroeconomics

The publication of Keynes's *General Theory*, arguably the first fully worked out theory integrating money, finance and economic activity, caused Lange to revise his own views on money and the rate of interest. However, his response was perhaps more to develop his theory to accommodate Keynes's own analysis rather than to adopt Keynes's theoretical and philosophical precepts, bearing out Willard Quine's view that we do not so much change our minds as adapt our preconceptions. In 1938 Lange published a paper in *Economica* on 'The Rate of Interest and the Optimum Propensity to Consume', in which he tried to show that



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Keynes's theory was a special case of a Walrasian general equilibrium; Lange argued that the rate of interest is determined in the *real* economy, this being now defined as the relationship between desired *real* money balances, and real consumption and investment, all measured in wage units. He seems to have held an essentially Ricardian conception of money and banking – what Schumpeter called a 'monetary theory of credit' – in which money is a means of exchange, and banking consists solely of the intermediation of saving.

In his paper, Lange argued that the rate of interest still tended to become equal to the marginal productivity of capital (as he interpreted Keynes's marginal efficiency of capital). Liquidity preference came into the analysis because the rate of interest on real money balances was determined by real income and the supply of money. Equilibrium is achieved when the rate of interest with a given real income and liquidity preference function is consistent with the rate of interest that gives a particular excess of real income over real consumption, and real investment that combines with consumption into that given real income.

Lange distinguished two specific cases of this general model, which he argued could be inferred from Walras. One was what he called the 'traditional' view, in which the demand for real cash balances is inelastic with respect to the rate of interest, and therefore the demand for money is purely determined by real income. The other was the case he attributed to Keynes, in which changes in the marginal efficiency of investment and in the propensity to consume do not affect the rate of interest. Lange concluded by arguing that his more general, Walrasian, theory is preferable because it can be used to give an 'optimum' level of saving (the corollary of the 'optimum propensity to consume' of the paper's title, that does not depress investment through either inadequate saving, causing a higher rate of interest, or excessive saving, causing underconsumption). In Keynes's case, according to Lange, consumption does not affect the rate of interest, so that the optimum consumption is that level of consumption at which the marginal efficiency of capital (in the sense of marginal capital productivity) does not rise any more. This is where the elasticity of supply of all factors of production falls to zero, and any further expenditure on consumption raises prices but not output. In the 'traditional' case any decrease in consumption and increase in saving reduces the rate of interest and stimulates investment, so that saving can never be excessive. For the general case the 'optimum' propensity to save is defined by, among others, a given quantity of money. Over-saving can therefore be counteracted by loosening monetary policy.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

In 'The Rate of Interest and the Optimum Propensity to Consume' Lange used Walrasian general equilibrium to define his variables and establish the relationship between them. But he was sufficiently 'Austrian' to believe that this general equilibrium does not exist in the real world. He used his general system of equations also to show how, if the rate of interest was not the equilibrium rate, the total of real consumption and real investment would change the liquidity preference function to give a new rate of interest. This would give a new level of consumption and investment. The resulting change in total income would give a new liquidity preference function, at the given money supply. 'This process of *mutual adjustment* goes on [...] until equilibrium is attained.' In a footnote he pointed out that if lags are involved then cyclical fluctuations rather than equilibrium would ensue, and gave as an example Kalecki's business cycle theory, as expounded in the latter's 'A Theory of the Business Cycle' which had been published in the *Review of Economic Studies* (Kalecki, 1937). (Kalecki was not impressed. In a revised version of that paper, he explicitly referred to Lange, along with Hicks and Meade, as obtaining spurious Keynesian equilibrium positions because they did not distinguish between investment and investment *decisions*, which cause lags, and because they ignored the effect of investment on the capital stock, Kalecki, 1939b: pp. 139–140). In his later review of Schumpeter's *Business Cycles*, Lange explicitly criticised the latter's presumption, in the course of Schumpeter's criticism of Kalecki, that the rate of interest would automatically bring about an equilibrium between saving and investment. Furthermore, he argued that the existing monetary policy would fail to make interest rates sufficiently flexible in the face of uncertainty and inelastic expectations (Lange, 1941b).

The view of Keynesian macroeconomics that Oskar Lange put forward is essentially pre-Keynesian. 'Pre-Keynesian' here does not mean published prior to Keynes' *General Theory*, or in some sense failing to come to terms with some essential Keynesian innovation; rather it indicates a 'monetary theory of credit' and a notion of interest that is rooted in some excess of the value of real production over its cost, in a capitalist system of production. This may be contrasted with a 'pure monetary' theory in which interest is derived from relations in money and financial markets. Whether this was Keynes's fundamental innovation in monetary economics is debatable. ('Keynes [...] in intent at least, established a monetary theory of interest, according to which interest is not derived from, or expressive of, anything that has, in whatever form, to do with the net return on capital goods.' Schumpeter, 1954: p. 1178). What is indisputable is that in market capitalist economies from the late



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

19th century onwards, the rate of interest has been determined in financial markets rather than in and among firms engaged in the production of and trade in goods and services. In 'The Rate of Interest and the Optimum Propensity to Consume', Lange came close to a pure monetary theory of interest, but concluded that it could only be temporary if it was not reinforced by an equivalent marginal productivity of capital. This perhaps reveals his reading of Wicksell. Lange moved beyond the general equilibrium categories that he used in his macroeconomics, to allow that a disequilibrium rate of interest could be a key factor in economic dynamics.

Keynes called the approach to macroeconomics in which business cycles are driven by differences between saving and investment 'neoclassical' and indicated his dissent from it (Keynes, 1936: p. 177). However, Lange's interpretation was taken up by Dennis Robertson in a note which he sent to *The Economic Journal* entitled 'Mr. Keynes on "Finance"'. Keynes, as editor of *The Economic Journal*, sent the note for comment to Austen Robinson, with a request that Austen or his wife Joan might care to comment. Joan Robinson responded in a letter to Keynes dated 23 March 1938, in which she wrote: 'Dennis appeals to Lange. Lange's article tho' silly is formally quite correct, and if Dennis really accepts his argument he has given away everything' (Moggridge, 1979: pp. 168–169).

## 8.3 Differences over econometrics

The dispute that John Maynard Keynes conducted in 1939 with Jan Tinbergen over the scope and significance of quantitative economics is well known. Less well known is the criticism of Keynes's position that was put forward by Kalecki's friend Oskar Lange together with Jacob Marschak. Much more obscure is the reaction of Oskar Lange to that dispute. Research has now shown that as Kalecki was leaving Cambridge for Oxford, Keynes was urging that Kalecki undertake a full technical criticism of Tinbergen's work. Oskar Lange was an accomplished statistician and a leading figure in the trend towards formalism and mathematics in academic economics; moreover, from his Marxist background he derived a strong interest in economic philosophy that was to form the basis of the reasoned critique of Keynes's views on method. Following the publication of Keynes's review of Tinbergen's '*A Method and Its Application to Investment Activity*' in *The Economic Journal* in September 1939, Lange and Jacob Marschak decided to write a response to Keynes's criticisms of Tinbergen. A 17-page typescript emerged, dated 1939, under their joint



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

authorship and the title 'Mr. Keynes on the Statistical Verification of Business Cycles Theories'. Keynes appears not to have thought highly of their joint critique. But he was clearly keen to put more technical expertise behind his critique of Tinbergen. As Kalecki's research at Cambridge came to an end, Keynes urged him to turn his critical attention to Tinbergen's work. But Kalecki, who was close to Lange, did not take up this suggestion.

According to the author of the editorial notes in Volume 5 of the Collected Works of Oskar Lange, the joint paper was sent to Keynes with a view to publication in *The Economic Journal* (Ulatowska, 1976: p. 1072). However, in the meantime, Tinbergen responded to Keynes's review of his book. That response was published in the *Journal* together with Keynes's reply to Tinbergen's note. Possibly with a sense that the issues between Keynes and Tinbergen had been dealt with in the published exchange between them, Lange and Marschak refrained from seeking publication of their paper. A typescript corrected in hand by Lange is among Lange's papers (ibid). A summary of this paper is provided by Irena Ulatowska in the editorial notes in Volume 5 of the Collected Works of Oskar Lange. David Hendry and Mary Morgan published the draft of the paper that Mary Morgan had found among the papers of Jacob Marschak in 1995 (Hendry and Morgan, 1995). However, since Lange was the corresponding author of the paper, Hendry and Morgan did not have access to the correspondence with Keynes over the paper, and the version in the Lange archives contains Lange's small but significant corrections to the paper.

There is no mention of Marschak and Lange's paper in the *Collected Writings* of Keynes. The only mentions of Lange are references to his paper 'The Rate of Interest and the Optimum Propensity to Consume'. There are only two rather curious references to Jacob Marschak in the *Collected Writings*, both of them in Volume XIV. The first appears in a letter to Keynes dated 31 August 1938 from Alexander Loveday at the League of Nations. The letter was written further to his original request to Keynes for a review of Tinbergen's book. Loveday wrote:

> I think that most of the questions you have raised [on statistical methodology in an earlier letter to Loveday – JT] are those which a number of us have had in mind throughout the whole course of Tinbergen's labours and for this very reason I had in fact arranged for two or three meetings of economists and statisticians to discuss the whole matter. Also, Dennis Robertson has been good enough to spend a good deal of time in advising Tinbergen, although he is of course



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> not responsible for the results. I think the net result of the meetings, which have included such persons as Bowley, Marshak, Anderson, Harrod and a number of other economists, has been that we ought certainly to go ahead with the work, although probably each one of them had reservations on this or that point – possibly the statisticians less than the economists. (Moggridge, 1973: p. 290)

Marschak, like Lange, was a statistician as well as an economist. Roy Harrod had no doubt as to which camp Marschak belonged to. In an earlier letter to Keynes, dated 6 July 1938, Harrod had expressed his irritation at Tinbergen's suggestion that 'the facts' do not support the 'acceleration principle' which was a feature of Harrod's dynamic theory. Harrod commented further:

> We have a sort of minor Tinbergen here in the form of Marschak [...] He tells (me) that my theoretical work is entirely divorced from the facts. He himself is content to with what you once called wise-cracks, very good ones I think. But he happens to be a shrewd person. (Moggridge, 1973: p. 298)

In fact, Marschak was at that time the Director of the Oxford Institute of Statistics. His stay in the United States, on prolonged leave of absence from the Institute during 1939, not only provided the opportunity for him to collaborate with Lange on a response to Keynes's attack on Tinbergen; it also set in train a series of changes at the Oxford Institute that led to the appointment there of Lange's compatriot, Michał Kalecki.

Keynes's critique of Tinbergen is too well known to warrant any more than the briefest summary here. Keynes argued that statistical methods cannot disprove theories, because there will always be a possibility that particular correlation tests were wrongly specified. Furthermore, such methods cannot take into account non-quantitative factors, and they rely on the independence of causal quantitative variables. He criticised Tinbergen for using linear functions in his study of investment; such functions, in Keynes's view, were an inappropriate foundation for recurrent business cycles. Tinbergen's choice of time lags and trends was arbitrary, and he failed to allow for structural changes, such as innovations or changes in tastes, in the economies he was studying (Keynes, 1939).

### 8.4.1 The Lange–Marschak critique of Keynes

Lange and Marschak commenced by pointing out the most obvious flaw in Keynes's argument, namely that he had reviewed only the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

first volume of the Tinbergen study, which should have been considered together with its second volume. Lange and Marschak would not accept that statistical methods cannot disprove theories. They gave as an example Hayek's theory of the trade cycle; this postulates that the capital-intensity of production rises during economic booms, and falls in economic depressions. Kaldor had shown in his paper 'Capital Intensity and the Trade Cycle', published in *Economica* in February 1939, that in fact the reverse is the case: capital intensity falls during a boom and rises in a depression. According to Lange and Marschak, Keynes himself used such methods (Ulatowska, 1976: pp. 680–681). Kaldor in fact did not use any statistical proof in his paper, but used logical, theoretical analysis taking into account various arguments on the subject. In a review of Schumpeter's monumental *Business Cycles*, which Lange wrote shortly afterwards, he referred to 'confronting some implications of the theories of Mr. Kalecki or Mr. Kaldor with the facts. Both theories imply net disinvestments of capital during the depression. As far as our statistical knowledge goes such disinvestment does not happen as a rule (an exception: the USA in 1931–1935)' (Lange, 1941b).

Lange and Marschak agreed with Keynes that non-quantitative factors also influenced the movement of variables. But they suggested that given a proper understanding of such qualitative factors, quantitative techniques could still be appropriate. Very often, they suggested, such variables can be proxied by binary variables, or indices. Indeed, they argued that it was essential to understand non-quantitative factors because such an understanding can then indicate where a correlation is affected by two variables offsetting each other's influence on some dependent variable. In other words, the statistical investigator had to have an understanding of the *economic* significance of variables in order then to be able show their statistical correlations. These would often be revealed in partial correlations between variables. From this point of view, Lange and Marschak argued that Tinbergen had very carefully established the economic significance of his correlations. Structural changes can be accommodated by appropriate and careful manipulation of data, although they conceded that where these changes caused major shifts in variables this can cause difficulty.

Lange and Marschak also pointed out the obvious flaw in Keynes's assertion that linear equations could not result in cyclical movements of variables. This was a point which Tinbergen had rebutted, pointing among other examples to Kalecki's business cycle models based on linear functions. However, the example Lange and Marschak proposed was a



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

simple 'cobweb' model using linear supply and demand functions to produce cyclical equilibrium price movements.

Regarding the choice of lag periods and trends, Lange and Marschak accepted that this was a problem. But they argued that the treatment of time in general is a common difficulty of all empirical work. In many cases, the investigator has to rely on 'additional sources of information', often qualitative data or induction from other sources. This may not provide definitive answers, but it limits the conclusions that may be drawn from *a priori* systems of analysis. They agreed with Keynes that further analysis of sub-periods was called for by Tinbergen's data. They also agreed with his view that correlation analysis cannot pick up the influence of factors which do not change in the period under analysis. But they argued that this is well known in economics. The geographic and historical limitations of conclusions is recognised when making empirical observations.

Lange was also taken by Keynes's suggestion that the constancy over time of statistical relationships may vary, and that therefore data over a period may need to be broken down into sub-periods to check on the stability of coefficients between the sub-periods. Marschak was less taken by this suggestion, adding a marginal note that 'this is not new. I think it is too kind to Mr. Keynes' (Hendry and Morgan, 1995: p. 397). Lange pointed out that such methods had been first introduced by the German political economist and statistician Wilhelm Lexis. They had been developed in the analysis of variance since his, Lexis', death in 1914.

Lange then advanced much broader and more important limitations of statistical methods arising from the issue of variance. He linked these limitations clearly with his own Marxist approach to the scope and methods of economic theory. In the first place:

> nothing can be done to investigate the influence of factors which remain relatively constant during the period under consideration. But this limitation applies to <u>any</u> economic proposition whether formulated statistically or not. Therefore all empirical generalizations are bound to have a historically and geographically limited validity [...] Their validity is limited historically and geographically by a number of factors such as given social institutions, given motivations of behaviour (e.g., entrepreneurs aiming at maximum money profit, and not at carrying out certain rules directed towards the maximization of social welfare, as they would under Socialism), etc. It is only within the framework of given and constant social institutions and historically



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> conditioned patterns of behaviour that most of the 'laws' of economic theory are valid. Even the validity of natural laws is subject to the restriction 'other things being constant'. The historical character of the empirical material of the social sciences subjects the regularities discoverable in the social world to much narrower limits of time and space within which they hold ... in no case need this difference [between the natural and social sciences – JT] lead us into giving up the very attempt to narrow down, by empirical study, the bewildering variety of theories, all equally plausible on a priori grounds. The statistical methods of such verification may be crude and as yet unsatisfactory, but it is by a refinement of these methods and by their coordination with theoretical analysis rather than by their wholesale condemnation that we can expect to contribute to the further development of economic knowledge[1]. (Hendry and Morgan, 1995: p. 397)

There was one other condition, according to Marschak and Lange, that a theory requires. This is that it needs to be formulated 'so as to show that it is neither over nor underdeterminate (loc. cit, Morgan and Hendry, 1995: p. 398). This would obviously limit economic 'laws' to such situations in which a determinate system of statistical relations could be obtained. But then such 'laws' would also be limited by the choice of variables, and the possibility that a different, or extended, set of variables may give different 'laws' applicable over different timespans, incorporating the shorter timespans in which some initial 'laws' obtained.

Thus, Lange and Marschak accepted the validity of many of Keynes's comments, insofar as they limited the inferences that may be drawn from statistical studies. Although current methods of empirical verification were still primitive, they argued that progress in economics would come from improving statistical methods and coordinating them with theoretical analysis, rather than rejecting them. Lange was absolutely convinced that empirical study could eventually sort out those theories which are valid from those which have no basis in the real world. In his review of Schumpeter's *Business Cycles*, he concluded:

> The choice ... (between various business cycle theories) ... can be made only on the basis of empirical investigation. It is necessary to find the concrete functions involved and their parameters, then to investigate what periods, amplitudes, damping etc. are to be expected from the different theories, and to confront these expected values with empirical data. Only in this way is it possible to choose the 'true' theory from among those theoretically admissible. It is possible, even



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

likely, that the 'true' theory will prove more complex and will have to combine elements of the different *a priori* theories developed (this is suggested by Professor Tinbergen's work and has also been made clear by Professor Haberler). (Lange, 1941b: p. 193)

### 8.4.2 Keynes's response

Lange sent off their joint paper from the University of Chicago to Keynes on 15 February. (The covering letter is in the Lange correspondence deposited in PAN III-309/22). In the absence of a reply from Keynes, on 30 April Lange wrote again to check 'that the article did not become lost in the mail' (PAN III-309/22). In fact Keynes had received the article, and had written on 10 April an extensive reply to Lange.

In the first place, Keynes pointed out that he now had 'an extensive rejoinder' from Tinbergen, which had reached Keynes before the Lange–Marschak paper had arrived. Since Tinbergen's response was going to be published, Keynes had an editorial decision to make about whether also to publish the Lange–Marschak rejoinder. He referred the matter to Arthur Pigou, the President of the Royal Economics Society, which publishes *The Economic Journal*. Pigou advised that in view of Tinbergen's response, which was to be published, the Lange–Marschak paper should not be published. Nevertheless, Keynes felt reluctant to close a discussion that he felt 'is an extremely important one'. He therefore suggested that the co-authors should read Tinbergen's response, and then consider if there were any 'special points [...] not dealt with by him which you would like to pick out for special emphasis'. Keynes suggested that he might find room for a four- or five-page manuscript on those points; in any case, the co-authors would have to review their arguments in the light of Tinbergen's own response.

On the substantive issues raised by Lange and Marschak, Keynes had three points to make. First of all, he denied arguing that a business cycle theory cannot be tested statistically. He was, he said, 'dealing solely with Tinbergen's very special method of analysis'. (In a return to the characteristically waspish rhetoric that had marked his attack on Tinbergen, Keynes concluded this paragraph with the remark: 'I emphasise this because, whilst it is sometimes useful to have a controversy about something one has said, it can never be of interest to the general public to have a controversy about something which the author himself does not admit to having said and which, however that may be, he certainly does not believe' PAN III-309/22).

Keynes then grudgingly conceded that it might be possible to obtain cyclical variation from linear functions. ('I think it very possible indeed



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

that there may be something in what you say.') But he could not resist pointing out to Lange that Lange and Marschak had made their case using merely one example, the 'cobweb' price model, and that this example could give perverse results. Calculating the price series backwards according to the formula given by Lange and Marschak would give a negative price; this obviously indicates that the model is incorrect.

Finally, Keynes questioned whether admitting the possibility of variation of coefficients between sub-periods contradicted Tinbergen's assumption that 'the same formula is valid over a long period of years? If this is seldom or never the case, is it worth while to bother about the details of the method?' (PAN III-309/22).

### 8.4.3 The resort to Kalecki

The general view is that Keynes did not come out well of his critique of Tinbergen, with the implication that essentially he did not understand the new mathematical economics that Tinbergen represented and that Lange and Marschak championed ('Introduction', Hendry and Morgan, 1995). Keynes's apparent failure to pursue the matter into a methodological study that was more systematic than incidental criticisms of a particular author has generally been taken to indicate a less than serious approach to the matter, caused by his own frail health and the emergency of war. However, there is now evidence that Keynes was somewhat more persistent in his view than might be inferred from his published exchange with Tinbergen. He appears to have decided that his critique could best be pursued with a more technical approach. He identified Kalecki as a possible ally in this.

Kalecki was, according to his later account relayed through the recollections of his widow, becoming disillusioned with Cambridge. His work there had been subject to methodological criticism. His funding from the National Institute for Economic and Social Research appeared, however, secure. With the continued absence of Marschak from Oxford, the Institute of Statistics there was leaderless, and offered a clear opening for Kalecki to continue the statistical research that he had been doing in Cambridge. Keynes continued to support Kalecki at meetings of the NIESR Council; he put forward there his suggestions for Kalecki's research agenda at Oxford.

Lange had the advantage of being able to join Keynes's dispute with Tinbergen on economic method without the need to justify a specific body of quantitative work, as Tinbergen was obliged to do. Lange was therefore able to concede points on which Keynes's view was (probably) incontrovertible. At the same time, Lange, was unusual in combining



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

a strong interest in statistical and mathematical economics, with an equally strong commitment to economic philosophy and methodology. This gave him a stronger position from which to challenge Keynes's philosophical and methodological objections to Tinbergen. The writer of the editorial notes to Lange's Collected Works therefore makes perhaps too modest a claim that the published exchanges between Keynes and Tinbergen covered the main points in Lange and Marschak's contribution. It is understandable that two writers who were making their careers promoting a statistical and mathematical approach to economics would not wish to prolong a public dispute over a methodological approach to which they had nailed their academic colours. But the issues which they raise continue to haunt economics (see, for example, Hendry and Morgan, 1995; Toporowski, 2002) if only because when the respective parties to these methodological disputes enter into dialogue, as they did in the case of Lange, Marschak and Keynes, the terms they used did not have the same meaning for each of the parties. For the statisticians, economic theory meant relations between variables, whereas for Keynes, economic theory meant the linguistically unambiguous specification of concepts and the relations between them. Lange and Marschak were quite happy to concede to Keynes the possibility of structural change within a period covered by statistical data. But structural change in this context meant changes in model coefficients, whereas Lange clearly suggested that the more interesting structural changes are the ones in the institutions that make up a particular mode of production. Keynes was clearly keen that these issues should be more thoroughly explored. Hence his attempt to place the critique of Tinbergen onto Kalecki's research agenda at Oxford. In fact, despite his technical facility, Kalecki was perhaps the last person who should have undertaken such a fundamental analysis. He was not a trained statistician, and his knowledge of statistical theory was practical rather than methodological. In any case, there is no evidence that Kalecki took up Keynes's suggestion, although in later years he attempted a more methodological and institutional criticism of econometrics as his contribution to the *festschrift* for Oskar Lange (Kalecki, 1964).

## Acknowledgement

I would like to thank Tadeusz Kowalik for drawing my attention to Lange and Marschak's contribution to the Keynes–Tinbergen dispute, Mary Morgan for communications concerning her and David Hendry's publication of the text, and participants in research seminars at the Institute



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of Economics of the Polish Academy of Sciences on 29 September 2004, and the Research Centre for the History and Methodology of Economics of the University of Amsterdam on 29 April 2005, at which an earlier version of a part of this chapter was presented.

## Note

1. The quotation is from the version of the paper found, together with his correspondence with Keynes, among the Lange papers in the archives of the Polish Academy of Sciences, file number PAN, the Polish initials of the Polish Academy of Sciences, III-309/29. It may be found on p. 397 in the Hendry and Morgan edition.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 9
# The Walrasian Socialism of Oskar Lange

*Meghnad Desai*



## 9.1 Introduction

Tadeusz Kowalik was our guide and mentor to the economics of Michal Kalecki. His edition of Kalecki's collected works is still a great source of knowledge for us. But he was interested in Oskar Lange not just for reasons of common national origin but also as an economist who thought differently. In this chapter I want to examine Lange's arguments for Socialism which sparked off the Lange–Hayek controversy in the 1930s. (In the essay, Lange uses lower-case letters for socialism and capitalism. I use upper-case letters in my text but preserve his lower-case letters when I quote him. Where the words appear as adjectives for example 'socialist economy', I use lower-case letters.)

Oskar Lange taught in Cracow and then moved to the USA upon getting a Rockefeller Fellowship (Kowalik, 1987). It was during his stay at Harvard that he wrote the first draft of his celebrated essay 'On Economic Theory and Socialism'. This set off a controversy in which Friedrich Hayek was his main antagonist. Hayek came from the Mises tradition, which had argued the impossibility of Socialism without a price allocation system (Mises, 1935). The debate at this stage is academic. It makes little reference to the ongoing experiment in the USSR. It is in a truly *Marxist* tradition, since it envisages the advent of Socialism in a mature Capitalist market economy.[1]

## 9.2 The possibility of Socialism

Marx and Engels showed very little interest in discussing the building of Socialism, and indeed wrote a trenchant critique of the Gotha Programme which was the draft manifesto of the newly merged socialist parties of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Germany. Kautsky's interest in a future socialist economy inspired N.G. Pierson's 1902 article which is the pioneer in posing the issue of the feasibility of a socialist economy (Hayek, 1935: pp. 41–86).

Of course people had only the faintest idea of what it would mean to have a socialist economy, as most socialists were passionate idealists and not practical people. Thus, as Pierson said in his article,

> The problem of value? These words will astonish my readers; this will be the last thing they expected. The problem of value in a socialist society? Surely if socialism is realised, there will be no value phenomena and therefore no value problem. Then everything will be a mere question of technique. (ibid: p. 43)

Pierson baldly stated the nature of a socialist economy by quoting Cairnes, 'Socialism subsists in the recommendation of certain modes of action and in the utilisation of the authority of the state for particular purposes' (ibid: pp. 46–47).

One aspect Pierson contrasts between a capitalist society and a socialist one is the link between *work* and *pay*. The argument is that the link can be broken under socialism, although everyone will be obliged to work. If income and productivity are divorced from each other, how is the distribution of income to be decided?

Another question is: how is capital to be allocated if the principle of allocation is not profit?

Enrico Barone's classic article about the Ministry of Production in *The Collectivist State* published in 1908 is a pioneering contribution in several senses. It expertly uses mathematical tools to pose an economic problem. It is also completely free of any political or ideological disputation regarding Capitalism and Socialism, or Collectivism as Barone called it. Barone's approach is the ideal way for an economic theorist to pose the problem of allocation in rival systems of property rights; how is production to be organised, given the technical constraints which are (by assumption) invariant across the systems? (Barone, 1935: pp. 245–290)

Barone stated his conditions for a socialist economy after describing how a capitalist economy attains equilibrium. He began by positing what we would now call a mixed economy: 'Individuals own some resources but the bulk of resources are owned by the State. The Ministry of Production has to solve the problem of combining these individual and collective services in order to procure the *maximum welfare* for its people' (ibid: p. 265).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

He stated two conditions: there is no money and there are no prices, but the Ministry of Production 'maintains [...] some method of determining ratios of *equivalence* between the various services and between various products and between products and services. Individuals bring their products to the socialised shops to exchange them for consumables or state owned resources for own use.'

Barone concluded that the achievement of maximum efficiency is impossible unless the Ministry can incorporate the idea that the technical coefficients of production are not given constants but are variable. The optimum variation can be calculated in a market place within the 'anarchy of markets'; a Ministry can only do so *a priori* if it can carry out experiments, but then the test of efficiency can only be applied during the course of the working of the economy. It is the difficulty of allowing the variability of production conditions which in the market is done by the death and birth of firms which is the obstacle for a socialist economy.

> If the Ministry of Production proposes to obtain the collective maximum – which it must, whatever the law of distribution may be adopted – all the economic categories of the old regime must reappear, though may be with other names: prices, salaries, interest, rent, profit, saving etc. [...T]he same two fundamental conditions which characterize free competition must reappear [...] the conditions of minimum costs of production and the equivalence of price to cost of production. (ibid: p. 289)

The First World War changed the context of the debate even before the Russian Revolution. Lenin had been impressed by the way the German war economy was organised; on highly centralised lines with allocation based on the needs of war rather than on prices or profits. For him, this was a demonstration of Marx's prediction of the centralisation and concentration tendencies of Capitalism. The economy had become a single firm. He called it State Capitalism and saw it as a transitional step towards Socialism (see Desai, 2002 for a discussion).

A much more serious contribution was made by Otto Neurath on the practical issues of running a post-Capitalist Socialist economy. In the aftermath of the war, in the wake of the Austrian Revolution, a Socialist Party had seized power. Otto Neurath then put forward comprehensive scheme with supporting arguments for a Socialist economy to be based on non-monetary, even non-market, considerations. Thus he wrote



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> Maximum profits is the purpose of the individual business in the capitalist economy [...] a maximum of happiness, of the enjoyment of life in a community and of utility is the purpose of a socialist economy. (Cartwright et al., 1996: p. 29)

Neurath believed that money led to misallocation of resources, since prices distorted use values. As with the German war economy, Neurath argued,

> The theory of the Socialist economy acknowledges only one manager or producer – the society – who organises production and shapes the standard of living on the basis of the economic plan, without calculation of losses or profits and without taking the circulation of money as a basis, be it in the form of coins or labour. (Cartwright et al., 1996: p. 37)

Thus there is no market, no buying and selling – only direct allocation of goods based on need. Money or profits play no role in a socialist economy. Production decisions are subject to democratic control. Neurath's ideas have been ignored in recent debates on Socialism, but he clearly embodied the ideas of those who saw the market as a distorting allocation mechanism. (Marx and Engels were not of this view. If anything they wanted the full play of market forces. See Hollander, 2010, 2011.)

## 9.3 Mises's critique of moneyless allocation under Socialism

It was the idea of a moneyless allocation of resources under Socialism which had led Mises to argue that if so, this could not be a rational allocation system. As Hayek described the ideas of Neurath,

> Dr. O. Neurath [...] tried to show that war experiences had shown that it was possible to dispense with any considerations of value in the administration of the supply of commodities and that all calculations of the central planning authorities should and could be carried out in natura, i.e. that the calculations be carried in terms of some common unit of value but that they could be made in kind. Neurath was quite oblivious of the insuperable difficulties which the absence of value calculations would put in the way of any rational economic



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

use of resources and even seemed to consider it as an advantage. (Hayek, 1935: pp. 30–31)

As such it was bound to fail. 'Only through the rationalisation inherent in economic calculation based on the use of money could the human mind come to understand and trace the laws of action' (Mises, 1935: p. 95). There are some delicious ironies here. Much of the then (and even now) dominant theory of allocation makes no use of any property or of money except as a unit of account. Walrasian theory can arrive at the solution of the General Equilibrium problem without any reference to the amount of money. Ricardo is no different; indeed Walras was only putting Ricardo in mathematics except for a different theory of value – marginal utility rather than labour time. Money is not germane to the equilibrium at all. The Vienna School to which Mises and Hayek belonged was not of course totally signed up to the Walrasian programme, but it did not have any better substitute. Hayek, who ended up fighting the battle against Lange, was a firm Walrasian as he made clear in his LSE lectures of 1931 later published as *Prices and Production* (Hayek, 1935). He later abandoned the Walrasian paradigm on the grounds that it demanded complete knowledge, and went on to explore the problem of the division of knowledge among economic agents (Hayek, 1937). But whatever these later developments as at the time of the debate, rational calculation in a market economy had been shown to involve some elaborate barter processes (perhaps involving a mythical auctioneer) but not monetary calculation.

## 9.4 Oskar Lange's counter-coup

Neurath's experiment had been short-lived and never became well known. But since the debate about the possibility or feasibility of Socialism had been cast in terms of rational allocation, Lange's answer to Mises is very much a tactical coup. The bulk of the essay (pp. 57–98) is devoted to demonstrating the similarity of the allocation problem under Capitalism and Socialism, and then demonstrating that Socialist allocation can mimic the efficiency of Capitalist allocation and, despite the lack of private ownership of resources, provide an equal if not a better outcome in terms of efficiency.

But it is important to note that the battle is fought narrowly on the issue of allocation. Socialism seems to have arrived by some peaceful method, since the problem of transition is not explicitly discussed. There has been no disruption of the production process and no obstacles



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

placed by capitalists in the path of the socialist economy managers. An economy which was capitalist on Friday had become socialist on the Monday after. In his section on Transition at the end of the essay, Lange advocates wholesale and immediate nationalisation of all private capital on the first day of Socialism to avoid the disruption which was inevitable from the arrival of Socialism. This is in order to avoid any sabotaging by the capitalists. Clearly he has more knowledge of such dangers than Barone had. There are thus contradictions within the text which I would like to highlight, as doing so may throw some light on the actual experience of Socialism.

Lange made the crucial, though implicit, assumption that in the Socialist phase all the market relations which have previously allocated goods and services under Capitalism will still be available as a reference point. Thus the disruption due to the transition to Socialism would be minimal. The market can then be recreated as an algorithm for solving equations of demand and supply. The previously prevalent prices serve as points of departure for recalculating equilibrium prices under the new regime. Lange implicitly invoked local stability of the Walrasian Equilibrium, though at the time he wrote the issue of stability had not been formally tackled. It was not to be solved till the early 1950s, by the work of Arrow and Debreu (Arrow and Hahn, 1970).

The entire problem and its solution have the easy aspects of a transition to Socialism over a weekend. There seems to have been no confiscation of property or reprioritising of policy objectives; supplies have not been disrupted or sabotaged. Lange does not pose the problem of changing the identity of who owns the capital goods or what the conditions of wage labour are, or whether barter will be used rather than money prices.

In the main part of the exercise Lange took for granted the claims of Walrasian theory about the efficient allocation of resources by the market. The static nature of the Walrasian model is not questioned, nor is it asked how excess demand or supply will be resolved outside the time dimension by the auctioneer. Lange even allowed that Walrasian allocation rules will solve the longer-run problem of expanding some industries and shrinking other since the Central Planning Board has all the information. This is not actually a question posed, much less solved, in a Walrasian model. Even Marshallian Economics got into a muddle about the Long Run Average Cost Curve. Gerard Debreu's work reestablished the validity of Walrasian insights but confined the proof to an Economy of Exchange given endowments and did not tackle production. (To the best of my knowledge production has yet not been integrated



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

into an Arrow–Debreu model). Debreu has showed how many heroic assumptions are necessary to eliminate time from the Walrasian model, by introducing contingent commodities and pretending that the equilibrium allocations for all the time periods in future are obtained in the first instance by solving the equations, and then the market passively unfolds the equilibrium in each period with no shocks (Debreu, 1960). There is no real time dynamics in a Walrasian model, either original or in the Arrow-Debreu version.

Even in terms of what was known about the Walrasian model in the 1930s, Lange avoids the discussions of the flaws in the Walrasian model. Thus it was known that Walras had stated the conditions for equilibrium and articulated the equations but had not been able to demonstrate that an equilibrium existed. Gustav Cassel had shown that an equilibrium could exist for a linearised version of the Walrasian model. Abraham Wald had made the first breakthrough in the Menger Seminar in Vienna in the 1930s by showing that if the equilibrium condition could be relaxed to allow for non-negative rather than strictly positive prices, then an equilibrium could be said to exist (Dorfman et al., 1958: pp. 346–389).

Of course neither Wald nor anyone else, to my knowledge, asked what would happen in markets where the equilibrium price was zero. Will that industry disappear and set off some dynamic repercussions, or will the industry resume production in the next period when it obtains a positive price? If the former, does the equilibrium solution for the other n–1 markets have to be recalibrated, and do we know whether there would not be further zero prices as result of eliminating one market? The non-negativity of prices is a formal condition whose real consequences were not and have not as yet been examined.

Thus the Walrasian allocation model was not at all as perfect as Mises had argued and Lange accepted. There is also no hint of the argument at the outset that whatever the theoretical elegance of the Walrasian model it had no relevance for the study of a capitalist economy. Schumpeter had offered a critique of Walrasian theory from this perspective at the outset in his two-volume magnum opus *Business Cycles* (Schumpeter, 1939). Lange had worked with Schumpeter during the thirties, but does not hint at this critique.

## 9.5 Lange's critique of Capitalism

Thus while there is no critique in the bulk of the paper of Capitalism as causing cycles and unemployment, towards the end, after settling the allocation problem, Lange devoted a long section to 'The Economist's



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Case for Socialism'. It is here that he said that while the formal principles of allocation are the same in the two systems, the actual allocation is better under Socialism. There are two grounds for this superiority; first it is because Socialism can afford a better distribution of incomes while retaining consumers' choice and the free movement of labour as between occupations; the other reason is that while a capitalist economy can be prone to Pigouvian market failure, a socialist economy can avoid it due to public ownership of resources. This in Lange's view also allows the socialist economy to avoid business cycles. As he said,

> In a socialist economy there can be, of course, grave mistakes and misdirection of investments and production. But such misdirection need not lead to shrinkage of output and unemployment of factors of production spreading over the whole economic system. A private owner *has* to close his plant when he incurs grave losses. In a socialist economy a mistake is a mistake, too, and has to be corrected [...] Mistakes can be *localized*, a partial overproduction does not need to turn into a general one. (Lange et al., 1938: p. 106)

It is in this context that Lange adds that a capitalist system is not competitive in any case, as Joan Robinson and Edward Chamberlin had just demonstrated. 'Only a socialist economy can fully satisfy the claim made by many economists with regard to the achievements of free competition' (ibid: p. 107). The one doubt Lange admitted about the working of Socialism is about the efficacy of public officials as managers, compared to private ones. Hayek was later to zero in on the problem of incentives for socialist managers to minimise costs or achieve efficiency. Lange was however worried about a problem which was to prove the most difficult for 'Really Existing Socialism'. As he said:

> It seems to us, indeed, that the real danger of socialism is that of a bureaucratization of economic life, and not the impossibility of coping with allocation of resources (italics in the original). He softened the blow by castigating the same danger under monopolistic capitalism and added, again rather piquantly in terms of what happened later on, 'Officials subject to democratic control seem preferable to private corporation executives who practically are responsible to nobody'. (ibid: pp. 109–110)

At this point, Lange unleashed a deeper critique of Capitalism, which reflects the then prevailing mood of pessimism about its prospects. He



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

argued that far from being innovative and dynamic, Capitalism had been caught up in conserving currently unprofitable industries by the virtue of monopolistic practices. He started off on this section of his argument by stating quite dramatically what is the nub of the issue.

> However, the really important point in discussing the economic merits of socialism is not that of comparing the equilibrium position of a socialist and of a capitalist economy with respect to social welfare. Interesting as such a comparison is for the economic theorist, it is not the real issue. The real issue is whether the further maintenance of the capitalist system is compatible with economic progress. (ibid: p. 110, italics in the original)

Lange admitted that Marx has praised the dynamism of capitalism but then averred that at the time of his writing the separation of ownership and management had made corporations more interested in conserving value than in innovating which would destroy value. He calls this stage *financial capitalism* (italics in the original). It is this tendency in his view which dries up new investments and leads to Keynes's predicted underemployment equilibrium. To cure this ill, public investments are needed. The conclusion is then inevitable.

> It seems to us that the tendency to maintain the value of old investment can be removed successfully only by the abolition of private ownership of capital and natural resources, at least in those industries where such tendency prevails. (ibid: p. 116)

The cure lies in reintroduction of free competition, a favourite Chicago cure for the ills of capitalism. But there will be political interference due to large corporations lobbying against it. The alternative of increased control of production and investment by the government could not work if it was only partially implemented. There was no alternative but going to the final solution and moving to socialism. In the final section of 'On the Policy of Transition', Lange opts for a one-off wholesale nationalisation of all private property when socialism comes.

> A socialist government really intent upon socialism has to decide to carry out its socialization program at one stroke, or give it up altogether. The very coming into power of such a government must cause a financial panic and economic collapse. Therefore the socialist government must either guarantee the immunity of private property



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

and private enterprise in order to enable the capitalist economy to function normally, in doing which it gives up its socialist aims or it must go through resolutely with its socialization program at maximum speed. (ibid: p. 125)

## 9.6 Conclusion

The Mises–Hayek debate ended in a triumph for Lange. Generations of young economists and intellectuals were convinced that that the Socialism versus Capitalism debate had been settled once and for all by Lange's superior logic, which relied upon the economic theory accepted by Mises and Hayek to refute their critique. Here for many was the blueprint of post-war democratic Socialism as much as for full-blooded Socialism. Lange's argument was very influential during the immediate post-war period (as I can vouch from my own student days in Mumbai during the 1950s) when many new nations came into existence and wanted to avoid the worst of Capitalism and embark on some form of Socialism. Lange had shown that Socialism could allocate goods as well as Capitalism; that it could do better thanks to a better distribution of incomes and the ability to avoid business cycles – and finally, given the exhausted dynamic of Capitalism, Socialism could gradually replace it by selective nationalisation.

Writing 67 years after the end of the war and 20 years after the collapse of the Soviet Union, one has to ask: What went wrong? Not so much in history, since that is a large topic to tackle, but in the debate. Were we too eager to accept what we wanted and hail the superiority of socialism without examining the arguments on both sides?

The problems lie in Lange's tactical coup, which is at variance with his political realism in the later sections of the paper. At the core of the debate Socialism comes smoothly after Capitalism with all the institutions intact and no disturbance to economic life. The economy is described as Walras-style free competition, and all we have to show is that socialism can be as competitive as capitalism and either side can solve equations, one perhaps better than another. But this debate is both theoretically flawed and practically irrelevant. It is theoretically flawed because even on its own terms Walrasian equilibrium theory is fragile and has not really been robustly established. It was also clear to all sides of the debate, though not acknowledged by either, that Walrasian theory had little relevance to real life. Mises and Hayek had worked on business cycles and Lange on monopolistic distortions. So each side knew that the debate was shadow boxing of an esoteric sort.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

As for Lange, the later part of his essay acknowledges the irrelevance of the earlier part. If he admitted at the very end that the arrival of socialism would lead to a breakdown of economic life, what relevance does the trial and error method of calculating equilibrium prices have? There will have to be a takeover of ongoing firms, and bureaucratic power would be the only allocating mechanism. What Lange had feared may happen but dismissed as no worse than life under monopolistic competition, which had become the perpetual nightmare of socialist economies.

What we need to take from this debate is that the premises of the debate were false to begin with. A Capitalist economy is not and has never been adequately described by the theory of competition in the Walrasian or Marshallian sense. It is dynamic, not static. It has monopolies and oligopolies and cartels – and even so there is a rough and ready way in which it 'works'. It works through cycles of booms and busts, through bubbles and bankruptcies. We need to abandon the notion of a static equilibrium and comparative statics. Markets are not equations-solving algorithms. They are a dynamic real game played by hundreds of real people whose daily lives and future prospects depend on the way the market allocates resources. That market we have yet to understand. Economists want to be able to teach a simple story, so we teach the microeconomics which is at hand. But it has never had any relation to real life. The task of constructing a theory of how Capitalism works in its day-to-day existence, which Marx was the last serious economist to try, still remains unfinished. It may be that is why the Socialism which Marx predicted as following a mature Capitalism remains elusive.

## Note

1. I wish to contrast Marxists with Leninists, since in the latter tradition Socialism can come before the full maturity of Capitalism while in Marx's work this possibility is denied. I have discussed these two traditions in my *Marx's Revenge* (Verso, 2002).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 10

# Between Memory and Historical Enquiry: Kalecki and the Warsaw Centre of Research on Underdeveloped Economies in 1962–1968

*Marcin Kula*



## 10.1 Introduction

The study of human and social sciences in communist-era Poland is still awaiting in-depth investigation.[1] Generally speaking, the closer these disciplines were to current affairs, politics and ideology, the lower their level. Under Stalinism, sociology as a science was banned – which is actually something that may have benefited it, since it was thus able to avoid the worst compromises that others were forced to make. It was a difficult time for philosophy as well. In history it was more prudent to pursue subdisciplines dealing with distant periods. At the same time, though, politically sensitive issues could appear in an area of science that one would think was the furthest thing from the minds of the authorities and/or ideologues. If in the USSR genetics could take on a fundamental political significance, then obviously so could anything else. For example, in Polish historical writing, at a certain point it became important to prove that the territories that Poland had acquired from Germany after the Second World War had centuries ago been Polish.

At the same time, even in the most politically sensitive areas there were always some more reasonable scientists who did not forget that science is something different from politics. They frequently escaped toward less politically charged areas of their discipline, the history of the area studied, or the history of the discipline itself.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

There were two factors that favoured the maintenance of a relatively high level of many academic disciplines in communist-era Poland: first, the fact that there were still a number of scientists working there who had been educated before the war, most of whom – and this includes those with leftist beliefs– even if they had been forced to stop working during the Stalinist period, returned after the liberalisation of 1956. The second factor was the reestablishment of foreign contacts by Polish scientists after 1956. We visited the West and hosted Western visitors. We read Western literature, a fair amount of which was translated into Polish. Years later we were surprised to find how many of our colleagues from Lithuania, Ukraine, Belarus and Russia knew Polish. Frequently, they learned the language precisely to be able to read literature that was published in Poland and gain an otherwise unattainable window on the world. At any rate, the changes of 1956 were very important for saving Polish science.

## 10.2

Economics under communism was in a difficult situation. By its very nature, it was one of the social sciences most entangled in politics and ideology. The whole Marxist theoretical construct became a dogma that was difficult to sidestep. The combination of economics as a science with the praxis of economy, where decisions were also shaped by dogma, irrevocably tied it to current politics. Many communist officials believed themselves to be experts on the economy, which also made scientific work more difficult. For many academics, the conditions created by communism had the potential to corrupt; it allowed them to build unwarranted careers in party and/or state apparatus as well as in science – as 'our' scientists, approved by the authorities. Superimposed onto this were developments that were detrimental to intellectual life in general – first and foremost, the limits placed on freedom of expression (see, among others, Haugstad, 2008).

Economics, like everything else, underwent huge changes after the political breakthrough of 1956. That breakthrough was itself partly due to the absurdity of the economic principles that had been used to manage the economy under Stalin becoming obvious. Under the six-year plan (1949–1955) economic conditions had deteriorated radically, causing universal frustration in Poland. The workers who protested in Poznań in 1956 were the leading edge of a rising tide. It was the fear of a further rise that proved to be one of the important factors behind the government's accession to change. Another was the set of political events initiated in the USSR by the 20th Congress of the CPSU.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

The liberalisation that occurred after 1956 brought about a renaissance of economic thought. The condition of the economy and the obvious absurdity of the management methods being used stimulated various kinds of reflection. The keyword of the period was 'reform' – including, perhaps most importantly, reform of the economy. The general trend was to abandon what was known as pie-in-the sky economy in favour of considering the actual situation. Oskar Lange pointed out the need to carry out research on the actual income of the population. Soon after Michał Kalecki, who since 1962 had been Chairman of the Committee for Research on Social Issues of People's Poland of the Polish Academy of Sciences, encouraged research both on the subject of crime – especially economic crime – and on comparing the current incomes of blue- and white-collar workers with those before the Second World War. Asked later about the route he had taken to arrive at the conclusions of his papers on the socialist economy, Kalecki answered that he would sit at meetings at the Council of Ministers' Planning Committee and try to understand how it all worked (or didn't work). And in fact he did develop a concept that was grounded in reality and not up in the sky.

The renaissance of Polish economic science after 1956 possessed several characteristic traits. The idea of restoring some sense to economics united people of totally divergent backgrounds – such as Czesław Bobrowski, the head of the post-war Central Planning Office, subsequently a political émigré, and Włodzimierz Brus, who had formerly been an outspoken critic of both the office and Bobrowski himself. The group included Oskar Lange, a leading communist politician, Michał Kalecki, who had very little in common with communism, and Edward Lipinski, a pre-war socialist who under Stalinism had worked on the history of economic thought (most probably not only because it interested him but also due to the perceived difficulty of tackling contemporary economics). They also included Kazimierz Łaski, a man who, although previously closely tied in with communism, became a very reasonable economist. There was also Jerzy Tepicht, formerly employed in the party apparatus who had worked on the collectivisation of farming and subsequently established the Agricultural Economics Institute, an organisation whose work contributed to an understanding of actual conditions in the peasant villages. There was Tadeusz Kowalik, a member of the (communist) Polish United Workers' Party (PZPR), but at that point already out of favour with the government as a 'revisionist'. Very noteworthy was the composition of the Economic Council, an institution established by the government after 1956 to consider directions of reform but soon after abolished. Its



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

chairman was Lange, but it was actually led by Bobrowski; Kalecki took part in its work.

All of them were leftists in the broad sense of the term. The right wing did not on the whole have any illusions about the possibility of rationalising the economy. It was probably also more difficult for it to operate – even during the relative liberalisation. The scientists mentioned were people who did not have an overly rosy view of the economic condition of Poland before the Second World War. They were all people marked by the experience of the Great Depression who had been certain of the need to introduce various reforms in Poland as well as to pursue an active state-supported development policy. They did not question the principle of economic planning, but only the grave imperfection of its communist version. Kalecki 'supported central planning based on his own concept. He believed that central planning should be a process that combined democratic bottom-up pressure with a top-down structuring of postulates proposals' (Sadowski, 2011: p. 182). Regarding issues of economic development, Kalecki would say that socialism certainly has greater capability to mobilise – although, just as surely, he was not in favour of mobilising either with the methods used in real socialism or in the name of achieving unrealistic objectives.

The group's underlying idea was that of a rational reform of socialism rather than of abandoning it – which at the time would have been totally unrealistic. They were all strongly pragmatic, ready to work with various leaders and to propose solutions that made sense within the limits of what seemed possible. It is said that Kalecki, when in India once, was asked why he did not suggest solutions more radical than those he was proposing. He reportedly answered, 'Because you don't invite foreign advisers to conduct a revolution.' Czesław Bobrowski advised Colonel Houari Boumediene in Algeria – not a paragon of democracy; later on, Bobrowski went on to advise General Jaruzelski, amazing many of us who viewed the general negatively, as a person who had imposed martial law on Poland in 1981. When asked about his motives, Bobrowski supposedly said, 'Boumediene was no better.' It seems that these men were ready to advise and formulate plans for anybody, as long as they could honestly say what they believed was right.

Kalecki's several resignations from various posts at different stages of his life are a case in point. In a short autobiographical note written in 1965, Kalecki gave a brief description of his motives in each case. His first resignation came in 1937, when he left the Research Institute of Business Cycle and Prices (he had been abroad since 1936 as a Rockefeller scholar):



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> In November 1937, two of my colleagues from the Institute of Business Cycle, Ludwik Landau and Marek Breit, were dismissed because of a bulletin on the economic situation which they authored. In solidarity with them, I have resigned the position I held at the institute. In letters sent to the press, I have explained that the reason for this step was that due to the way my colleagues had been treated, I would be unable to perform objective research work.

His next resignation came after the war, when he was working for the UN Secretariat. He wrote:

> At the end of 1953 the Mexican Government approached the UN Secretariat with a request to delegate me as an expert within the technical assistance program. The request was denied due to the alleged impossibility for me to abandon my work for a period of several months. It was, however, entirely clear that the actual reasons behind the refusal were purely political.
>
> Shortly thereafter, I met with similar trends in my on-going work. In the spring of 1954, despite my vigorous protests, the chapter of the World Economic Report on the Chinese People's Republic was totally altered (I first included China in the report in 1950 and already then, I encountered serious difficulties). Some time later, under the pretext of a reorganisation of the UN Secretariat, my role in developing the report on the global economic situation was severely curtailed. In view of this, I came to believe that my work at the UN Secretariat could no longer be effective. Accordingly, with the agreement of the Government of the People's Republic of Poland, I resigned my position at the end of 1954 and returned home. (Sadowski, 2011: pp. 178–179)[2]

Kalecki's next resignation – the one in 1968 – will be discussed further down.

The other members of Kalecki's circle also had certain limits which they tried not to exceed. Even though some of them belonged to the PZPR (which Kalecki never joined), they did not belong to either of the two categories of communist typical of ruling communist parties: they were neither fanatics nor careerists looking out mostly for their own interests and for the system that enabled them to further those interests. It is true that after 1956 the whole party was undergoing fundamental, though not very noticeable, changes. The fanatical type was becoming



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

a feature of the past and careerists were coming to the fore, but the party membership consisted mostly of average people who actually had little to do with communism; the party was becoming an association of administrators and directors.

One gets the impression that the style of these economists' thinking was like that of the left wing in the West (if we accept for the moment that that thinking was homogeneous). It is characteristic that several of these men spent some time living in the West – usually as émigrés who had left Poland under various circumstances. Kalecki himself worked abroad from 1936 to 1954 (with a three-month interlude in 1946, when he returned to Poland).

Also noteworthy is the fact that many of the members of this circle who were members of the PZPR either resigned or were thrown out. Several of them went on to play important roles in the democratic opposition, the Gdańsk shipyard protest of 1980 and Poland's move away from communism.

## 10.3

The renaissance of economics as a science after 1956, like the resurgence of other social sciences at the time, had its limits. The government never allowed an open breach of the imponderables of the principles of Marxism and the system. They also upheld the principle of friendship with the Soviet Union, defining this friendship very broadly, extending its scope to cover certain areas of science. This position inevitably led to attacks against scientists who were particularly distant from dogmatic Marxism, openly opposing it or the 'wisdom' of the PZPR. Academic life in communist Poland always remained curtailed to some extent, even during the period of its greatest liberalism.

At the same time, the limits of freedom after 1956 were incomparably broader than under Stalinism. The regime actually tolerated quite a lot, especially if someone did not speak directly against them, was an independent authority (which did happen in Poland) and didn't try to spread their ideas among a wider audience. Furthermore, in Poland the communists in power really did include some people who were saner, and realised who was and who wasn't a good scientist; in any case, some people like that were needed because of domestic and international public opinion. Sometimes, tolerating them, the system attempted to 'model' them as well. When the system coveted somebody who was obviously not tied to it, they were referred to as 'progressive'. Sometimes, when there was only the slightest reason, the word 'Marxist' would even be



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

used (it was, after all, the party that decided who was or wasn't Marxist, and the criteria did not have much to do with philosophy). Thus, when in 1965 the Senate of the Higher School of Economics in Wrocław (today the Wrocław University of Economics) considered awarding an honorary doctorate to Professor Kalecki, the Enterprise Economics Department that submitted his candidacy in an unsigned document characterising the candidate wrote about his Essay on the Theory of the Business Cycle: 'The theory, deeply anti-capitalist in its assumptions, may be considered to be a development of certain ideas of Marx, as described in Volume 3 of *The Capital*.'[3] Let us not delve too deeply into whether Kalecki himself would agree with this description. Perhaps the author of that document was sure that it was correct. Both these issues were of secondary importance, however. More significant was the fact that a suitable pretext to honour Kalecki had been found.

Kalecki was convenient for the authorities, and necessary as well; perhaps the more sensible representatives of those authorities also realised that he was an eminent scientist. He was not a man of the establishment. As a participant wrote about one of his lectures:

> After coming back to Poland he spoke at the memorable Economists' Congress in 1956 where he presented a speech on economic growth theory. He caused a sensation because what he talked about had nothing to do with the official Marxist doctrine and showed entirely new ways of thinking. (Sadowski, 2011: p. 179)

Nevertheless, the self-same Kalecki received the state prize in 1966, an honorary doctorate from Warsaw University in 1964 and the Higher School of Economics in Wrocław in 1965 (the awarding of honorary doctorates also had to have government approval). In 1964 he was awarded the Order of the Banner of Labour, a very high communist distinction. Significantly, between 1955 and 1957 he worked at the Council of Ministers' Office as an adviser to the First Deputy Prime Minister, who was in charge of the economy, and in 1957–1964 at the Council of Ministers' Planning Commission – initially as Chairman of the Committee for the Perspective Plan and subsequently as Scientific Adviser to the Chairman of the Planning Commission. Between 1957 and 1964 he headed the Polish delegation to the Council for Mutual Economic Assistance in Moscow.

In Poland at the time, if one accepted certain ground rules it was possible to function fairly reasonably and achieve something – even in science. Science was becoming differentiated. And even if not all



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

schools of thought could be openly represented, a scientific discipline could include people as different as Michał Kalecki and his faithful opponent Bronisław Minc (supported by the more hard-line members of the authorities; a man whose academic achievements have faded into obscurity). Polish economists after all included on the one hand renowned scientists like Kalecki and Lange, and on the other the party school economists who repeated the same Leninist slogans over and over like a mantra of their atheist faith.

## 10.4

Of significance to economy as a science was the fact that that the party elite who came to power then, although more rational than under Stalin, began to abandon relatively quickly any thought of economic reform. This occurrence – together with the general roll-back of liberalism in many scientific disciplines – had to have a negative impact on the science of economics. Economic thought – especially the broader and less technical sort – was becoming inconvenient. The rigid economic planning – or the most egregious political repressions – of the Stalinist period never came back, but the hopes for broader economic change that people had fostered in 1956 gradually became nothing but a memory which the authorities exerted every effort to erase. It was at about this time that the world experienced the liberation of Africa, the Cuban revolution, and, in the social sciences, a great wave of interest in the Third World. It was that wave that brought me into contact with economics, and specifically with Michał Kalecki. A historian and sociologist by training, I became interested in the Third World – and this coincided with the establishment of the Centre of Research on Underdeveloped Economies at the University of Warsaw and Central School of Planning and Statistics (SGPiS – today, the Warsaw School of Economics). The centre was headed by Ignacy Sachs, and the chairman of its council was Michał Kalecki.[4] This was where (in 1965) I entered graduate school, although due to the political upheavals, more on which below, I was forced to complete my studies elsewhere.

The Third World offered a new area of study and reflection for the awakened Polish economists who were already beginning to feel the tightening of the ideological screws. Firstly, these were issues that were unknown, important and interesting.[5] Secondly, they enabled us to stay within the realm of economic development – meaning we maintained our research interests, although we dealt with different regions and different conditions (which only made things more interesting).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

The work clearly required an interdisciplinary approach, which Sachs promoted and which opened opportunities for historians, for example, to cooperate. Thirdly, this choice of topic made it possible to preserve certain elements of left-wing economic thinking; it was obvious that in economically underdeveloped countries state control and central planning would still be appropriate. Fourthly, all – including left-wing and planning-based – thinking and actions with respect to Third World countries could be based on actual reality – something which in the case of Poland posed a problem to honest economists.

At that time, many Polish economists, including Kalecki, took positions as advisors in various economically underdeveloped countries. Kalecki himself served as advisor in India in 1950 and in Cuba in 1960 (he also worked in other countries at other times). His circle in Warsaw developed practice economic plans for various such countries. Contrary to dogmatic economic Marxism, these plans did not recommend developing heavy metallurgy as a universal solution. They took into account real conditions, including institutional factors. Especially interesting was the attempt to develop a strategy for Mongolia, which was very difficult due to the local conditions and the enormous cost of transport that increased the cost of any export. The group that was working on the problem remarked that animal husbandry, highly developed in Mongolia, could be a source of raw materials for the pharmaceutical industry, the products of that industry weighing little, being easy to transport and with sufficient value added to make their export financially viable. A significant part of the puzzle was the political protection of socialist markets, which would provide Mongolian pharmaceuticals with a market. Without such protection, those ideas would of course not make sense – just as the later Cuban plans to develop the pharmaceutical industry did not have huge chances of success.

A realistic appraisal of the situation was also the starting point for Kalecki's thinking about Cuba. He had a very negative opinion of what the Cubans had told him, about doing away with monoculture by destroying sugar cane plantations. He asked his hosts what exactly – regardless of the economic profile they were planning for the future – they planned to live off then and there. He held a similar view of the increases in all the indicators in the plan he had developed for Cuba, which the Cuban authorities considered to be insufficiently revolutionary or optimistic.

Also characteristic was Kalecki's interest in Vietnam's war economy – as an experience that demonstrated the potential to mobilise economic factors in peacetime.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Significantly, the planning postulated in Kalecki's circle was more of a reflection on economic strategy and less of the typical socialist planning of the sales levels of cabbage in every corner shop. Kalecki's position on the role of foreign capital was typical. At the time when dogma was so important in the communist world, he said that foreign capital in itself was neither good nor evil; it all depended on how it worked with respect to the national development goals. Planning, in his view was not supposed to mean forcing anybody to do anything. Kalecki used to say that a good advisor is one who advises in such a way that the prime minister of the host country wakes up one morning convinced that it was he or she who had had a great idea.

There was another factor that made economically underdeveloped countries not only an attractive area of study but also in a sense a convenient one. This was that the communist authorities were less concerned about Polish economists' thinking on the Third World than about their thinking on the communist world, including Poland. The authorities did try to interpret everything that happened in the Third World as reflecting favourably on communism and bearing out its ideology. But this was no longer the time when, in the Soviet interpretation, the history of France resembled the history of Madagascar and vice versa. Even regarding those issues with more direct relevance to communism, it was acknowledged that within the framework of general principles different approaches were possible. Communist elites realised that conditions in the Third World were different, and they no longer denied it; the times when Soviet authorities had demanded deliveries of pork from Soviet Muslims were over. For this reason, when working on economically underdeveloped countries, Kalecki was able to develop his concept of intermediate regimes, and – together with Sachs – the concept of a mixed economy. It was also possible to develop the concept of growth barriers, based on which Ignacy Sachs analysed the foreign trade barrier. It was possible to work on selection techniques promoting development (Zofia Dobrska) or reflect on the role of the state in economic development or – let's say – the concept of perverse growth (Ignacy Sachs, see Sachs, 2008).

Work on economically underdeveloped countries was facilitated for yet another reason. The Soviet Union and the countries of the socialist bloc cared about contacts with the Third World. They strove to establish those contacts on many planes. They showed caution and skill in their actions. Gone were the times when foreigners were brought to Moscow in order to use the most illustrious among them as propaganda tools, or to train them as revolutionary instructors and/or spies. Although



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

this was probably also happening at the time I am referring to, there were also other types of activity. Within these activities several research organisations specialising in Third World topics were established in Warsaw, including the centre mentioned above, headed by Professor Sachs and Michał Kalecki's seminar, which attracted leading Polish, and sometimes foreign, economists. Besides the centre, there was also the Advanced Course in National Economic Planning for economists and planners from developing countries; it was attended by young economists from Third World countries. The authorities realised that to keep them coming, the course could not consist of political indoctrination or the same simple drivel served up at numerous Polish courses. I heard that once even high-ranking officials cooled the enthusiasm of some of the scientists faithful to the doctrines of the PZPR in order to bring the course curriculum more in line with new communist standards. Deputy minister Eugenia Krassowska said at the time that Third World youth had to be treated very gently (the unspoken implication being that young Poles were easier to indoctrinate – but this is of course beyond the scope of this chapter).

The fact that the courses were able to attract students was due not just to the lecturers but also Warsaw's fairly high academic reputation at the time. It was a socialist capital, but at the same time more intellectually interesting than many other capital cities of the Eastern Bloc. It hosted numerous representatives of various social sciences, frequently invited to give lectures as part of the course, whose opinions of the city varied. Seymour Martin Lipset said in Warsaw that capitalism commits social mistakes, and socialism capital ones; he proved to be an accurate prophet.

## 10.5

The boom in the social sciences that began after 1956 ended gradually; the final, crippling blow to it was not delivered until the anti-intellectual and anti-Semitic campaign of 1968. This also brought about the disintegration of the Centre of Study on the Third World; both it and the course for foreigners were taken over by people whose scientific achievements are unmemorable. The wave of scientists or pseudo-scientists on the rise at the time had their career path eased, since the government promoted people who, due to their limited talent, had not been able to succeed and who in 1968 became convenient; Kalecki once called that changing of the guard at SGPiS a 'revolt of the frustrated tutors'. A change made especially to facilitate the new guard's careers was the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

waiving of the requirement to obtain the post-doctoral research degree known in Poland (and in Germany) as the 'habilitation'. Kalecki said then that he could not support the maintenance of the requirement, since he himself did not have a habilitation, nor a doctorate or master's degree, either (for personal reasons he never completed a formal university course of education). 'But why', he asked, 'do they keep promoting the stupidest ones?'[6]

1968 brought changes to the form of the Centre. The former institution, affiliated with Warsaw University and the SGPiS, was replaced by the Research Institute for Developing Countries, tied to the SGPiS only.[7] All or nearly all of us who had been connected with Kalecki's circle were dismissed from the SGPiS with the mere annotation, if we were lucky, that we weren't suited to scientific work (thankfully nothing political!). Sachs, released from his position as head of the centre and treated very badly at SGPiS, emigrated. Many others among us stayed in science. The situation in which I found myself was particularly good; since I was a graduate student, I was not on the faculty, and hence the automatic dismissals did not apply to me. I wrote the Chancellor that I had completed my doctoral thesis, and I obtained my doctorate at the Polish Academy of Sciences Institute of History.

Kalecki resigned from the foreigners' course after Gomułka's speech at the Trade Union Congress on 19 June 1967. The PZPR leader said then that some Polish citizens of Jewish descent had manifested their support for Israel after its victory in the Six-Day War. He even used the term 'fifth column' (theoretically meant to be seen as Zionist but in practice signifying Jewish). Even though that fragment of his speech was not printed in the newspapers, the signal was clear. Kalecki told the Chancellor, Prof. Wiesław Sadowski, that he would not endorse the course while being accused of belonging to the fifth (Jewish) column. He submitted his application for dismissal from his post of professor at SGPiS on 8 October 1968. It read:

> After reviewing a number of events that took place at the Main School of Planning and Statistics during the 1967/68 school year, I have decided to leave the school this year instead of the next year, after I turn 70.
>
> In view of the above, please accept my resignation from the position of professor at the Main School of Planning and Statistics effective 30 September 1968'. (AAN, MEN, 1957)

As mentioned above, this was not Kalecki's first resignation.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

The minister naturally acceded to the professor's request. When Kalecki received the written agreement for him to retire, he took out two boxes of chocolates he had prepared in his desk; he gave one to the cleaning lady who swept his office and the second one to the waitress who brought him tea to his table at the university canteen. He put his hat on his head and left SGPiS. Nobody said goodbye to him.

But Kalecki was not forgotten at SGPiS. The school held a session that was his *de facto* mock trial – a trial that should shame its participants (Dwilewicz, 2006; Barlik, 2011: pp. 30, 80). Kalecki came to the conference and listened to the speeches attacking him. He answered briefly – he said that this was the first conference in which he had ever taken part which was a witch-hunt, and he left the room (Dwilewicz, 2006: p. 233). When in Warsaw one known oppositionist was beaten up in the streets by 'unknown assailants' Kalecki began carrying a cane. In view of the slightness of his physique, he probably would not have been able to defend himself effectively anyway. Fortunately he didn't have to. When he died, on 17 April 1970, Minister of Education Henryk Jabłoński sent his 'sincerest condolences at the death of retired Prof. Michał Kalecki, a leading scientist and long-time research and teaching employee of the university' to the SGPiS Chancellor and Senate. He also sent Kalecki's widow an 'expression of sorrow' due to the death of 'a leading scientist and worker who had performed great services for Polish science and higher education'. The obituary, published in the paper and signed by the minister, stated, 'The late Prof. Kalecki was a leading scientific authority in the area of economic development, an adviser to international and Polish organisations and economic institutions. His passing represents an enormous loss to Polish science.'

These positive words are easily explained. By 1970, the 1968 campaign was rather a thing of the past, and certain people were probably eager to forget the role they had played in it. It was easier to cast themselves in a positive light by talking about a dead person who could not say anything any more. In 1971, the party's *Nowe Drogi* monthly published an article by SGPiS professor and future minister Janusz Górski, who cautiously praised the contribution of Professor Kalecki and his school to socialist economic development theory. The text was phrased circumspectly and not in an unequivocally positive tone – but it was a clear signal of the coming change. Since the beginning of 1971, the country had a new communist leader, Edward Gierek. After quarrelling with the intelligentsia in 1968 and the bloody crackdown on the shipyard strikes at the end of 1970, which took place while Władysław Gomułka was still in place, Gierek wanted to begin a new era. This was all the easier, since



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

what some party activists wanted to achieve in 1968 had been achieved. Whoever was supposed to have been got rid of – from the party, their job, scientific position or even from the country itself – had already been got rid of. Those who wanted to take their places, to win promotion in science at the expense of the dismissed, had already been promoted. Life could go on as if nothing had happened.

## 10.6 Conclusion

I kept in touch with Professor Kalecki until his death. I felt honoured that we co-authored a paper at a time when he stayed mostly at home, without any public activity. I had the impression that at the end of his life Kalecki felt that economics as a science was going in a direction other than he wanted. He did not like dogmatically neoliberal economics, offering models and precepts supposedly applicable everywhere from Labrador to Tierra del Fuego, from Sydney to Anchorage. He did not live to see the moment when his collected works were published in Cambridge and he was eulogised by Joan Robinson. The works were published in Poland in 1979–1988.

## Notes

1. Of the existing holistic approaches to the problem, see Connelly (2000) and Herczyński (2008).
2. The document is kept in the Warsaw School of Economics archive; I obtained a duplicate from Dr Małgorzata Mazurek. Kalecki's difficulties with including China in the report were to be referred to later by Zdzisław Sadowski in the context of his own experiences in this area.
3. Appendix to 'Wyciąg z protokółu posiedzenia Senatu Wyższej Szkoły Ekonomicznej we Wrocławiu z dn. 4 VI 1965 r.' (Archives of New Files, files of the Ministry of National Education, sign. 1957).
4. The copy of Kalecki's appointment to that position dated 31 January 1962 is in the Ministry archives (AAN, MEN, 1957).
5. 'At the time this was a very popular issue in world economy, and in Poland it attracted those who wanted a break from socialist economics' (Sadowski, 2011: p. 177).
6. Quoted from memory.
7. For more on 1968 campaign at SGPiS, see Dwilewicz (2006).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 11

# The Price Mechanism and the Distribution of Income in Kalecki's Economics and Post-Kaleckian Economics

*Jo Michell*



## 11.1 Introduction

The markup of prices over costs plays a central role in Kalecki's economics. The concept originates in his microeconomic analysis of the pricing decisions of firms operating in imperfect markets under conditions of uncertainty. The ability of oligopolistic manufacturing firms to fix prices above costs, in conjunction with the assumption of constant marginal and average costs, results in a direct relationship between the price mark-up and the distribution of income between wages and profits within an industry.

This relationship between the price mark-up and the functional distribution of income is extrapolated to the aggregate macroeconomic level in both Kalecki's own economics and that of more recent writers in the Kaleckian tradition. Something that has tended to retreat from view in those more recent contributions is the related function of the price system as a determinant of the distribution of profits within the capitalist class. This function was an important element in Kalecki's analysis and in that of his follower, Josef Steindl, but has received less attention in subsequent writings.

This essay traces the evolution of the relationship between the mark-up and the distribution of income in Kalecki's economics and that of his followers. The starting point is a discussion of Kalecki's analysis of the behaviour of the firm. While this analysis can be extended to industry level in a straightforward manner, conceptual difficulties in defining the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

boundaries of different industries arise, particularly when making the jump to the level of the aggregate economy. Even putting these problems aside, in an economy made up of a number of sectors, each with a distinctive mark-up, the effects on income distribution of shifts in pricing behaviour at the level of individual industries or sectors become impossible to distinguish from shifts in the composition of output due to changes in the structure of demand.

This interaction between on the one hand, income distribution and prices, and on the other, aggregate demand and output was central to Steindl's (1952) analysis of the stagnation which results from the 'maldistribution of profits' and 'enforced indebtedness' of firms in mature capitalist economies. The relationship between income distribution and long-run growth was also the focus of a model derived several decades later by both Rowthorn (1981) and Dutt (1984). This model came to be known as the Kaleckian or post-Kaleckian growth model, and has become one of the main pillars of the post-Keynesian literature.

More recently, an important literature has formed, taking as its point of departure the influential paper by Bhaduri and Marglin (1990) in which it is demonstrated that the Kaleckian growth model may, with minor modifications, generate either 'profit-led' or 'wage-led' growth. This literature has a significant empirical strand in which econometric analysis is used to characterise the historical growth path of individual countries as either profit-led or wage-led.

The centrality of Kalecki's work to contemporary post-Keynesian economics (although unfortunately not to contemporary economics more broadly) serves to demonstrate the power of his insights and theoretical innovations. However, it is argued here that the transition taken by the mark-up – from a microeconomic concept defined at the level of the individual firm or industry to an exogenous macroeconomic parameter which determines the distribution of aggregate income between wages and profits – has obscured the subtleties of Kalecki's original theory. Issues surrounding the role of firms' pricing decisions in determining the distribution of profits within and between industries and sectors have been largely neglected.

This chapter is organised as follows: the next section examines the relationship between the degree of monopoly and the aggregate distribution of income in Kalecki's own writings. Particular attention is given to Kalecki's repeated attempts to overcome the problems involved with aggregating his microanalysis of the firm to the level of the economy as a whole. Section 11.3 examines Steindl's use of a Kaleckian framework for the analysis of the determinants of long-run growth. Section



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

11.4 discusses the role of the mark-up in the more recent post-Kaleckian growth models and the associated literature on wage-led versus profit-led growth. Section 11.5 concludes.

## 11.2 Kalecki's theory of income distribution

One of the fundamental differences between Kalecki's economic theory and the orthodoxy which prevailed during the time in which his thoughts developed lies with his refusal to accept perfect competition as a valid approximation to the structure of the capitalist economy. While orthodox economics has recently conceded this point, with monopolistic competition becoming the standard market structure used in the construction of modern dynamic general equilibrium models, many of the assumptions underlying this orthodox approach remain at odds with those adopted by Kalecki.

For Kalecki, rejection of the assumption of perfect competition meant not only that prices would exceed marginal costs – as in modern general equilibrium models – but also that marginal costs should be regarded as being close to constant over the relevant ranges of output and production. This is because under imperfect competition output is constrained not by costs primarily, but by demand. Firms therefore generally operate with excess capacity, implying that output can be increased without a corresponding rise in prices. The result of these assumptions is that the share of revenues accruing as profits at the firm level is directly proportional to the price mark-up.

Kalecki's analysis of the relationship between prices, costs and income distribution at the aggregate level was a topic to which he returned a number of times. The theory underwent several of revisions in attempts to overcome the conceptual difficulties of reconciling microeconomic concepts with macroeconomic outcomes. Nonetheless the assumption that prices of manufactured goods are set as a mark-up over nearly constant marginal costs remained central to his analysis in almost all iterations of his theory.[1] This price mark-up is closely related to the concept of the degree of monopoly of an enterprise $\mu$ (introduced by Lerner, 1934), which is defined as 'the ratio of the difference between price and marginal cost to price' (Kalecki, 1938: p. 7):[2]

$$\mu = \frac{p - m}{p} \tag{11.1}$$

The foundations of Kalecki's theory of income distribution are introduced in 'The Determinants of Distribution of the National Income'



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

(1938). While this analysis starts from pricing at the level of an individual firm, the target of investigation is the distribution of income at the aggregate level: 'Our proper task is to find the relative share of wages *W* in the national income *Y*.' (Kalecki, 1938: p. 13)

The problem is set out by defining the marginal cost of production *m*, as equal to the sum of four elements: the marginal costs of depreciation, salaries, wages and raw materials respectively.[3] The price of output *p*, is equal to the sum of the *average* cost of each of these four items, plus 'average capitalist income'.

Kalecki argued that the difference between average and marginal costs in the case of wages and raw materials is likely to be so small that it may be discounted. If salaries and depreciation (and interest in the case of Kalecki, 1939b) are combined into 'overhead costs'; this implies that the difference between price and marginal costs will be comprised primarily of the average share of capitalist income plus the difference between marginal and average overhead costs:[4]

$$p - m = p\mu = c_a + (o_a - o_m) \tag{11.2}$$

In the above formula, $c_a$ refers to average capitalist income, and $o_a$ and $o_m$ refer to average and marginal overhead costs respectively. To get from here to the relative shares in aggregate output, the entire formula is first multiplied by total output, *x* and then summed over all firms to give the following:

$$\sum xp\mu = \sum xc_a + \sum x(o_a - o_m) \tag{11.3}$$

Now, $\Sigma xc_a + \Sigma xo_a$ are simply the total nominal income of capitalists *C*, and total nominal overhead costs *O*, respectively. Since the marginal component of overhead costs will generally be small in comparison to the average component, this may be dropped, leaving the following:[5]

$$\sum xp\mu = C + O \tag{11.4}$$

Finally, both sides of this equation are divided by aggregate turnover $T = \Sigma\, xp$.

$$\frac{\sum xp\mu}{\sum xp} = \frac{C+O}{T} = \bar{\mu} \tag{11.5}$$



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

This gives a ratio representing the average degree of monopoly weighted by the shares in total revenues, denoted as $\overline{\mu}$. Thus, given Kalecki's assumptions about the effects of imperfect competition on the shape of the relevant cost curves, and in strong contrast to the marginalist theory of income distribution, he arrived at the following proposition:

> The relative share of gross capitalist income and salaries in the aggregate turnover is with great approximation equal to the average degree of monopoly. (Kalecki, 1938: p. 9)

Kalecki went on to investigate the share of wages $W$, in income $Y$. This is complicated by the fact that total turnover $T$, represents total gross revenues of firms. At the level of an individual firm, turnover is equivalent to total revenue. Summed at the aggregate level, this becomes total gross aggregate revenues. The variance between this measure and total value added (nominal aggregate supply) will depend on the degree to which firms are vertically integrated.

This is of significance to Kalecki's theory because the raw material inputs of some firms will be purchased from others, subject to the cost mark-up imposed by those other firms. However, while the remainder of raw material inputs will not be manufactured, it is not clear how the associated income accrues: Kalecki defined total income $Y$ as being composed of capitalists' income $C$, overheads $O$, and wages $W$. Thus, firms' expenditures on raw materials do not accrue as a separate category of aggregate income.[6]

Using the identity $Y - W = C + O$ to substitute for $C + O$ in equation 11.5, and multiplying both sides by $T/W$, Kalecki derives the following formula for the share of wages in output (Kalecki, 1939b: p. 245).

$$\frac{W}{Y} = \frac{1}{1 + \overline{\mu} \cdot (T / W)} \tag{11.6}$$

The distribution of national income between profits, wages and overhead costs is thus determined through the interaction of two main factors: the aggregate weighted degree of monopoly $\overline{\mu}$ and the ratio of raw material costs to wages. The last of these is incorporated only implicitly in the above formula, via the term $T/W$, as a result of the issues outlined above. However, this term is not independent of $\overline{\mu}$ resulting in the fact that there is no direct correlation between $T/W$ and the ratio of raw material costs to wages.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Given the aggregation procedure used by Kalecki, the weighted aggregate degree of monopoly $\bar{\mu}$, will change over time as a result of two factors: changes to the price mark-up of individual firms, and changes to the relative shares in total output of these firms. Both changes in the structure of demand and changes in the pricing decisions of firms will thus result in shifts in aggregate income distribution. Further, these shifts will occur both in the distribution of income between profits and other incomes and in the distribution of profit income among the various groups of capitalists. In turn, these shifts in income distribution will have further effects on the composition of aggregate demand. As noted by Kriesler, this was pointed out by Lange in his review of Kalecki's *Essays in the Theory of Economic Fluctuations*:

> The average degree of monopoly for the whole economy being a weighted mean is changed by a shift in output between industries. Thus it has little meaning to say that the distribution of income is 'determined' by the average degree of monopoly. (Lange, 1941a: p. 281; quoted in Kriesler, 1987: p. 48)

Kalecki's subsequent contributions on the issue of income distribution reflect a growing awareness of the implications of oligopoly for his analysis (Kriesler, 1987: p. 50). In particular, these contributions show Kalecki attempting to grapple with the fact that his previous work fails to take into account the fact that the pricing decisions of firms within an oligopolistic industry are not independent of one another – the analysis above moves from pricing decisions at the level of the firm directly to income distribution at the aggregate level without taking into account the industry-level effects caused by firms reacting to price changes by other firms.

Kalecki's initial two attempts to incorporate the interdependency of firms' pricing decisions (1940, 1941) were built upon the newly developing economics of imperfect competition that was emerging at the time from Cambridge, England, in the work of Joan Robinson and others. Kalecki's subsequent dissatisfaction with these 'marginalist' analyses of the distribution of income led him to to abandon this line of investigation and return instead to his initial formulations in an attempt to refine the analysis of his earlier papers.[7]

This task was first undertaken in Kalecki (1943b) and the analysis was developed further in Kalecki (1954[1965]). The former essay takes the analysis of Kalecki (1938); Kalecki (1939b) as a starting point, but instead of aggregating over individual firms to examine the distribution



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

of income at the level of the economy as a whole, the analysis introduces the intermediate stage of the distribution of income at the industry level. At the same time, Kalecki dropped the relatively complex reasoning used to justify the assumption that marginal and average prime costs are close enough for the difference to be negligible. Instead, it is assumed 'for the sake of simplicity that the average prime cost $a_k$ of any product is *strictly* constant when output fluctuates' (1943b: p. 119). Marginal costs are therefore also constant and equal to average prime costs for any individual firm, up until the point at which full-capacity output is reached.

These modifications serve to simplify the analysis, and result in the fact that for any firm the share of revenues accounted for by overheads and profits is equal to the percentage gross margin, which is in turn given by $(p–a)/p$ where $p$ is the price of output and $a$ is the average prime cost. This can be used, as before, to find a weighted average $\bar{\mu}$ of the percentage gross margins of the firms within an industry, again using as weights the respective revenues of those firms.

At the industry level, the ratio of profits and overheads to revenues is then equal to $\bar{\mu}$. The ratio of profits plus overheads to prime costs is thus equal to $\bar{\mu}/(1-\bar{\mu})$. Since the net output or value-added of an industry $y_n$ is equal to the sum of profits, overheads and wages, it is given by the following formula (Kalecki, 1943b: p. 175),

$$y_n = \frac{\bar{\mu}}{1-\bar{\mu}}(1+m)W + W \tag{11.7}$$

where $m$ is the ratio of raw material costs to wages. This can be rearranged and simplified to give the share of wages in the value-added of an industry:

$$w = \frac{1-\bar{\mu}}{1+\bar{\mu}m} \tag{11.8}$$

Thus the share of wages in the value-added of any given industry is inversely related to both $\bar{\mu}$ and $m$.

As noted before, this analysis is essentially a refinement of Kalecki's earlier reasoning about the implications of mark-up pricing in the context of nearly constant marginal costs. By aggregating only to the industry level, Kalecki again side-stepped the issue of the income which accrues as the counterpart to raw materials costs: these materials are assumed to be 'imported' by the industry as a whole. However this introduces a new complication, in that the definition of an industry is not clear-cut.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

This theory is developed further in Kalecki (1954[1965]), in which Kalecki explicitly introduced the prices of other firms within an industry into the pricing decision of the individual firm. Another further simplification is introduced in this version of the theory in that overhead costs are assumed to be fixed, so that 'the level of output and prices at which the sum of overheads and profits is maximised is at the same time the level which may be considered most favourable to profits' (p. 12).

Thus, the only factors affecting the pricing decision of an individual firm will then be unit prime costs $u$ and the prices of other firms in the same industry, represented as a weighted average $\overline{p}$, so

$$p = mu + n\overline{p} \tag{11.9}$$

where $m$ and $n$ are positive coefficients, such that $n < 1$. The coefficient $m$ captures the influence of average prime cost on price, while $n$ explicitly incorporates the influence of other firms' pricing decisions. Since $n<1$, any increase in the weighted average price of the industry, with unchanged average prime costs for the individual firm, induces a less than proportionate change in the price charged by that firm.

The pricing equations for all firms in an industry may be aggregated as before by weighting each equation by the output of the firm, and summing to give

$$\overline{p} = \overline{m}\,\overline{u} + \overline{n}\,\overline{p} \tag{11.10}$$

In this equation, $\overline{u}$ is the weighted average unit prime costs of the industry, $\overline{m}$ is the average of $m$ weighted by the total prime costs of each firm and $\overline{n}$ is the average of $n$ weighted by respective outputs. This can be rearranged to give

$$\overline{p} = \frac{\overline{m}}{1-\overline{n}}\,\overline{u} \tag{11.11}$$

The degree of monopoly of an industry is thus represented by the coefficient of weighted unit prime costs, $\frac{\overline{m}}{1-\overline{n}}$. Kalecki identified a number of factors which may give rise to changes in the degree of monopoly captured by these two coefficients: firstly the tendency towards ever-greater concentration of industry sets up a tendency towards higher price mark-ups. Related to this is the potential for non-price competition to displace price competition through, for example, 'the development of sales promotion through advertising, selling agents etc. These



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

practices will obviously cause a rise in the degree of monopoly' (Kalecki, 1954[1965]: p. 17).

Secondly, Kalecki considered the potential for changes in the degree of monopoly to arise either as a consequence of shifts in overheads in relation to prime costs or as a result of the power of trade unions. The influence of the first of these is regarded as being likely to give rise to greater 'protection of profits', particularly during a downturn, leading to 'a tendency for the degree of monopoly to rise during the slump, a tendency which is reversed during the boom' (ibid: p. 18). The latter exerts a counteracting tendency since high profit margins set up the potential for trade unions to demand wages rises while still allowing firms to maintain 'reasonable profits'. Thus trade unions tend to exert a restraining force on the degree of monopoly. This final point shifts the emphasis of the determinants of the distribution of income away from the pricing decision of the firm, and towards the labour market and the wage bargain. Kalecki returned to this point in 'Class Struggle and the Distribution of National Income' (1971a), discussed in more detail below.

Kalecki (1954[1965]) presents a final attempt to make the leap from analysis at the level of an industry to the distribution of national income. Given price formation as in equation 11.11, the ratio of total revenues to prime costs is determined by the degree of monopoly and may be represented by a coefficient *k*. Since prime costs are composed of wages *W*, and raw materials costs *M*, this implies the following:

$$\mathit{overheads} + \mathit{profits} = (k-1)(W+M) \tag{11.12}$$

The relative share of wages in the value added of a given industry is thus

$$w = \frac{W}{W+(k-1)(W+M)} \tag{11.13}$$

and, denoting the ratio of aggregate raw material costs to the wage bill by *j*, the following is obtained:

$$w = \frac{1}{1+(k-1)(j+1)} \tag{11.14}$$

Kalecki then argues that this formula may be applied not only at the level of an individual industry, but by subsequent degrees of approximation to manufacturing as a whole; to a group of industries comprising



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

manufacturing, construction, transportation and services; and finally to the relative share of wages in the gross national income of the private sector.

In order to apply this theory at the increasing levels of aggregation listed above, the issues highlighted previously in the chapter need to be addressed – the concept of the industry needs to be clearly defined; the income that accrues as a result of spending on raw material inputs needs to be accounted for; and the effects of changes in the composition of demand and output on the degree of monopoly need to be incorporated into the analysis.

These issues are never dealt with in a convincing manner. Kalecki argued that the coefficients $k$ and $j$ may be replaced at each additional level of aggregation by new 'ratios $k'$ and $j'$, adjusted in such a way as to eliminate the effect of changes in the importance of particular industries' (Kalecki, 1954[1965]: p. 29). But quite how these new coefficients are to be determined is not fully explained. Kalecki based his argument on claims that for the private sector excluding agriculture, mining, communications, public utilities, trade, real estate and finance, the formula would be applicable directly, since the share of wages in value added would 'decrease with an increase in the degree of monopoly or an increase in the ratio of price of primary products to unit wage costs' (ibid: p. 30). For agriculture and mining – those sectors which *produce* raw materials – the degree of monopoly alone will determine the distribution of income, while in the remaining sectors the relative share of wages in value added is negligible, so the degree of monopoly may be excluded from the analysis of these sectors. In summary:

> It will thus be seen that, broadly speaking, the degree of monopoly, the ratio of prices of raw materials to unit wage costs and industrial composition are the determinants of the relative share of wages in the gross income of the private sector. (ibid: p. 30)

The key issue which is left largely unresolved thus relates to the composition of output between different firms and industries. These problems manifest themselves in a number of ways. Firstly, as already noted, the concept of an industry is impossible to pin down in a rigorous way. Secondly, the technique of weighting the degree of monopoly of either firms or industries by the nominal value of output results in ambiguities in determining the causes of changes to the weighted degree of monopoly. Since Kalecki assumed excess capacity and thus constant unit costs, any firm or industry may respond to increased demand for



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

its product by increasing output without any change in price or price mark-up. However, at the aggregate level this firm or industry will then exert a greater influence in determining the aggregate degree of monopoly. Thus the aggregate weighted degree of monopoly may undergo shifts despite the fact that no individual price mark-ups will have changed. Related to this is the fact that weighting by the *value* of output also implies that changes in *price* for any given firm or industry will lead to a change in the relative weights at the aggregate level. Finally, as noted by Kriesler (1987: p. 66), in an oligopolistic market setting, these two problems are not even independent: output and price are determined simultaneously.

The complex inter-dependencies involved in locating a meaningful aggregate 'degree of monopoly' serve to highlight another, less obviously significant, phenomenon. This is the fact that changes in prices or volumes of output of individual firms or industries will affect not only the aggregate degree of monopoly – and thus the share of wages in output – but will also lead to changes in the distribution of aggregate profits among firms and industries. Thus the price mechanism not only determines the division of output between wages and profits, but also acts to distribute those profits among the capitalist class. This function is emphasised by Toporowski in his review of López and Assous (2010):

> In Kalecki's analysis of capitalism, profits are determined by capitalists' consumption and their investment [...] The function of the price system is to distribute that surplus around the capitalists and firms in the economy. This is a key point that distinguishes Kalecki's theory from that of many Ricardian Marxists, and Post-Keynesians, for whom profits are a mark-up on labour costs, so that the price system determines the distribution of income between wages and profits. (Toporowski, 2011)

On this point, López and Assous compare Kalecki's analysis to that of Marx. They argue that while both authors view class struggle as the ultimate determinant of the distribution of income, Marx assumed a competitive product market. Kalecki's shift to imperfect competition implies that class struggle then takes place both through wage bargaining, and the price-setting of firms:

> In Marx's analysis, changes in the real wage and in the rate of surplus value appear to be determined exclusively in the labour market [...] prices seem to play a passive role in that business are "price-takers"



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> [...] Kalecki [...] retained the general focus of Marx and in particular the idea that the distribution of income is determined ultimately by the class struggle [...] But he took into consideration the new reality of imperfect competition as an element which is not marginal, but rather predominant, in contemporary capitalism [...] In his conception, business are now "price-makers" [...] Thus, the distribution of income is determined as much in the labour market as in the market for commodities. (López and Assous, 2010: pp. 196–197)

The role of this process of class struggle in determining the distribution of the surplus among the capitalist classes is brought out most clearly in Kalecki's final discussion of income distribution in the posthumously published 'Class Struggle and the Distribution of National Income' (Kalecki, 1971a). In this article Kalecki returned to his previous assertion that trade union power will tend to restrain the degree of monopoly, but considered the implications of the wage bargain at the level of individual firms or sectors. By dividing the economy into three sectors – producing investment goods, capitalist consumption goods and wage goods respectively – he demonstrated that a rise in the real wage will have differential effects across these sectors. In particular, increased consumption demand resulting from a rise in real wages leads to an increase in output and in employment in the sector producing wage goods, while in the remaining two sectors output and employment remain unchanged or decrease. Thus, even though the mark-up falls by the same proportion in all three sectors, the effects on the *volumes* of profits – and thus the relative share of the surplus accruing to capitalists in each sector – will differ.

Kalecki's theories on pricing and distribution are integrated with his theory of profits and aggregate demand to give an account of the dynamics of the determination of output and employment. Since workers are assumed to consume all of their income, it is the saving and investment decisions of capitalists which determine the volume of output. The division of this output between workers' consumption and profits is determined by the degree of monopoly and other factors such as the cost of raw materials relative to wages:

> The above clarifies the role of the 'distribution factors', that is factors determining the distribution of income (such as degree of monopoly) in the theory of profits. Given that profits are determined by capitalists' consumption and investment, it is the workers' income [...] which is determined by the 'distribution factors'. In



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

> this way capitalists' consumption and investment conjointly with the 'distribution factors' determine the workers' consumption and consequently the national output and employment. The national output will be pushed up to the point where profits carved out of it in accordance with the 'distribution factors' are equal to the sum of capitalists' consumption and investment. (Kalecki, 1954[1965])

The integration of these theories of pricing, income distribution, aggregate demand and profits results in a coherent systematic account of the dynamics of the capitalist system. However, the issues resulting from the aggregation of microeconomic concepts to derive 'distribution factors' at the macroeconomic level are never fully overcome. It may be argued that these issues are only of real significance in the case of long-run analysis, in which case such 'distribution factors' will be subject to shifts resulting from secular trends in the underlying structure of the economy. Kalecki's emphasis on the short run, and his decision to analytically separate cycles from trend growth of output, largely precludes such issues from undermining his conclusions. Nonetheless, Kalecki argued that the analysis is also largely valid over the longer period, but that it is impossible to predict the long-term trend in the wage share:

> The long-run changes in the relative share of wages, whether in the value added of an industrial group such as manufacturing or in the gross income of all the private sector, are [...] determined by long-run trends in the degree of monopoly, in the prices of raw materials in relation to unit wages costs, and in industrial composition. The degree of monopoly has a general tendency to increase in the long run and thus to depress the relative share of wages in income [...] It is difficult, however, to generalize about the relation of raw material prices to unit wage costs [...] or about industrial composition. No *a priori* statement is therefore possible as to the long-run trend of the relative share of wages in income. (Kalecki, 1954[1965])

The application of Kalecki's theory to the long-run analysis of growth and income distribution was first undertaken by Josef Steindl, before being picked up by a number of subsequent authors.

## 11.3 Steindl's theory of income distribution

Steindl's book *Maturity and Stagnation in American Capitalism* (1952) is an attempt to provide an explanation for the secular decline in the growth



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

rate of the American economy which culminated in the decade of depression preceding the Second World War. In Steindl's analysis, what lies at the heart of this decline is the inability of saving rates to adapt to a reduced rate of capital accumulation: 'the economy is unable to adjust to low growth rates because its saving propensity is adjusted to a high one' (Steindl, 1979: p. 1).

This rigidity stems from the saving behaviour of both firms and the public. With rising levels of concentration in the firms sector, the 'saving' behaviour of firms becomes increasingly inelastic. This is a consequence of changes in the way that firms respond to the unused productive capacity which arises in an oligopolistic market structure.

On the household side, Steindl dropped Kalecki's assumption that wage income is entirely consumed. Introducing saving out of wages into the analysis has two main implications: firstly, another source of deficiency in aggregate demand is introduced, and secondly, the potential arises for the firms sector as a whole to become indebted towards the household sector. Steindl emphasised the importance of differential saving rates out of different classes of household income. In particular, he argued that the saving propensity out of dividends and interest and out of the incomes of the professional salaried classes is higher than out of wage income. The relatively protected status of such incomes in the face of a downturn results in the overall inelasticity of household saving to aggregate income.

Kalecki's analysis is extended in a number of important ways. Firstly, as already noted, the focus shifts from the dynamics of cycles around the steady state to an examination of those factors which influence growth and income distribution over the long run. Secondly, the existence of excess capacity takes on a central role in Steindl's theory. While Kalecki's results depend on the existence of excess capacity – and thus the possibility of output increasing without a rise in prices – excess capacity in itself does not directly affect the decisions of firms. In Steindl's analysis, the existence of undesired excess capacity acts as a drag on the investment of monopolised firms, and thus plays a central role in his theoretical system:

> It is surprising that this equilibrium excess capacity should never have been dealt with in the same way as other forms of idle reserves, for example, stocks of commodities, or balances of money. It would then have to be explained as a reserve held in anticipation of future events, or in view of some existing uncertainty. (ibid: p. 9)

Steindl argued that in a competitive market firms will react to excess capacity by cutting prices, leading to a reduction in the mark-up on



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

costs and thus in profit margins. However, this cost-cutting will drive out 'marginal' producers, resulting in rising concentration. Once competition gives way to oligopoly, firms become wary of cost-cutting and cease to react to excess capacity by cutting prices.

This leads Steindl to explicitly incorporate the distribution of profits within the capitalist class into the theory. The long-run tendency towards increasing industrial concentration results in a 'cartelised' sector of the economy, characterised by a high degree of monopoly. At the same time, it is argued, there remains a fringe of firms operating in markets which reasonably approximate a competitive structure. The relative inelasticity of mark-ups in the cartelised sector of the economy implies that gross profit margins will be higher for firms in this sector. Further, the tendency towards increased concentration will result in a rise in the relative share of profits accumulating in the cartelised sector, at the expense of competitive firms. This 'maldistribution of profits' will in turn lead to disproportionately higher gearing ratios in the competitive firms sector.

Steindl thus developed and refined Kalecki's insight that a long-run rise in the degree of monopoly will be associated with a redistribution of profit income to monopolised sectors of the economy at the expense of competitive firms:

> The changes in the degree of monopoly are not only of decisive importance for the distribution of income between workers and capitalists, but in some instances for the distribution of income within the capitalist class as well. Thus, the rise in the degree of monopoly caused by the growth of big corporations results in a relative shift of income to industries dominated by such corporations from other industries. In this way income is distributed from small to big business. (Kalecki, 1954[1965]: p. 18)

Like Kalecki, Steindl's analysis is first carried out in the context of an individual industry, assumed to be 'self-contained' in that firms do not invest outside their own industry. The theory is then extended to the case of the economy as a whole.

### 11.3.1 The case of an individual industry

In an industry where competitive conditions prevail, Steindl argued, there exist forces which operate to prevent the build-up of idle productive capacity. These mechanisms operate primarily through their influence on the gross profit margin. Increasing concentration of industry



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

leads to a reduction in the elasticity of the mark-up and thus the gross profit margin, with respect to excess capacity.

Concentration of industry is seen by Steindl as an inevitable consequence of cost-cutting innovations. As some firms introduce lower-cost technologies, the increased profit margins, and thus retained earnings, of these 'progressive' firms generate 'internal accumulation' (retained earnings) in excess of that which may be absorbed by investment, given the rate of expansion of the industry as a whole. Steindl argued that this accumulation will lead to an 'explosive force': price-cutting by lower-cost progressive firms will cause higher-cost firms to be driven out of the industry. This expulsion of high-cost firms will act to reduce profit margins once more, but will lead to a new equilibrium with fewer firms in total.

The relationship between sales growth, capacity utilisation and profit margins for an industry in which a process of concentration is under way can be analysed algebraically as follows. The overall rate of sales growth $R$, for the industry as a whole is dictated by the growth of demand and is thus initially assumed to be exogenous. The overall rate of expansion of sales *for those firms which remain in the industry* at the end of a period in which a process of elimination has taken place may then be decomposed into component rates of change, as in the following equation,

$$R = u' + g' - k' - c + \alpha \tag{11.15}$$

in which $c$ denotes the ratio of eliminated firms' sales to total industry sales and the other terms represent proportionate rates of change of the following magnitudes: capacity utilisation $u'$, the gearing ratio, $g'$, capital intensity $k'$ and retained earnings $\alpha$ (Steindl, 1952: p. 48).[8]

For any given firm, the rate of internal accumulation $\alpha$, is determined by the *net* profit margin, which at a given price of output is a function of the cost of production and the level of capacity utilisation:

> The net profit margin can, in fact, change for two quite different reasons: either because of a change in utilisation of capacity, with an otherwise unchanged structure of costs and prices; or the net profit margin can change at a *given level of capacity utilisation*. (Steindl, 1952: p. 46)

If the possibility of elimination of high-cost firms is initially put to one side, with the rate of sales growth $R$, assumed constant, an increase in the growth of retained earnings $\alpha$, can only be accommodated by a fall in the



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

rate of capacity utilisation (as a result of overinvestment), an increase in the capital intensity of production, or a fall in the gearing ratio.

Steindl argued that of these possibilities an increase in capital intensity is the most feasible 'outlet for funds'. It is unlikely that leverage will be reduced in the face of the new profit opportunities presented by an expanding industry, and it is improbable that firms will voluntarily undertake investment in capacity that is likely to stand idle.

Aside from the possibility of increasing capital intensity of production, it can thus be seen that in the absence of elimination of high-cost producers, a maximum is set on the rate of internal accumulation, and thus profit margins, by the overall rate of expansion of the industry as a whole.[9]

> The conclusion which emerges [...] is the following: the rate of internal accumulation is limited by the rate of expansion of the the industry and the rate of capital intensification. The net profit margin at given levels of capacity utilisation [...] is therefore also limited by these factors. (Steindl, 1952: p. 50)

This conclusion holds in the case of 'conditions where the process of absolute concentration is already over', but is modified in the case that cost-cutting innovations allow progressive firms to engage in competitive price-cutting, eliminating high-cost competitors and increasing market share. In this case, an increase in $a$ is accommodated by a corresponding temporary increase in $c$ (representing the rate of elimination of uncompetitive firms). Once this process of elimination has taken place, however, a new 'equilibrium' is reached with a lesser number of firms, in which internal accumulation is once more constrained by the factors described above.

At the industry level, Steindl thus presents a rich analysis of the interaction between cost competition, capacity utilisation and profit margins in which he concludes that the rate of output growth for the industry as a whole acts as a restraint on the volume of profits that can be 'absorbed' by firms in that industry over any time period. Other than increasing the capital intensity of production, this constraint can only be overcome through the elimination of high-cost producers by competitive price cutting.

### 11.3.2 Accumulation in the economy as a whole

This industry-level analysis can be extended to the case of the economy as a whole, with a few important modifications. Assuming now a fixed



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

market structure, such that the elimination of low-cost firms is excluded from consideration, the equation expressing the dynamics of growth for an industry can be applied at the level of the entire economy. Rewriting Equation 11.15, and rearranging terms gives the following:

$$R + k' - u' = g' + \alpha \tag{11.16}$$

The variables must now be taken to represent rates of change for the entire economy, not an individual industry. This equation is in essence identical to the Keynesian identity that *ex post* saving must equal investment, expressed in growth terms. The left-hand side represents the growth rate of the capital stock, decomposed into growth rates of output, capital intensity and capacity utilisation. The right-hand side equals the growth rate of total saving, since $\alpha$ is the growth of 'internal accumulation' while $g'$ is the rate of change of the gearing ratio.

The meaning of the ratio $g'$ must now be reconsidered. Whilst at the industry level this ratio refers to the ratio of borrowed funds to own capital, at the aggregate level it represents the ratio of 'internal accumulation' to 'outside saving' for the firm sector as a whole. Since $g'$ is the *rate of change* of the gearing ratio, if 'internal accumulation' and 'outside saving' grow at an equal rate, then $g$ will remain constant and $g' = 0$.

Achieving the desired value of this gearing ratio presents problems for firms, since it is co-determined by their internal accumulation and 'outside saving' – the accumulation of financial assets by households. Any given desired gearing ratio will only be attainable if the marginal propensity of households to save exhibits the same elasticity to the variables of the system as the rate of internal accumulation, a highly unlikely scenario. In particular, Steindl emphasised the case where, in the face of an initial fall in growth – due, for example, to an adjustment in one of the structural coefficients of the system – the rate of investment growth falls below the rate of saving growth.

In such a situation, the rate of profit will fall in line with the drop in the rate of accumulation. Since Steindl followed Kalecki in assuming that the saving of capitalists is determined as a constant proportion of profits, the rate of internal accumulation will likewise fall. The fall in the rate of profit will also lead to a reduction in the desired gearing ratio of firms, requiring that the growth rate of household saving be reduced by a *greater* degree than the rate of internal accumulation. However, since household saving is assumed to be less elastic than retained earnings, this is impossible and the gearing ratio *increases*. Equivalently, an exogenous increase in the rate of growth of the capital stock will lead to an increase



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

in the rate of profit. This in turn increases the rate of internal accumulation and will therefore result in a reduction of the gearing ratio.

On the firms' side, the fall in the rate of profit will result from a reduction in net profit margins, but this reduction may be achieved either through a reduction in the price mark-up or through a fall in the rate of capacity utilisation. Which of these predominates will largely be determined by the market structure: in a competitive market a reduction in profit margins at unchanged capacity utilisation is to be expected. However, in an oligopolistic market in which a process of concentration has been under way for some time, it is more likely that firms will react by scaling back on production than by reducing price mark-ups. This reduction in output will lead to an increase in unused capacity, which in turn is likely to trigger further reductions in the growth of investment.

Reductions in the rate of growth are thus likely to be self-reinforcing. The resulting rise in the gearing ratio and fall in the rates of profit and capacity utilisation will cause feedbacks leading to further falls in the rate of accumulation. These effects will not be felt evenly across all firms, however. In particular, if the process of concentration in the oligopolistic sector of the economy leads to a rise in price mark-ups, this shift in income distribution towards profits in the cartelised sector will place downward pressure on aggregate demand. But this fall in aggregate demand will affect all industries simultaneously, and thus will reduce rates of profit disproportionately in the competitive sectors of the economy. Reduced accumulation is thus accompanied both by increased overall gearing, and a redistribution of profits from competitive to oligopolistic firms. This 'maldistribution of profits' will result in the gearing ratio rising disproportionately in the competitive sectors of the economy as a greater share of profits accrues in the oligopolistic sector.

Steindl's analysis thus provides a detailed account of the processes which combine to generate long run trends in growth or stagnation. Like Kalecki, Steindl attempted to present his theoretical system in the form of mathematical macroeconomic model. While this model is not sophisticated enough to incorporate all the elements of his theoretical system, it contains a number of key features which have since become standard in the literature based around post-Kaleckian growth models (discussed in more detail in the next section).

In Steindl's mathematical model, aggregate demand is determined by the investment decisions of firms and the distribution of income between firms and households – given the different saving propensities of the two classes. In addition to being a function of profits, as in Kalecki's model, investment is also influenced by the gearing ratio and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

the level of excess capacity. The inclusion of these additional arguments into the investment function alters the way that the system adjusts to a shift in the aggregate distribution of income: with an increase in the mark-up, and thus the gross profit margin, aggregate demand and output will fall. The resulting increase in the gearing ratio and rise in the level of excess capacity will induce a fall in the rate of investment, and thus the growth rate.

While in Steindl's formal model the distribution of income is determined purely by the gross margin of the firms' sector – and thus the price mark-up – the chapters preceding this model contain a detailed account of the factors involved in the division of national income. Of particular significance are the maldistribution of profits in the firms sector and different propensities to save out of different types of household income, which in turn have different elasticities with respect to output. The use of an aggregate mark-up in the model is therefore a device used for the sake of tractability. Steindl made it clear that the model is only intended as a first sketch: 'It is evident that the model presented cannot be more than a beginning in the theory of endogenous long-run economic development' (Steindl, 1952: p. 50).

Nonetheless, the key features of Steindl's model – the sensitivity of investment to the level of excess capacity, and determination of aggregate demand by the level of investment in combination with 'distribution factors' represented by an exogenous aggregate mark-up – have become the core features of the more recent post-Kaleckian growth models to which the discussion now turns.

## 11.4 Income distribution in post-Kaleckian growth models

Not long after the publication of Steindl's book, another strand of non-marginalist 'Keynesian' theories of growth and distribution appeared in a series of papers authored by Kaldor (1955), Kaldor (1966) and Pasinetti (1962). These theories, in contrast with the neoclassical growth model of Solow (1956), were 'designed to project into the long period the central thesis of the General Theory, that firms are free, within wide limits, to accumulate as they please and that the rate of saving of the economy as a whole accommodates itself to the rate of investment that they decree' (Robinson, 1962: pp. 82–83).

The main problem with these Cambridge growth models arose from the assumption of a fixed level of capacity utilisation. This led – in conjunction with the assumption in common with Steindl of a higher



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

propensity to save out of profits than out of wages – to the result that a higher rate of accumulation can only take place through a redistribution of income from wages to profits. The resulting inverse relationship between wages and profits gave rise to 'the generally accepted idea, derived from Cambridge growth models, that higher growth requires greater inequality' (Dutt, 1984: p. 25).

Bhaduri and Marglin's description of the Keynesian objection to such a system is that if capacity is allowed to vary and investment depends upon the rate of profit, higher real wages should lead to an increase in the rate of profit, and thus accumulation.

> [H]igher real wages should increase aggregate demand, at least under the assumption that the propensity to save out of wages is less than the propensity to save out of profits. Although higher wages may diminish the profit per unit of output, business will make up the difference by an increased volume of production and sales. If investment demand increases with the rate of capacity utilisation, there will be even greater aggregate demand, and both aggregate profits and the profit *rate* will be higher even as the profit *share* is lower. (Bhaduri and Marglin, 1990: p. 154)

The reasoning behind this objection can also be found in Kalecki (1971a) who argued that an increase in the real wage would increase workers' consumption and thus output and employment:

> It follows from the above that a wage rise showing an increase in trade union power leads – contrary to the precepts of classical economics – to an increase in employment. And conversely, a fall in wages, showing a weakening of their bargaining power, leads to a decline in employment. The weakness of trade unions in a depression, manifested in permitting wage cuts, contributes to deepening unemployment rather than to relieving it. (Kalecki, 1971a)

If on the other hand capacity utilisation is allowed to vary, as in Steindl's model, a higher rate of accumulation may be accommodated without a change in the functional distribution of income: higher output with a given capital stock and an unchanged mark-up over costs (in the form of real wages) will result in a higher rate of profit, a reduction in excess capacity, and thus higher accumulation.[10]

The neo-Kaleckian growth model first appeared in two papers, Rowthorn (1981) and Dutt (1984), which appear to have been written



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

independently.[11] This model combines elements of the Cambridge growth models with the innovations introduced by Steindl: variable capacity utilisation and sensitivity of investment demand to excess capacity. The neo-Kaleckian model in its most basic form comprises a set of three equations: a pricing/profit function, a saving function and an investment function (Lavoie, 2008a).

The first of these is essentially equivalent to combining Steindl's equation for the rate of aggregate accumulation, equation 11.16, with an exogenous price mark-up, resulting in an expression for the rate of profit $r$:[12]

$$r = \frac{mu}{v} \tag{11.17}$$

In this equation, $u$ and $v$ refer to the rate of capacity utilisation and the inverse of the level of capital intensity, respectively.[13] Their product gives the ratio of output to the capital stock, $Y/K$. Multiplying by the gross margin $m$ thus gives the rate of profit: the ratio of profits to the capital stock.

The saving function of the system is derived in a straightforward manner from the assumption that workers consume their entire income. The aggregate rate of saving in growth terms $g^S$, is thus equal to the propensity to consume of capitalists $s_c$, multiplied by the rate of profit $r$.

$$g^S = rs_c \tag{11.18}$$

Finally, the rate of accumulation $g^I$, is a function of animal spirits, excess capacity and the rate of profit:

$$g^I = \gamma + \gamma_u u + \gamma_r r \tag{11.19}$$

Since saving must equal investment, the saving and investment functions can be combined to give the following aggregate demand function,

$$r = (\gamma_u u + \gamma) / (s_p - \gamma_r) \tag{11.20}$$

The intersection of this aggregate demand equation with the pricing/profit equation, equation 11.17, gives the long-run equilibrium growth rate of the model, along with the associated rates of profit and capacity utilisation.

The key feature of this model is that there exists an inverse relationship between the price mark-up – and thus the share of profits in



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

income – and the rate of growth. This is demonstrated in Figure 11.1. Aggregate demand, as represented by equation 11.20, is shown by the line AD. The pricing/profit equation, equation 11.17, is represented by the lines PP1 and PP2. An increase in the price mark-up and thus the share of profits in income is shown in the shift of the pricing/profit line from PP1 to PP2. This leads to an increase in the level of excess capacity and a fall in the rate of profits. As a consequence the growth rate of investment and the overall growth of output both fall.

In the neo-Kaleckian growth model, the 'degree of monopoly' is thus a purely exogenous parameter which fully determines the distribution of income between wages and profits. This parameter is of particular significance in a recent empirical literature which is based upon a modified version of the neo-Kaleckian growth model. This literature takes as its starting point Bhaduri and Marglin's (1990) influential critique of the neo-Kaleckian model in its standard form. In this paper, Bhaduri and Marglin argue that the investment function shown in equation 11.19 is mis-specified and that the rate of investment growth should instead be a function of capacity utilisation *u*, and the gross margin *m*.

The reason for replacing the rate of profit *r*, with the gross margin *m*, relates to the result that growth is 'wage-led' in the post-Kaleckian model. However, Bhaduri and Marglin argue that the effect of an increase

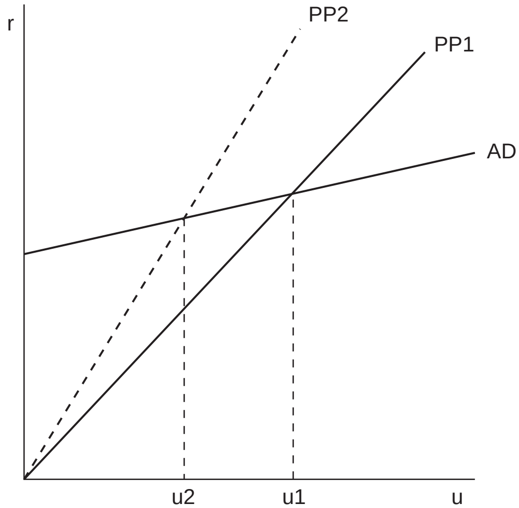



*Figure 11.1* A higher price mark-up leads to an increase in excess capacity and a fall in the rate of profit



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

in the mark-up on investment growth is in fact ambiguous since it is the outcome of two counteracting tendencies: a higher profit margin should induce higher investment, while the simultaneous reduction in aggregate demand and thus greater excess capacity should have the opposite effect. Which of these two factors predominates will determine whether growth is 'wage-led' or 'profit-led'. Their objection to the investment function of equation 11.19 is that 'it imposes unwarranted restrictions on the relative response of investment to the two constituents of the profit rate, [capacity utilisation] and [the mark-up], with the result that the possibility of profit-led expansion is ruled out' (Bhaduri and Marglin, 1990: p. 380).

The modified version of the neo-Kaleckian model, incorporating the investment function proposed by Bhaduri and Marglin has given a rise to a large empirical literature. This literature attempts to determine the relative sensitivity of investment to the mark-up and to capacity utilisation using econometric estimations of the Bhaduri and Marglin investment function. This allows the historical growth path of individual countries to be classified as either 'profit-led' or 'wage-led'. The seminal contribution to this literature was a study by Bowles and Boyer (1995). Significant subsequent contributions include Naastepad and Storm (2007) and Stockhammer et al. (2009). Hein and Vogel (2008) provide a good literature review.

In the paper in which Bhaduri and Marglin's (1990) model first appears, they justify the use of an exogenous mark-up, and thus real wage, as follows: 'in order to examine the connection between real wage and unemployment it is necessary to perform at least "thought experiments" based on exogenous variations in the real wage rate' (p. 376). However, in the subsequent literature generated by this model, the role of the mark-up has shifted from that of an exogenous parameter in a thought experiment, to a key empirical variable, usually proxied by the share of wages in national income.

## 11.5 Conclusion

This essay has charted the voyage taken by the mark-up of price over costs in both Kalecki's economics and the theories of his followers. The starting point is located in Lerner's concept of the degree of monopoly. The concept undergoes a number of changes through the various iterations of Kalecki's attempts to reconcile the microeconomic behaviour of firms with aggregate income distribution before becoming a central element in Steindl's theories of the maldistribution of profits and



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

'enforced indebtedness of firms'. Lastly the mark-up is examined in its role as an exogenous parameter of the modern post-Kaleckian macroeconomic model.

The enduring strength of Kalecki's influence on subsequent streams of economic thought demonstrates the originality and power of his insights. Starting from the simple assertion that marginal costs may not rise but instead be constant over the range relevant for analysis, the mark-up of prices over costs is transformed from a magnitude which is of significance only at the margin into a variable which captures the distribution of income between wages and profits.

However, over the course of this journey taken by the 'degree of monopoly', some of the richness and subtlety of the theoretical systems of Kalecki and Steindl has been lost. Kalecki never satisfactorily overcame the problems he identified in transferring his microanalysis to the distribution of income at the aggregate level. In Steindl's theoretical system, the structure of the economic system is viewed as being in a state of continuous change, with alterations in the mark-up of firms leading in turn to shifts in the distribution of profits within the firms sector as well as changes in the wage share.

These theoretical puzzles and insights deserve renewed attention. Although the use of the degree of monopoly as an exogenous parameter allows for the derivation of powerful and tractable macroeconomic models which incorporate many of Kalecki's key innovations – excess capacity, an inverse relationship between real wages and employment, and the central position of investment in determining aggregate demand – it also serves to exclude a number of significant elements from the analysis.

## Notes

1. The exception to this is the brief, and subsequently abandoned, attempt made in Kalecki (1940) and Kalecki (1941) to incorporate more 'marginalist' theories of cost determination into his analysis.
2. As noted in Kriesler (1987: pp. 40–42), this definition is misleading since the relative monopoly strength of an enterprise will manifest itself across a range of variables such as output and employment in addition to the price-cost ratio. In later works Kalecki appeared to acknowledge this and instead refers to the price-cost ratio as 'reflecting' the degree of monopoly. Even this is problematic since in the presence of heterogeneous overhead costs, the price-cost ratio will not provide an accurate index of the relative monopoly position of an enterprise. Kriesler argues that: 'Given this, it is better to call $\mu$ simply the 'mark-up' as this provides a superior description.' This may also be misleading since the mark-up usually refers to the difference between



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

price and costs as a proportion of *costs*, rather than *price*. If the mark-up $\theta$, is defined in the traditional sense such that $p = (1+\theta)m$ where $p$ is price and $m$ marginal cost, then the 'degree of monopoly' $\mu$ will be given by $\mu = \theta/(1+\theta)$.

3. Kalecki (1939b) adds interest payments to this list.
4. The definition of costs includes only wages and raw materials. Other costs, such as advertising and transport costs, are thus excluded.
5. The fact that overhead costs are considered to have even a slight 'marginal' element demonstrates the distinction between this category and the fixed costs of modern microeconomics textbooks.
6. Presumably this income would constitute a pure rent. Kalecki (1938) avoids the issue in the numerical example provided by assuming that non-manufactured raw material inputs are imported (pp. 13–16). In later analyses, this is dealt with by assuming that primary products are produced using only labour as an input, so that the prices of those materials are determined by the degree of monopoly in the industries producing those goods.
7. Discussion of these 'marginalist' works can be found in Kriesler (1987: ch. 5) and López and Assous (2010: pp. 78–84).
8. This result is derived from the following equation, by assuming that the proportionate rates of changes are small enough that the products of these rates of changes are negligible enough to be dropped: $(1+R)(1+c) = (1+u')\dfrac{1}{1+k}(1+g')(1+\alpha)$
9. This result relies on the important assumption that firms do not invest outside their own industry, and thus enter into other, more rapidly expanding industries.
10. 'We need [...] to distinguish between between those shifts to and from profits which are due to effective demand, and those which result from changed price–cost relations independent of demand. The neoclassical tradition now *en-vogue* takes great delight in confusing these two states of a shift in profit. In fact, neoclassicism does not admit of anything but full utilisation in the long run, and even in the short run adopts the same assumption when considering practical problems. For the Keynesian tradition, on the other hand, the concept of utilisation is of central importance' (Steindl, 1979: p. 3).
11. According to Lavoie (1995), the main results were previously shown in a paper by Del Monte (1975), published in Italian. It seems appropriate that the model which has taken Kalecki's name should have first been published in a language other than English and attributed to the English-speaking authors who subsequently discovered it.
12. Steindl's equation additionally includes the gearing ratio. This is excluded from consideration here because, as in Kalecki's model, it is assumed that workers consume their wages in entirety.
13. Capital intensity is defined as the ratio of the capital stock to full-capacity output.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# 12
# Financial Fragility and the Kalecki Principle under Expanded Reproduction

*Andrew B. Trigg*

## 12.1 Introduction

Since the outbreak of the 2008 financial crisis that has beset the world economy, the economic establishment has belatedly turned its attention to the prophetic warnings of Hyman Minsky. Numerous contributors to the *Financial Times*, for example, have in recent years championed the 'long forgotten, and recently rediscovered, financial instability hypothesis' (Münchau, 2008). As critically appraised by Keen (2011), mainstream economists, such as the Nobel prize winner Paul Krugman, have also started to recognise the insights provided by Minsky's claim that capitalism has an in-built tendency to create unsustainable volumes of debt.

A somewhat overlooked dimension of Minsky's mature work is the use of Kalecki's theory of profits to develop the financial instability hypothesis (Minsky, 1978). Under the Kalecki principle that capitalists earn what they spend, profits are determined mainly by investment. This provides a macroeconomic source for financial instability, since whenever investment falters this can undermine capitalist profits and their ability to repay debt. The problem, however, as identified by Toporowski (2008a), is that Minsky did not fully take into account the 'revolving door' in which capitalists are able to finance their own debt through the creation of profits.

Minsky argued that as investment increases there is ever-increasing financial debt; for Kalecki, investment outlays are financed by realised profits. There is a fallacy of composition, Toporowski argues, in which debt problems can beset individual capitalists, but not the capitalist class





10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

as a whole. Lavoie and Seccareccia 2001: p. 84) similarly argue that there is a 'missing link' in Minsky's arguments at the macroeconomic level.

To examine this revolving door of profits financing debt, a consideration of production across time is required. As Minsky (1978: p. 14) argued: 'We are dealing with a capitalist economy with a past, a present and a future'. In this vein, it can be argued that when capitalists borrow money at the start of a period of production to finance investment outlays, they may be able to pay off debts at the end of that period through receipts from production – so long, that is, that investment outlays are useful for expanding capacity in subsequent periods. A fully developed theory of debt and profits requires the consideration of expanded reproduction.

One of the unifying themes of the rich and varied Polish school of Marxism, which we honour in these volumes, is the central importance of Marx's schemes of expanded reproduction. In her *Accumulation of Capital* (1913a), left-wing firebrand Rosa Luxemburg wrote: 'Karl Marx made a contribution of lasting service to the theory of economics when he drew attention to the problem of the reproduction of the entire social capital.' Oskar Lange devoted a whole book – *Theory of Reproduction and Accumulation* (1969) – to the same problem, his input–output equations being 'the same as that of Marx's schemes' (p. 47). The modelling of reproduction schemes in Kalecki's theory of profits is also claimed to be 'fully in the Marxian spirit' (Osiatyński, 1991: p. 459).

The contribution of this chapter is to explore the role of debt in Marx's reproduction schemes. Following an earlier contribution (Trigg, 2006), the Kalecki principle can be modelled in the original schemes of expanded reproduction developed by Marx. These analytical insights are extended here to explicitly consider the role of debt relationships between departments of production. Implications of this analysis will be explored for understanding the structure of debt repayments and financial fragility.

## 12.2 Investment, profits and debt

The key equation in Kalecki's theory relates gross real profits ($P$) to investment ($A$) and capitalist consumption ($u$):

$$P = A + u \tag{12.1}$$

Kalecki considered the direction of causality for this equation, dismissing the idea that firms can choose their profits (which are not under their



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

control); they are more likely to have control over investment (and capitalist consumption) spending decisions. On this basis, it is the right hand-side of (12.1) that determines the left hand-side. Profits are determined by capitalist consumption and investment. This is the Kalecki principle: that capitalists earn what they spend. Thus interpreted, this principle represents a *reverse* Say's Law. Instead of supply determining demand (Say's Law), demand determines supply (the reverse Say's Law).

This distinction, it should be noted, is not always clear in Kalecki's early writings. López and Assous (2010: p. 48) argue, for example, that for Kalecki a reduction in capitalist consumption can enhance investment 'because of the assumption of Say's law'. Similarly, Patinkin (1989: p. 36) argues that in (1) above 'Kalecki uses the symbol *A* to represent both capitalists' savings and investment' – which somewhat muddles up the causation of investment demand to profits. Patinkin explains this lack of clarity as being due to Kalecki's main objective, which was to model Marx, who has also been accused at times of slipping into Say's Law.

The pure Kalecki principle, however, can be related to the interpretation of Marx developed by Sardoni (1989), in which money is cast into the reproduction schemes by capitalist demand requirements. Sardoni shows how Marx refers to 'the sum of money that the capitalist casts into circulation to cover his individual consumption until the first reflux of his capital is exactly equal to the surplus-value that he produces and hence has to convert into money' (Marx, 1978: p. 410). This interpretation of Marx can also be found in Rosa Luxemburg's analysis of the reproduction schemes: 'if the capitalists themselves have set in motion all the money which circulates in society, they must also advance the money needed for the realisation of their own surplus value' (Luxemburg, 1913a: p. 98). There is a revolving door in Marx's analysis in which for the capitalist as a whole there is a reflux of money from the original sum cast into circulation.

For Minsky, this relationship between capitalist expenditure and profits has a key role to play in theorising financial fragility. Profits can be seen as a flow of cash to company balance sheets which 'may (or may not) validate debts and the prices paid for capital assets' (Minsky, 1978: p. 13). Long-run expectations about whether debt repayments can be met are heavily influenced by current profits. Minsky writes that 'the extent to which present profits validate decisions taken in the past affects long run expectations and thus present investment and financing decision; present investment and financing decisions in turn determine the 'parameters' within which future decisions will be made' (Minsky, 1978: p. 14).



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Vital to the lifeblood of capitalism is its success in generating profits in order to provide a signal to capitalists that debt repayments on investment can be met. But this is also the weakness of the system. Any faltering in investment, and hence in the generation of profits, will threaten the repayment of debt. For Minsky, a key aspect of financial fragility is rooted in the consequences of low investment for the repayment of debt obligations.

Minsky's hypothesis is that as capitalism grows indebtedness will increase, leading to ever-increasing financial fragility. Companies will move from hedge type finance, in which repayments are covered by cash flows, to speculative and even Ponzi type finance, in which borrowing is required to meet debt payment obligations.

Toporowski (2008a), however, has argued that Minsky has overestimated the rising indebtedness associated with capitalist expansion. In particular, he underestimates the cash flow which investment generates for some companies. Investment in capital goods, for example, generates immediate income for those companies producing those goods; they have 'no further financial or business liabilities' (Toporowski, 2008a: p. 734). Indeed, some companies can benefit from increased assets in their balance sheet as a result of investment; it is the purchasers of capital goods that will have liabilities in their balance sheets. Overall, investment leads to an increase in assets for some, an increase in liabilities for others. There is a composition of assets and liabilities, which may cancel each other out for the economy as a whole.

For Toporowski (2008a: p. 735), Minsky 'overlooked the addition that investment makes to internal finance through profits'. The locus of financial fragility should be on the indebtedness of particular individual firms, rather than on the capitalist class as a whole. In the analysis that follows, we examine this critique of Minsky under a scenario of expanded reproduction

## 12.3 The Kalecki principle under expanded reproduction

Consider the most developed of Marx's schemes of expanded reproduction, as formulated in Scheme B, Section 3, Chapter 21 of *Capital,* Volume II (Marx, 1978: pp. 586–589). There are two departments of production: department 1, producing capital goods, and department 2, producing consumption goods. The latter are used for both worker and capitalist consumption.

Values ($W_i$) for each of the two sectors, 1 and 2, assumed for simplicity to be equal to prices, are made up of constant capital ($C_i$), variable



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

capital ($V_i$) and surplus value ($S_i$). Total values ($W_1 = 6{,}000$) produced in department 1, for example, are made up of $C_1 = 4{,}000$, $V_1 = 1{,}000$, and $S_1 = 1{,}000$. A total value of $W_2 = 3{,}000$ is produced in department 2.

A uniform 100 per cent rate of surplus value is assumed between sectors, so that for each unit of variable capital a unit of surplus value is extracted. In addition, department 1 has a higher organic composition of capital $C_i/V_i$ than department 2; a ratio of 4:1 compared to 2:1. As is well known, this leads to different rates of profit, 20 per cent for department 1, and 33.3 per cent for department 2. This is an artificially specific example, in which mobility of capital between departments, due to different rates of profits, is not modelled. The generality of any results from this framework should therefore be treated, with caution, as insights into logically possible outcomes under expanded reproduction.

The defining feature of this schema is that department 1 produces more capital goods (the row sum in Table 12.1 of 6000) than are consumed by the two departments (the column sum of 5500), during the current period of production. This is an expanded reproduction schema, in which this increase in the provision of capital goods enables a higher scale of output in subsequent production periods. Part of the 1750 units of surplus value shown in Table 12.1 is allocated *ex post* to new capital goods.

Following in the tradition of Lange (1969), the reproduction scheme can be re-cast as an input–output table. This format allows a clearer exposition of capitalist expenditure under expanded reproduction. In Table 12.2, each column represents a particular set of expenditure outlays by the two departments; each row refers to the receipts from production enjoyed by that department of production.

The two departments each purchase new capital. Department 1 purchases new constant capital ($dC_1$) of 400 from itself; department 2 purchases 100 of new constant capital ($dC_2$) from department 1. In Marx's approach, new consumption goods for the expansion of variable capital are also categorised as investment. Economic expansion requires

*Table 12.1* Marx's scheme of expanded reproduction

| | $C_i$ | $V_i$ | $S_i$ | $W_i$ |
|---|---|---|---|---|
| Dept. 1 | 4,000 | 1,000 | 1,000 | 6,000 |
| Dept. 2 | 1,500 | 750 | 750 | 3,000 |
| Total | 5,500 | 1,750 | 1,750 | 9,000 |



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

*Table 12.2* Expanded reproduction in an input-output table

| | **Dept 1** | **Dept 2** | $dC_1$ | $dC_2$ | $dV_1$ | $dV_2$ | $u_1$ | $U_2$ | **Receipts** |
|---|---|---|---|---|---|---|---|---|---|
| Dept 1 | 4,000 | 1,500 | 400 | 100 | | | | | 6,000 |
| Dept 2 | 1,000 | 750 | | | 100 | 50 | 500 | 600 | 3,000 |
| Outlays | 5,000 | 2,250 | 400 | 100 | 100 | 50 | 500 | 600 | 9,000 |

both additional labour and the wherewithal to feed and clothe that labour. In Table 12.2, department 1 purchases 100 units of new variable capital ($dV_1$) from department 2, and department 2 purchases 50 units of new variable capital ($dV_2$) from itself.

Capitalists in each department also make purchases of consumption goods from department 2. Capitalists in department 1 advance expenditure on capitalist consumption ($u_1$) of 500; capitalist spending in department 2 ($u_2$) is 600 units in this example.

Noting from Table 12.1 that total profits (surplus value) are 1750, the Kalecki principle can be identified in Table 12.2 such that

$$1{,}750 = dC_1 + dC_2 + dV_1 + dV_2 + u_1 + u_2 \tag{12.2}$$

Total profits are realised by the volume of money cast into circulation as additional capital (constant and variable) together with capitalist consumption. Capitalists earn what they spend under expanded reproduction.

## 12.4 Debt obligations under expanded reproduction

The obvious question to be then asked, following Rosa Luxemburg, is 'Where does the money come from?' A possible way forward is to calculate the outlays and receipts of the capitalists in the two departments of production, as shown in Table 12.3. At the outset, we make the simplifying assumption that all *intra*-sectoral assets and liabilities, for example between capital goods-producing firms, cancel out. This enables a clear focus on *inter*-sectoral relationships.

To understand how this works, consider the receipts and outlays for department 1. As shown in the first row of Table 12.2, the receipts of department 1 consist of 4000 units of constant capital (sold to itself), 1500 units of constant capital (sold to department 2), 400 units of new constant capital (sold to itself), and 100 units of new constant capital (sold to itself): all these sum up to 6000 total receipts. Outlays



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

*Table 12.3* Outlays and receipts under expanded reproduction

| Department 1 | | Department 2 | |
|---|---|---|---|
| **Outlays** | **Receipts** | **Outlays** | **Receipts** |
| 4,000 ($C_1$) | 4,000 ($C_1$) | 1,500 ($C_2$) | 1,000 ($V_1$) |
| 1,000 ($V_1$) | 1,500 ($C_2$) | 750 ($V_2$) | 750 ($V_2$) |
| 400 ($dC_1$) | 400 ($dC_1$) | 100 ($dC_2$) | 100 ($dV_1$) |
| 100 ($dV_1$) | 100 ($dC_1$) | 50 ($dV_2$) | 50 ($dV_2$) |
| 500 ($u_1$) | | 600 ($u_2$) | 500 ($u_1$) |
| | | | 600 ($u_2$) |
| 6,000 | 6,000 | 3,000 | 3,000 |

of department 1, on the other hand, consist of 4000 units of constant capital (purchased from itself), 1000 units of variable capital (purchased from department 1), 400 units of new constant capital (purchased from itself), 100 units of new variable capital (from department 2) and 500 units of capitalist consumption goods (from department 2). Remarkably, total outlays for department 1 also sum to 6000. The balance between outlays and receipts, 3000, is also shown for department 2.

This result has implications for the structure of debt between departments of production under expanded reproduction. Three possibilities can be identified. First, capitalists may be able to advance money for expansion out of their own currency reserves. In discussing the turnover of capital, in *Capital*, Volume II, Marx stated: 'We are abstracting from all credit relationships, and assume therefore that the capitalist operates only with his own capital'. The outlays may be sourced out of money hoards, which are then entirely replenished at the end of the production period out of receipts. Moreover, Marx shows that the overlap between periods of working time and circulation time can allow for a continual stream of receipts that are available to be advanced in the production process (see Marx, 1978: ch. 15).

Despite the mitigating effect of turnover time, however, the problem is that under the sheer scale of expanded reproduction, hoards of metallic currency would, if relied on to service capitalist expenditures, eventually run out (see Foley, 1986). In Table 12.3, the advances for new constant and variable capital will over time expand beyond the confines of capitalist currency reserves.

A second possibility available to capitalists is that they borrow from each other. Capitalists in each department may provide the other department with short-term debt contracts: IOUs or bills of exchange



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

(see Weeks, 2010: pp. 94–95). In Table 12.2, for example, department 1 produces 100 units of capital goods for department 2; it could do so on a contractual basis, where department 2 owes this amount until the capital goods are delivered. Department 1 could act likewise, writing IOUs for purchases it makes from department 2. Since, as we have seen, outlays and receipts balance for each department, all short-term debt obligations between departments are extinguished at the end of the production period; each department can use its receipts to pay off any IOUs it needed to take out to enable its outlays.

In principle, debt contracts between departments of production could be based on mutual agreement between capitalists where no interest is charged on short-term debt. In the absence of interest payments, expanded reproduction would have no long-term debt implications – providing no basis for a theory of financial fragility. We therefore go slightly further than Toporowski's mixed picture of increasing liabilities for some firms and increasing assets for others. Table 12.3 shows that expanded reproduction is logically possible without any stocks of assets and liabilities held by departments of production across production periods. Under certain assumptions, the Kalecki principle that capitalists earn what they spend *can* apply specifically to each of the two great departments of production in Marx's schemes of expanded reproduction – and not just in the aggregate.

A final, more realistic, possibility can be identified where short-term debt is extended to the two departments by financial capitalists (banks). Again, all debts are paid off out of receipts at the end of the period. But financial capitalists might also be expected to demand a slice of the profits earned by industrial capitalists, with the latter paying interest on short-term loans. The key question is whether industrial capitalists can meet these interest payments. As the basis for formulating an answer, it might be noted that in Marx's expanded reproduction schema, the first year of which is shown in Table 12.1, an annual growth rate of 10 per cent is established (see Trigg, 2006: p. 56). Of critical importance are the rates of interest charged on debt in comparison to this 10 per cent growth rate. Again, it is logically possible, so long as interest rates are sufficiently low, for department 1 and 2 capitalists to expand without building up long-term debt obligations. Industrial capitalists might be able to extinguish short-term debts, and meet all interest payments at the end of each production period.

A long-term stock of debt might evolve, however, when interest rates are so high that profits in each production period are unable to service short-term debt obligations. This can come about in periods of debt-



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

fuelled overinvestment, which forces up interest rates, rolling over debt obligations to subsequent periods of production – a move away from the relative safety of Minsky hedge financing, where interest payments are met by cash flows. Breaking out of hedge financing opens the system up to the fragilities associated with speculative and Ponzi finance.

In *Capital*, Volume III, Marx considered the role of financial overconfidence leading to levels of debt that outstrip the confines of industrial profits. Weeks (2010) has related Marx's analysis to the 2008 financial crisis, where 'the credit system has facilitated the expansion of production to its material limit' (p. 95). Financial exuberance is also characterised by speculation and even fraud. For Lucarelli (2010: p. 209), 'Marx's scathing critique of these new forms of financial chicanery resonates with the rise of the modern Ponzi schemes'.

But note that financial fragility in this analysis is not based on the structural debt relationships between departments of production. Financial fragility is a seemingly behavioural phenomenon, depending on the overconfidence and exuberance of industrial and financial capitalists: an exuberance that does not inevitably follow from the structure of the reproduction schemes.

## 12.5 Conclusions

It is widely recognised that orthodox Marxism has paid insufficient attention to the role of money and finance in Marx's writings – a charge that *cannot* be levelled at the rich vein of 20th-century Polish Marxism led by Michał Kalecki and Rosa Luxemburg. Much work is left to be done, and is urgently required, to energise, develop and apply this tradition to current issues in political economy. This chapter offers a tentative contribution by examining the key role of the Kalecki principle, that capitalists earn what they spend, in the financial instability hypothesis formulated by Hyman Minsky.

Using the most developed of Marx's numerical examples of expanded reproduction, the role of debt and its repayment out of profits has been considered. Notwithstanding the specificity of this particular numerical example, it has been shown that the outlays and receipts of each of the two great departments of production can be in complete balance. Even though in Marx's simulation there is expanded reproduction at an annual rate of 10 per cent, in their intersectoral transactions neither the capital goods producing department nor the consumption goods producing department carries over any debt obligations from period to period. This insight further develops the critique of Minsky contributed



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

by Toporowski (2008b), which allows for some capitalists to operate without debt obligations due to the reflux of profits. Furthermore it is logically possible for debt obligations to be extinguished even when departments have to pay interest on their short-term debt obligations. Financial fragility is associated with the higher interest rates that follow from the behavioural exuberance of capitalists (financial and industrial) rather than the debt liabilities associated with the structure of production.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# References

Althusser, L. (1977a[1969]) 'Lenin before Hegel', in: Althusser, L. (ed.) *Lenin and Philosophy and Other Essays*, New Left Books, London.

Althusser, L. (1977b[1969]), 'Preface to Capital', in: Althusser, L. (ed.) *Lenin and Philosophy and Other Essays*, New Left Books, London.

Anderson, K. (1983) 'The 'unknown' Marx's Capital', in: *Review of Radical Political Economy*, vol. 15, no. 4, pp. 71–80.

Arrow K. J. and F. H. Hahn (1970) *General Competitive Analysis*, Addison Wesley, New York.

Baran, P. A. (1957) *The Political Economy of Growth,* Monthly Review Press, New York.

Baran, P. A. (1969) *The Longer View,* Monthly Review Press, New York.

Baran, P. A. and P. M. Sweezy (1965) 'Economics of Two Worlds', *On Political Economy and Econometrics: Essays in Honour of Oskar Lange,* Pergamon Press, Oxford.

Baran, P. A. and P. M. Sweezy (1966a) *Monopoly Capital: An Essay on the American Economic and Social Order*, Monthly Review Press, New York.

Baran, P. A. and P. M. Sweezy (1966b) 'Notes on the Theory of Imperialism', *Problems of Economic Dynamics and Planning: Essays in Honour of Michał Kalecki,* Pergamon Press Oxford.

Baran P. A. and P. M. Sweezy (2012a) 'Last Letters', in: *Monthly Review*, vol. 64, no. 3, p. 69.

Baran, P. A. and P. M. Sweezy (2012b) 'Some Theoretical Implications', in: *Monthly Review*, vol. 64, no. 3, p. 69.

Barlik, E. (2011) *Koźmiński, Reaktywacja*, Poltext, Warszawa.

Barone, E. (1935[1908]) 'The Ministry of Production in the Collectivist State,' in: Hayek, F. A. (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, Routledge and Kegan Paul Limited, London.

Bauer, O. (1913) 'Die Akkumulation des Kapitals' ['The Accumulation of Capital'], in: *Die Neue Zeit*, vol. 31, no. 1, pp. 831–837, 862–874.

Becker, G. S. and W. J. Baumol (1952) 'The Classical Monetary Theory: The Outcome of the Discussion', in: *Economica*, vol. 19, no. 76, pp. 355–376.

Bellofiore, R. (2004a) 'Marx and the Macro-economic Foundation of Microeconomics', in: Bellofiore, R. and N. Taylor (eds) *The Constitution of Capital: Essays on Volume One of Marx's Capital*, Palgrave Macmillan, Basingstoke.

Bellofiore, R. (2004b) 'Like a Candle Burning at Both Ends: Rosa Luxemburg and the Critique of Political Economy', in: Zarembka, P. (ed.) Neoliberalism in Crisis, Accumulation, and Rosa Luxemburg's Legacy, in: *Research in Political Economy*, vol. 21, Emerald Group Publishing Limited, Bingley.

Bellofiore R. (2009a) 'Rosa Luxemburg on Capitalist Dynamics, Distribution, and Effective Demand Crises', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London and New York.

Bellofiore, R. (2009b) 'The Monetary Circuit of Capital in the Anti-Critique', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London and New York.





10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Bellofiore, R. (2011) 'Crisis Theory and the Great Recession: A Personal Journey, from Marx to Minsky', in: Zarembka, P. and R. Desai (eds) Revitalizing Marxist Theory for Today's Capitalism, in: *Research in Political Economy*, vol. 27, Emerald Group Publishing Limited, Bingley.

Bergman, J. (1983) *Vera Zasulich: A Biography*, Stanford University Press, Stanford.

Bernstein, E. (1899) *Die Voraussetzungen des Sozialismus und die Aufgabe der Sozialdemokratie* [*The Preconditions of Socialism and the Task of Socialdemocracy*], Dietz, Stuttgart.

Besomi, D. (ed.) (2003) *The Interwar Papers and Correspondence of Roy Harrod*, Elgar, Cheltenham.

Bhaduri, A. and S. Marglin (1990) 'Unemployment and the Real Wage: The Economic Basis for Contesting Political Ideologies', in: *Cambridge Journal of Economics*, vol. 14, pp. 375–393.

Bowles, S. and R. Boyer (1995) 'Wages, Aggregate Demand and Unemployment in an Open Economy: An Empirical Investigation', in: Epstein, G. and H. Gintis (eds) *Macroeconomic Policy After the Conservative Era. Studies in Investment, Saving and Finance,* Cambridge University Press, Cambridge.

Braun, H. (2012) 'Capital Market Inflation', in: Toporowski, J. and J. Michell (eds) *Handbook of Critical Issues in Finance*, Elgar, Northampton.

Breit, M. and O. Lange (2003) 'The Way to the Socialist Planned Economy', in: *History of Economics Review*, trans. by Toporowski, J., vol. 37, pp. 51–70.

Bronner, S. E. (ed.) (1978) *The Letters of Rosa Luxemburg*, Westview Press, Boulder, Colorado.

Brus, W. (1971) 'Preface', in: Kalecki, M. *The Last Phase in the Transformation of Capitalism,* Monthly Review Press, New York.

Bukharin, N. I. (1924) *Der Imperialismus und die Akkumulation der Kapitals*, trans. by R. Wichman (1972) *Imperialism and the Accumulation of Capital*, Monthly Review Press, New York and London.

Bukharin, N. (1926) *Der Imperialismus und die Akkumulation des Kapitals* [*Imperialism and the Accumulation of Capital*], Verlag für Literatur und Politik, Wien and Berlin.

Campbell, M. (1998) 'Money in the Circulation of Capital', in: Cristopher, J. A. and G. Reuten (eds) *The Circulation of Capital, Essays on Volume Two of Marx's Capital*, Macmillan, Basingstoke.

Carchedi, G. (2011) *Behind the Crisis: Marx's Dialectics of Value and Knowledge*, Haymarket Books, Chicago.

Carroll, L. (1872) *Through the Looking-Glass, and What Alice Found There*, Macmillan, Basingstoke.

Cartwright, N., Cat, J., Fleck, L., and T. E. Uebel (eds) (1996) *Otto Neurath: Philosophy Between Science and Politics*, Cambridge University Press, Cambridge.

Cavalieri, D. (1995) 'Plusvalore e sfruttamento dopo Sraffa: lo stato del problema', in: *Economia Politica*, vol. 12, no. 1, pp. 23–56.

Chilosi, A. (1999) 'At the Origin of Market Socialism: Dühring's "Socialitarian" Economic Communes and its Influence on the Development of Socialist Model of Thought and Practice', in: *Economic Analysis*, vol. 2, no. 3, pp. 187–207.

Connelly, J. (2000) *Captive University. The Sovietization of East German, Czech and Polish higher Education, 1945–1956*, The University of North Carolina Press, Chapel Hill, London.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

D'Antonio, M. (1978) 'Kalecki e il Marxismo', in: *Studi Storici*, vol. 19, no. 1, pp. 17–43.

Darity, W. (1979–1980) 'Kalecki, Luxemburg, and Imperialism', in: *Journal of Post-Keynesian Economics*, vol. 2, pp. 223–230.

Debreu, G. (1960) *Theory of Value,* Wiley, New York.

Del Monte, A. (1975) 'Grado di Monopolio e Sviluppo Economico', in: *Rivista Internazionale di Scienze Sociali*, vol. 83, no. 3, pp. 231–363.

Desai, M. (1974) *Marxian Economic Theory*, Gray-Mills Publishing, London.

Desai, M. (2002) *Marx's Revenge: The Resurgence of Capitalism and the Death of Statist Socialism*, Verso, London.

Desai, M. and R. Veneziani (2009) 'Rosa Luxemburg's Critique of Marx's Schemas of Reproduction: A Re-evaluation and a Possible Generalization', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London.

Domar, E. (1957) *Essays in the Theory of Economic Growth,* Oxford University Press, New York.

Dorfman, R., Samuleson, P. and R. Solow (1958) *Linear Programming and Economic Analysis,* McGraw Hill, New York.

Dutt, A. K. (1984) 'Stagnation, Income Distribution and Monopoly Power', in: *Cambridge Journal of Economics*, vol. 8, no. 1, pp. 25–40.

Dwilewicz, L. (2006) 'W Kręgu Wydarzeń Marcowych 1968 r.', in: Morawski, W. (ed.) *Historia Szkoły Głównej Handlowej w Warszawie 1906–2006*, SGH, Warszawa.

Ettinger, E. (1986) *Rosa Luxemburg: A Life*, Beacon, Boston.

Fine, B. and A. Saad-Filho (eds) (2012) *The Elgar Companion to Marxist Economics*, Elgar, Chelthenam.

Foley, D. K. (1986) *Understanding Capital: Marx's Economic Theory*, Harvard University Press, Cambridge, MA.

Foster, J. B. (1986) *The Theory of Monopoly Capitalism*, Monthly Review Press, New York.

Foster, J. B. (2012) 'A Missing Chapter of *Monopoly Capital*', in: *Monthly Review,* vol. 64, no. 3, pp. 1–23.

Foster, J. B. and R. W. McChesney (2012) *The Endless Crisis,* Monthly Review Press, New York.

Foster, J. B. and H. Szlajfer (eds) (1984) *The Faltering Economy,* Monthly Review Press, New York.

Frölich, P. (1972) *Rosa Luxemburg: Her Life and Work*, Monthly Review Press, New York.

Göçmen, D. (2007) 'Rosa Luxemburg, the Legacy of Classical German Philosophy and the Fundamental Methodological Questions of Social and Political Theory', in: *Critique: Journal of Socialist Theory*, vol. 34, pp. 375–390.

Graziani, A. (1984) 'The Debate on Keynes' Finance Motive', in: *Economic Notes*, vol. 1, pp. 5–33.

Graziani, A. (2003) *The Monetary Theory of Production*, Cambridge University Press, Cambridge.

Grossmann, H. (1929a) *Das Akkumulations- und Zusammenbruchgesetz des kapitalistische Systems* [*The Principle of Accumulation and Breakdown of the Capitalist System*], Hirschfeld, Leipzig.

Grossmann, H. (1929b) 'Die Änderung des ursprünglichen Aufbauplans des Marxschen "Kapitals" und ihre Ursachen' ['The Change of the Original Plan of



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Marx's Capital and its Causes'], in: *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, vol. 14, pp. 305–338.
Hagemejer, H. and T. Kowalik (eds) (1986) *Oskar Lange Dzieła tom 8 działalność naukowa i społeczna 1904–1965* [*Oskar Lange, Works Volume 8*], Państwowe Wydawnictwo Naukowe, Warszawa.
Halevi, J. (2009) 'Imperialism Today', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London and New York.
Halevi, J. and P. Kriesler (1998) 'Marx or Hicks? Structural Proportions and Crisis: The Transition from the First to the Third Volume of Capital', in: Bellofiore, R. (ed.) *Marxian Economics: A Reappraisal, Essays on Volume III of Capital, Volume 2: Profits, Prices and Dynamics*, Macmillan Press, Basingstoke.
Hall, Stuart (2003) 'Marx's Notes on Method', in: *Cultural Studies*, vol. 17, no. 2, pp. 113–149.
Hansen, A. (1951) *Business Cycles and National Income,* W.W. Norton, New York.
Harcourt, G. C. (2006) 'Paul Samuelson on Karl Marx: Were the Sacrificed Games of Tennis Worth it?' in: Szenberg, M., Ramratten, L. and A. A. Gottesman (eds) *Samuelsonian Economics and the Twenty-First Century*, Oxford University Press, Oxford and New York.
Harcourt, G. C. (2012) *Fusing Indissolubly the Cycle and the Trend: Richard Goodwin's Profound Insight*, mimeo, School of Economics, UNSW.
Harcourt, G. C. and P. Kerr (2009) *Joan Robinson*, Palgrave Macmillan, Basingstoke.
Harcourt, G. C. and P. Kriesler (2011) 'The Influence of Michal Kalecki on Joan Robinson's Approach to Economics', in: Arestis, P. (ed.) *Microeconomics, Macroeconomics and Economic Policy. Essays in Honour of Malcolm Sawyer*, Palgrave Macmillan, Basingstoke.
Harris, D. J. (1972) 'On Marx's Schemes of Reproduction and Accumulation', in: *Journal of Political Economy*, vol. 80, no. 3, part I, May/June.
Harris, D. J. (1975), 'The Theory of Economic Growth: A Critique and a Reformulation', in: *American Economic Review, Papers and Proceedings*, vol. 65, pp. 329–337.
Harrod, R. F. (1939), 'An Essay in Dynamic Theory', in: *Economic Journal*, vol. 49, pp. 14–33.
Harrod, R. F. (1948) *Towards a Dynamic Economics: Some Recent Developments of Economic Theory and their Application to Policy*, Macmillan, Basingstoke.
Haugstad, W. A. (2008) 'A Discipline Divided. Polish Economists and the Communist Regime, 1945–1960', *doctoral thesis*, Faculty of History and Arts, Norwegian University of Science and Technology, Trondheim.
Hayek, F.A. (ed.) (1935) *Collectivist Economic Planning*, Routledge, London.
Hayek, F.A. (1937) 'Economics and Knowledge', in: *Economica*, vol. 4, pp. 33–54.
Hein, E. and L. Vogel (2008) 'Distribution and Growth Reconsidered: Empirical Results for Six OECD Countries', in: *Cambridge Journal of Economics*, vol. 32, pp. 479–511.
Hendry, D. F. and M. Morgan (eds) (1995) *The Foundations of Econometric Analysis Cambridge*, Cambridge University Press, Cambridge.
Herczyński, R. (2008) *Spętana Nauka. Opozycja Intelektualna w Polsce 1945–1970* [*Bound Science. Intellectual Opposition in Poland 1945–1970*], Semper, Warszawa.
Hilferding, R. (1910) *Das Finanzkapital* [*Finance Capital*], Wiener Volksbuchhandlung, Wien.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Hobson, J. A. and A. F. Mummery (1889) *The Physiology of Industry*, J. Murray, London.

Hollander, S. (2010) *The Economics of Karl Marx,* Cambridge University Press, Cambridge.

Hollander, S. (2011) *The Economics of Friedrich Engels*, Cambridge University Press, Cambridge.

Huberman, L. and P. M. Sweezy (1961) 'A New New Deal?' in: *Monthly Review*, vol. 12, no. 10, pp. 28–35.

Kaldor, N. (1955) 'Alternative Theories of Distribution', in: *The Review of Economic Studies*, vol. 23, no. 2, pp. 83–100.

Kaldor, N. (1958) 'The Political Economy of Growth by Paul A. Baran', in: *American Economic Review*, vol. 48, no. 1, pp. 164–170.

Kaldor, N. (1959) 'A Model of Economic Growth', in: *Economic Journal*, vol. 67, pp. 591–624.

Kaldor, N. (1966) 'Marginal Productivity and the Macro-economic Theories of Growth and Distribution', in: *Review of Economic Studies*, vol. 33, pp. 309–319.

Kaldor, N. and J. A. Mirrlees (1962) 'A New Model of Economic Growth', in: *Review of Economic Studies*, vol. 29, pp. 174–192.

Kalecki, M. (1933a) *Próba Teorii Koniunktury*, ISBCP, Warsaw, translated as 'Essay on the Business Cycle Theory', in: Osiatyński, J. (ed.) (1990) *Collected Works of Michał Kalecki, Volume I, Capitalism: Business Cycles and Full Employment*, Clarendon Press, Oxford.

Kalecki, M. (1933b) 'The Determinants of Profits', reprinted in: Kalecki, M. (1971) *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970*, Cambridge University Press, Cambridge.

Kalecki, M. (1937) 'A Theory of the Business Cycle', in: *Review of Economic Studies,* vol. 4, no. 2, pp. 77–97.

Kalecki, M. (1938) 'The Determinants of Distribution of the National Income', in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1939a) 'Entrepreneurial Capital and Investment', reprinted in: Kalecki, M. (1971) *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970*, Cambridge University Press, Cambridge.

Kalecki, M. (1939b) *Essays in the Theory of Economic Fluctuations*, George Allen and Unwin, London, reprinted in: Osiatyński, J. (ed.) (1990) *Collected Works of Michał Kalecki, Volume I, Capitalism: Business Cycles and Full Employment*, Clarendon Press, Oxford.

Kalecki, M. (1939c) 'The Determinants of Investment', reprinted in: Kalecki, M. (1971) *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970*, Cambridge University Press, Cambridge.

Kalecki, M. (1939d) 'The Theory of Economic Fluctuactions', in: Osiatyński, J. (ed.) (1990) *Collected Works of Michał Kalecki, Volume I, Capitalism: Business Cycles and Full Employment*, Clarendon Press, Oxford.

Kalecki, M. (1940) 'The Supply Curve of an Industry under Imperfect Competition', reprinted in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1941) 'A Theory of Long-run Distribution of the Product of an Industry', in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kalecki, M. (1943a) 'Political Aspects of Full Employment', in: *Political Quarterly*, vol. 14, no. 4, pp. 322–331, reprinted in: Osiatyński, J. (ed.) (1990) *Collected Works of Michał Kalecki, Volume I, Capitalism: Business Cycles and Full Employment*, Clarendon Press, Oxford.

Kalecki, M. (1943b) 'Studies in Economic Dynamics', in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1954[1965]) *Theory of Economic Dynamics: An Essay on Cyclical and Long-Run Changes in Capitalist Economy*, George Allen and Unwin, London.

Kalecki, M. (1964) 'Econometric Model and Historical Materialism' in: *On Political Economy and Econometrics Essays in Honour of Oskar Lange*, PWN Polish Scientific Publishers, Warszawa.

Kalecki, M. (1965a) 'Contribution to the Discussion of J. Górski's Paper "On the Development of the Supply-and-demand Models of Economic Growth in Bourgeois Economics"', *Zeszyty Naukowe Uniwersytetu Lódzkiego*, no. 10, pp. 66–68, reprinted in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1965b) 'On Paul Baran's Political Economy of Growth', in: *Monthly Review*, vol. 17, no. 6, pp. 58–60.

Kalecki, M. (1966) *Studies in the Theory of Business Cycles, 1933–1939*, Augustus M. Kelley, New York.

Kalecki, M. (1967) 'Zagadnienie Realizacji u Tugana-Baranowskiego i Róży Luksemburg', in: *Ekonomista*, vol. 2, pp. 241–249, translated as 'The Problem of Effective Demand with Tugan-Baranovsky and Rosa Luxemburg', in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1968a) 'The Marxian Equations of Reproduction and Modern Economics', in: *Social Sciences Information*, vol. 6/7, pp. 73–79 in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1968b), 'Trend and Business Cycle Reconsidered', in: *Economic Journal*, vol. 78, pp. 263–276, reprinted as 'Trend and the Business Cycle' in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1971a) 'Class Struggle and the Distribution of National Income', in: Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kalecki, M. (1971b) *Selected Essays in the Dynamics of the Capitalist Economy*, Cambridge University Press, Cambridge.

Kalecki, M. (1971c) 'Theories of Growth in Different Social Systems', in: *Monthly Review*, vol. 23, no. 5, pp. 72–79.

Kalecki, M. (1972) *The Last Phase in the Transformation of Capitalism,* Monthly Review Press, New York.

Kalecki, M. (1984) 'The Marxian Equations of Reproduction and Modern Economics', in: Foster, J. B. and H. Szlajfer (eds) *The Faltering Economy,* Monthly Review Press, New York.

Kalecki, M. (1986) *Selected Essays on Economic Planning,* Cambridge University Press, Cambridge.

Kalecki, M. and T. Kowalik (1971) 'Osservazioni sulla "Riforma Cruciale"', in: *Politica ed Economia*, vol. 2–3, pp. 190–196.

Kautsky, K. (1899) *Die Agrarfrage: Eine Übersicht über die Tendenzen der modernen Landwirthschaft und die Agrarpolitik der Sozialdemokratie* [*The Agrarian Question*], Dietz, Stuttgart.

Kautsky, K. (1901–1902) 'Krisentheorien', in: *Die Neue Zeit*, vol. 20, no. 2, pp. 37–143.

Kautsky, K. (1914) 'Der Imperialismus', in: *Die Neue Zeit*, vol. 32, no. 2, pp. 908–922.

Keen, S. (2011) *Debunking Economics*, Zed Books, London.

Kemp, T. (1967) *Theories of Imperialism*, Dobson Books Ltd, Durham.

Keynes, J. M. (1936) *The General Theory of Employment, Interest and Money*, Macmillan, London.

Keynes, J. M. (1939) 'Professor Tinbergen's Method', in: *Economic Journal*, vol. 49, September, pp. 558–569.

Keynes, J. M. (1971) 'A Treatise on Money, Volume 2: The Applied Theory of Money', in: *The Collected Writings of John Maynard Keynes Volume VI*, Macmillan for the Royal Economic Society, Basingstoke.

King, J. (2002) *A History of Post-Keynesian Economics Since 1936*, Edward Elgar, Cheltenham.

Kowalik, T. (1964a) 'Biography of Michał Kalecki', in: *Problems of Economic Dynamics and Planning Essays in Honour of Michał Kalecki*, Państwowe Wydawnictwo Naukowe, Warszawa.

Kowalik, T. (ed.) (1964b) *On Political Economy and Econometrics: Essays in Honour of Oskar Lange*, PWN Polish Scientific Publishers, Warszawa.

Kowalik, T. (1971) *Róża Luksemburg. Teoria Akumulacji i Imperializmu* [*Rosa Luxemburg. Theory of Accumulation and Imperialism*], Zakład Narodowy im. Ossolińskich, Wrocław, translated into Italian by Pastrello, G. (1977) *Rosa Luxemburg: il pensiero economico*, Editori Riuniti, Roma.

Kowalik, T. (1987) 'Oskar Lange', in: *The New Palgrave Economic Dictionary*, Macmillan, Basingstoke.

Kowalik, T. (1991) 'Rejoinder to Pesenti', in: Osiatyński, J. (ed.) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

Kowalik, T. (ed.) (1994) *Economic Theory and Market Socialism: Selected Essays of Oskar Lange*, Edward Elgar Publishing, Aldershot.

Kowalik, T. (2003) 'Introduction', in: Luxemburg, R. *The Accumulation of Capital*, Routledge, London.

Kowalik, T. (2008) 'Lange, Oskar Ryszard (1904–1965)', in: Durlauf, S. N. and L. E. Blume (eds) *The New Palgrave Dictionary of Economics*, *Second Edition*, Palgrave Macmillan, London and New York.

Kowalik, T. (2009) 'Luxemburg's and Kalecki's Theories and Visions of the Capitalist Dynamics', in Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London and New York.

Kriesler, P. (1987) *Kalecki's Microanalysis*, Cambridge University Press, Cambridge, US.

Krupskaya, N. (1933) 'How Lenin Studied Marx', in: *Labor Monthly*, no. 2, available at: http://marxists.org/archive/krupskaya/works/howleninstudiedmarx.htm.

Lampa, R. (2010) 'Rigore Scientifico e Rilevanza Sociale: le Due Dimensioni della Riflessione Economica nel Giovane Oskar R. Lange (1931–1945)', *PhD dissertation*, Università degli Studi di Macerata, Macerata.
Lampa, R. (2011) 'A "Walrasian Post-Keynesian" Model? Resolving the Paradox of Oskar Lange's 1938 Theory of Interest', in: *Department of Economics Working Papers*, The New School for Social Research, New York.
Lange, O. (1935) 'Marxian Economics and Modern Economic Theory', *Review of Economic Studies*, vol. 2, no. 3, pp. 189–201.
Lange, O. (1936–1944) *The Socialist Attitude toward War, Papers* [Box 1; Folder 1], Special Collections Research Center, University of Chicago Library, Chicago.
Lange, O. (1936a) 'The Place of Interest in the Theory of Production', in: *Review of Economic Studies*, vol. 3, no. 3, pp. 159–192.
Lange, O. (1936b) 'On the Economic Theory of Socialism: Part One', in: *The Review of Economic Studies*, vol. 4, no. 1, pp. 53–71.
Lange, O. (1938) 'The Rate of Interest and the Optimum Propensity to Consume', in: *Economica*, vol. 5, no. 17, pp. 12–32.
Lange, O. (1941a) 'Review of Essays in the Theory of Economic Fluctuations', in: *Journal of Political Economy*, vol. 49, pp. 279–285.
Lange, O. (1941b) 'Review of Joseph A. Schumpeter Business Cycles', in: *Review of Economic Statistics*, vol. 23, no. 4, pp. 190–193.
Lange, O. (1944) 'Price Flexibility and Employment', in: *Cowles Commission Monograph*, no. 8, The Principia Press, Bloomington, Indiana.
Lange, O. (1945) 'Marxian Economics in the Soviet Union', in: *American Economic Review*, vol. 35, no. 1, pp. 127–133.
Lange, O. (1963a) *Economic Development, Planning, and International Cooperation,* Monthly Review Press, New York.
Lange, O. (1963b) *Political Economy, Volume 1*, Pergamon Press, Oxford.
Lange, O. (1965) *Teoria Reprodukcji i Akumulacji*, PWN Polish Scientific Publishers, Warzawa, translated as Lange, O. (1969) *Theory of Reproduction and Accumulation*, Pergamon Press, Oxford.
Lange, O. (1969) *Theory of Reproduction and Accumulation*, Pergamon Press, Oxford.
Lange, O. (1970), 'Political Economy' (in Polish), in: *Encyklopedia Współczesna*, reprinted in: Kowalik, T. (ed.) (1994) *Economic Theory and Market Socialism. Selected Essays of Oskar Lange*, Edward Elgar, Aldershot.
Lange, O. (1987[1942]) 'The Economic Operation of a Socialist Society', in: *Contributions to Political Economy*, vol. 6, pp. 13–24.
Lange, O., Lippincott, B. E. and F. M. Taylor (1938) *On the Economic Theory of Socialism,* University of Minnesota Press, Minneapolis.
Lapavitsas, C. (2000) 'On Marx's Analysis of Money Hoarding in the Turnover of Capital', in: *Review of Political Economy*, vol. 12, no. 2.
Łaski, K. (2006) 'Intellectual Trajectories: Kalecki's Place in my Career as Economist', in: *EAEPE Newsletter*, no. 36.
Lavoie, M. (1995) 'The Kaleckian Model of Growth and Distribution and its Neo-Ricardian and Neo-Marxian Critiques', in: *Cambridge Journal of Economics*, no. 19, pp. 789–818.
Lavoie, M. (2008a) 'Towards a Post-Keynesian Consensus in Macroeconomics: Reconciling the Cambridge and Wall Street Views', paper presented for the 12th Conference of the Research Network Macroeconomics and Macroeconomic

Policy *'Macroeconomic Policies on Shaky foundations—Whither mainstream economics?'* Berlin.

Lavoie, M. (2008b) 'Widow's Cruse', in: *International Encyclopedia of the Social Sciences*, available at: http://www.encyclopedia.com/doc/1G2–3045302972.html.

Lavoie, M. and M. Seccareccia (2001) 'Minsky's Financial Fragility Hypothesis: A Missing Macroeconomic Link?' in: Bellofiore, R. and F. Piero (eds) *The Economic Legacy of Hyman Minsky, Volume 2*, Edward Elgar, Cheltenham.

Lendjel, E. (2001) 'Le Tâtonnement "Marshallien" dans les Premiers Écrits d'Oskar Lange' ['"Marshallian" Tâtonnement in the First Writings by Oskar Lange'], in: *Cahiers d'Économie Politique*, no. 38, pp. 79–114.

Lenin, V. I. (1893) 'On the So-Called Market Question', in: Lenin, V. I. (1960) *Collected Works, Volume I,* Lawrence & Wishart, London.

Lenin, V. I. (1897) 'A Characterisation of Economic Romanticism (Sismondi and our Native Sismondists)', in: *Novoye Slovo*, no. 7–10.

Lenin, V. I. (1899) *Die Entwicklung des Kapitalismus in Russland* [*The Development of Capitalism in Russia*], Verlag für Literatur und Politik, Wien und Berlin.

Lenin, V. I. (1917) 'Der Imperialismus als höchstes Stadium des Kapitalismus' ['Imperialism. The Highest Stage of Capitalism'] (German ed. 1921), in: *Die Kommunistische Internationale*, no. 18.

Lenin, V. I. (1972a[1908]) 'Materialism and Empirio-Criticism', in: *Collected Works*, vol. 14, Progress Publishers, Moscow.

Lenin, V. I. (1972b[1914]), 'Conspectus of Hegel's Book The Science of Logic', in: *Collected Works*, vol. 38, Progress Publishers, Moscow.

Lenin, V. I. (1976a) *Selected Philosophical Works, Volume II*, Progress Publishers, Moscow, 1976.

Lenin, V. I. (1976b) 'Fundamental Problems of Marxism', in: *Selected Philosophical Works, Volume III*, Progress Publishers, Moscow.

Lerner, A. (1934) 'The Concept of Monopoly and the Measurement of Monopoly Power', in: *Review of Economic Studies*, vol. 1, pp. 157–175.

Levy, N. (2001) *Cambios Institucionales en el Sector Financiero y su Efecto sobre el Fondeo de la Inversión, México, 1960–1994*, Facultad de Economía, UNAM, Dirección General para Asunto del Personal Académico, Universidad Autónoma Benito Juárez de Oaxaca, México.

López, J. G. and M. Assous (2010) *Michal Kalecki*, Palgrave Macmillan, Basingstoke.

Lucarelli, B. (2010) 'Marxian Theories of Money, Credit and Crisis', in: *Capital and Class*, vol. 34, no. 2, pp. 199–214.

Lucas, R. E. (1988) 'On the Mechanics of Economic Development', in: *Journal of Monetary Economics*, vol. 22, pp. 3–42.

Lutz, R. H. (1967) *The German Revolution, 1918–19*, Cambridge University Press, Cambridge.

Luxemburg, R. (1898) *Die industrielle Entwickelung Polens,* Duncker & Humblot, Leipzig, translated as Luxemburg, R. (1977) *The Industrial Development of Poland,* Campaigner Publications, New York.

Luxemburg, R. (1900) *Sozialreformoder Revolution*, 2nd ed., trans. by D. Howard, *The Rosa Luxemburg Reader*, P. Hudis and K. B. Anderson (eds) Monthly Review Press, New York, 2004, pp. 128–167.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Luxemburg R. (1902) *Sozialreform oder Revolution?,* Verlag der Leipziger Volkszeitung, Leipzig, translated as 'Reform or Revolution?', in: Hudis, P. and K. B. Anderson (eds) (2004) *The Rosa Luxemburg Reader*, Monthly Review Press, New York.

Luxemburg, R. (1913a) *Die Akkumulation des Kapitals. Ein Beitrag zur ökonomischen Erklärung des Imperialismus*, Buchhandlung Vorwärts Paul Singer G.m.b.H., Berlin, translated as Luxemburg, R. (1951) *The Accumulation of Capital*, Routledge and Kegan Paul Limited, London, and Luksemburg, R. (1963) *Akumulacja kapitału. Przyczynek do ekonomicznego wyjaśnienia imperializmu*, Państwowe Wydawnictwo Naukowe, Warszawa.

Luxemburg, R. (1913b) 'International Loans', in: *The Accumulation of Capital*, available at: http://www.marxists.org/archive/luxemburg/1913/accumulation-capital/index.htm.

Luxemburg, R. (1921) *Die Akkumulation des Kapitals oder Was die Epigonen aus der Marxschen Theorie gemacht haben. Eine Antikritik* [*The Accumulation of Capital. Or What the Epigons Have Made of Marx's Theory. An Anti-Critique*], Franke, Leipzig.

Luxemburg, R. (1970[1925]) 'What is Economics?', in: Waters, M. A. (ed.) *Rosa Luxemburg Speaks*, Pathfinder Press, New York.

Luxemburg, R. (1971[1918]) *What does the Spartacus League want?*, Monthly Review Press, New York.

Luxemburg, R. (1986[1900]) *Reform or Revolution*, Militant Publications, London.

Luxemburg, R. (2011) *The Letters of Rosa Luxemburg*, edited by Annelies Laschitza, George Adler, and Peter Hudis, and trans. by George Shriver, Verso, London and New York.

Magdoff, H. (1978) *Imperialism: From the Colonial Age to the Present,* New York, Monthly Review Press.

Magdoff, H. (1990a) 'Perestroika and the Future of Socialism, Part One', in: *Monthly Review,* vol. 41, no. 11, pp. 1–13.

Magdoff, H. (1990b) 'Perestroika and the Future of Socialism, Part Two', in: *Monthly Review,* vol. 4, no. 11, pp. 1–17.

Magdoff, H. and P. M. Sweezy (1971) Kalecki, M. *Selected Essays in the Dynamics of the Capitalist Economy*, Cambridge University Press, Cambridge.

Marcuzzo, M. C. (2002) 'The Collaboration between J. M. Keynes and R. F. Kahn from the Treatise to the General Theory', in: *History of Political Economy*, vol. 34, no. 2, pp. 421–447.

Marramao, G. (1977) *Austromarxismo e Socialismo di Sinistra fra le Due Guerre*, La Pietra, Milano.

Marx, K. (1885) *Capital: A Critique of Political Economy, Volume II. The Process of Circulation of Capital,* Charles H. Kerr and Co., Chicago.

Marx, K. (1933) *Erstes Buch, der Produktionsprozess des Kapitals, sechtes Kapitel, Resultate des unmittelbaren Produktionsprozesses* [*First Book, the Process of Production of Capital, the Outcome of the Unmediated Process of Production*], IMEL, Moscow.

Marx, K. (1939) *Grundrisse der Kritik der politischen Ökonomie* [*Outlines of the Critique of Political Economy*], IMEL, Moscow.

Marx, K. (1968) *Matematičeskie Rukopisi* [*Two Manuscripts on Differential Calculus*], Nauka Press, Moscow.

Marx, K. (1978) *Capital: A Critique of Political Economy, Volume II. The Process of Circulation of Capital*, Penguin, London.

Marx, K. (1989[1881]) 'Marginal Notes on Adolph Wagner's "Lehrbuch der politischen Ökonomie"', *Marx & Engels Collected Works, Volume 24*, Progress Publishers, Moscow, 1989, pp. 531–560 at www.marxists.org/archive/marx/works/1881/01/wagner.htm.

Marx, K. and F. Engels (1964) *Sochineniia, Volume 32* [*Works, Volume 32*], Politizdat, Moscow.

Minsky, H. P. (1978) 'The Financial Instability Hypothesis: A Restatement', in: *Thames Papers in Political Economy*, Thames Polytechnic, London.

Minsky, H. P. (1986) *Stabilizing an Unstable Economy*, Yale University Press, New Haven.

Mises, L. (1935[1920]) 'Economic Calculation in the Socialist Commonwealth', in: Hayek, F. A. (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, Routledge and Kegan Paul Limited, London.

Moggridge, D. E. (ed.) (1973) *The Collected Writings of John Maynard Keynes Volume XIV The General Theory and After Part II Defence and Development,* Macmillan, London, for the Royal Economic Society.

Moggridge, D. E. (ed.) (1979) *The Collected Writings of John Maynard Keynes Volume XXIX The General Theory and After A Supplement*, Macmillan, London, and Cambridge University Press for the Royal Economic Society.

Moggridge, D. E. (ed.) (1982) *The Collected Writings of John Maynard Keynes Volume XXI, World Crises and Policies in Britain and America*, Macmillan, London, and Cambridge University Press for the Royal Economic Society.

Mott, T. (2010) *Kalecki's principle of Increasing Risk and Keynesian Economics*, Routledge, New York.

Münchau, W. (2008) 'Recession is not the Worst Possible Outcome', in: *Financial Times*, July 6.

Naastepad, C. W. M. and S. Storm (2007) 'OECD Demand Regimes (1960–2000)', in: *Journal of Post Keynesian Economics*, vol. 29, pp. 211–246.

Nell, E. J. (1988) 'On Monetary Circulation and the Rate of Exploitation', in: Arestis, P. (ed.) *Post-Keynesian Monetary Economics. New Approaches to Financial Modelling,* Edward Elgar, Aldershot.

Nell, E. J. (2002) 'On Realizing Profits in Money', in: *Review of Political Economy*, vol. 14, no. 4, pp. 519–530.

Osiatyński, J. (ed.) (1990) *Collected Works of Michał Kalecki, Volume I, Capitalism: Business Cycles and Full Employment*, Clarendon Press, Oxford.

Osiatyński, J. (ed.) (1991) *Collected Works of Michał Kalecki, Volume II, Capitalism: Economic Dynamics*, Clarendon Press, Oxford.

*On Political Economy and Econometrics: Essays in Honour of Oskar Lange*, PWN Polish Scientific Publishers, Warszawa (1964)

Pasinetti, L. L. (1962) 'Rate of Profit and Income Distribution in Relation to the Rate of Economic Growth', in: *The Review of Economic Studies*, vol. 29, no. 4, pp. 267–279.

Pasinetti, L. L. (1973) 'The Notion of Vertical Integration in Economic Analysis', in: *Metroeconomica*, vol. 25, pp. 1–29.

Pastrello, G. (2005) 'Filologia e Interpretazione: le Vicende del II Libro del Capitale' ['Philology and Interpretation. The Vicissitudes of Book II of Capital'], *paper presented at the IInd STOREP Conference*, Siena.

Patinkin, D. (1989) 'Michal Kalecki and the General Theory', in: Sebastiani, M. (ed.) *Kalecki's Relevance Today*, Macmillan, Houndmills.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Pierson, N. G. (1902) 'The Problem of Value in the Socialist Community', in: Hayek, F. A. (ed.) (1935) *Collectivist Economic Planning, Critical Studies of the Possibilities of Socialism by Pierson, von Mises, Halm and Barone*, Routledge, London.
Plekhanov, G. (1961) *Selected Works of G.V. Plekhanov, Volume I*, Lawrence & Wishart, London.
*Problems of Economic Dynamics and Planning Essays in Honour of Michał Kalecki* Państwowe Wydawnictwo Naukowe, Warszawa (1964).
Resis, A. (1970), 'Das Kapital Comes to Russia', in: *Slavic Review*, vol. 29, no. 2, pp. 219–237.
Robertson, D. H. (1939) 'The Problem of 'Pre-War' Finance', in: *Robertson Papers*, Trinity College, Cambridge.
Robinson, J. (1949) *An Essay on Marxian Economics*, Macmillan, London.
Robinson J. (1951) Introduction to Rosa Luxemburg, *The Accumulation of Capital*, Routledge & Kegan Paul, London, reprinted in the Routledge Classic Edition, London, 2003, pp. xxi–xxxvii.
Robinson, J. (1953) 'A Lecture Delivered at Oxford by a Cambridge Economist', in: Robinson, J. (1973) *Collected Economic Papers, Volume IV*, Basil Blackwell, Oxford.
Robinson, J. (1956) *The Accumulation of Capital*, Macmillan, London.
Robinson, J. (1957) 'The Policy of Backward Nations', in: *The Nation,* 1 June.
Robinson, J. (1960) *Collected Economic Papers, Volume II*, Basil Blackwell, Oxford.
Robinson, J. (1962) *Essays in the Theory of Economic Growth,* Macmillan, London.
Robinson, J. (1969) 'Introduction', in: Kalecki, M. *Studies in the Theory of Business Cycles, 1933–1939,* Augustus M. Kelley, New York.
Robinson, J. (1975) 'Survey: 1960s', in: Robinson, J. (1980) *Further Contributions to Modern Economics*, Blackwell, Oxford.
Robinson, J. (1976) 'Introduction', in: Kalecki, M. *Essays on Developing Countries,* Atlantic Highlands, Humanities Press, New Jersey.
Robinson, J. (1979) 'Marxism and Modern Economics', in: Robinson, J. (1980) *Further Contributions to Modern Economics*, Blackwell, Oxford.
Roemer, J. E. (1978) 'Marxian Models of Reproduction and Accumulation', in: *Cambridge Journal of Economics*, vol. 2, no. 1, pp. 37–53.
Rosdolsky, R. (1969) *Zur Entstehunggeschichte des Marxschen 'Kapital'* [*The Making of Marx's 'Capital'*], Europäische Verlaganstalt, Frankfurt, Europa Verlag, Wien.
Rowthorn, R. (1981) 'Demand, Real Wages and Economic Growth', in: *Thames papers on Political Economy,* Thames Polytechnic, London.
Rubin, I. I. (1972[1928]) *Essays on Marx's Theory of Value*, Black and Red, Detroit.
Sachs, I. (2008) *La troisième rive. A la recherche de l'écodéveloppement*, Bourin Editeur, Paris.
Sadowski, Z. (2011) *Przez ciekawe czasy. Rozmowy z Pawlem Kozlowskim o życiu, ludziach i zdarzeniach*, Polskie Towarzystwo Ekonomiczne, Instytut Nauk Ekonomicznych PAN, Warszawa.
Salleron, L. (ed.) (1958) *François Quesnay et la Physiocratie*, Institut National d'Études Démographiques, PUF, Paris.
Sardoni, C. (1981) 'Multi-sectoral Models of Balanced Growth and the Marxian Schemes of Expanded Reproduction', in: *Australian Economic Papers*, vol. 20, no. 37, pp. 383–397.

Sardoni, C. (1987) *Marx and Keynes on Economic Recession. The Theory of Unemployment and Effective Demand*, Wheatsheaf Books, the Harvester Press Publishing Group, Brighton.
Sardoni, C. (1989) 'Some Aspects of Kalecki's Theory of Profits its Relationship to Marx's Schemes of Reproduction', in: Sebastiani, M. (ed.) *Kalecki's Relevance Today,* Macmillan, Basingstoke.
Schumpeter, J. A. (1939) *Business Cycles,* McGraw Hill, New York.
Schumpeter, J. A. (1954) *History of Economic Analysis,* Allen and Unwin, London.
Shanin, T. (ed.) (1983) *Late Marx and the Russian Road: Marx and the Peripheries of Capitalism*, Monthly Review Press, New York.
Sieber, N. I. (2001[1871]) 'Marx's Theory of Value and Money', trans. by Rakhiya Manavova and James D. White, in: Zarembka, P. (ed.) Marx's Capital and Capitalism; Markets in a Socialist Alternative, in: *Research in Political Economy*, vol. 19, Emerald Group Publishing Limited, Bingley.
Sieber, N. I. (2011[1874]) 'Marx's Economic Theory', trans. by James D. White, in Zarembka, P. and R. Desai (eds) Revitalizing Marxist Theory for Today's Capitalism, in: *Research in Political Economy*, vol. 27, Emerald Group Publishing Limited, Bingley.
Solow, R. M. (1956) 'A Contribution to the Theory of Growth', in: *The Quarterly Journal of Economics*, vol. 70, no. 1, pp. 65–94.
Steindl, J. (1952) *Maturity and Stagnation in American Capitalism*, Basil Blackwell, Oxford.
Steindl, J. (1979) 'Stagnation Theory and Stagnation Policy', in: *Cambridge Journal of Economics*, vol. 3, no. 1, pp. 1–14.
Steindl, J. (1981) 'Some Comments on the Three Versions of Kalecki's Theory of the Trade Cycle', in: Łos, J. et al. (eds) *Studies in Economic Theory and Practice: Essays in Honour of Edward Lipiński*, North-Holland, Amsterdam, reprinted in Steindl, J. (1990) *Economic Papers 1941–88*, St. Martin's Press, New York.
Sternberg, F. (1926) *Der Imperialismus* [*Imperialism*], Malik-Verlag, Berlin.
Stockhammer, E., Onaran, O. and S. Ederer, (2009) 'Functional Income Distribution and Aggregate Demand in the Euro Area', in: *Cambridge Journal of Economics*, vol. 33, pp. 139–159.
Swan, T. W. (1956) 'Economic Growth and Capital Accumulation', in: *Economic Record*, vol. 32, pp. 334–361.
Sweezy, P. M. (1942) *The Theory of Capitalist Development,* Monthly Review Press, New York.
Sweezy, P. M. (1949) *Socialism,* McGraw Hill, New York.
Sweezy, P. M. (1953) *The Present as History,* Monthly Review Press, New York.
Sweezy, P. M. (1954) 'Maturity and Stagnation in American Capitalism by J. Steindl', in: *Econometrica,* vol. 22, no. 4, pp. 531–551.
Sweezy, P. M. (1956) 'Introduction' in: Luxemburg, R. *Accumulation of Capital,* Italian edition, Einaudi, Torino.
Sweezy, P. M. (1957) 'Challenge to a Critic', in: *The Nation,* June 29.
Sweezy P. M. (1967) 'Rosa Luxemburg's The Accumulation of Capital', in: *Science and Society*, vol. 31, no. 4, pp. 474–485.
Sweezy, P. M. (1971) 'Lessons of Poland', in: Sweezy, P. M. and C. Bettelheim (eds) *On the Transition to Socialism*, Monthly Review Press, New York.
Sweezy, P. M. (1972) *Modern Capitalism and Other Essays,* Monthly Review Press, New York.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Sweezy, P. M. (1974a) 'Baran and the Danger of Inflation', in: *Monthly Review*, vol. 26, no. 7, pp. 11–14.
Sweezy, P. M. (1974b) 'Some Problems in the Theory of Capital Accumulation', in: *Monthly Review*, vol. 26, no. 1, pp. 53–54.
Sweezy, P. M. (1981) *Four Lectures on Marxism,* Monthly Review Press, New York.
Sweezy, P. M. (1987) 'Monopoly Capitalism', in: *The New Palgrave Dictionary of Economics,* Macmillan, London.
Sweezy, P. M. and L. Huberman (eds) (1965) *Paul A. Baran (1910–1964): A Collective Portrait,* Monthly Review Press, New York.
Toporowski, J. (1986) 'Introduction', in: Kalecki, M. *Selected Essays on Economic Planning,* Cambridge University Press, Cambridge.
Toporowski, J. (2002) 'Mathematics as Natural Law: An Epistemological Critique of Formalism in Economics', in: Desai, M, Dow, S. C. and P. Arestis (eds) *Methodology, Microeconomics and Keynes, Essays in Honour of Victoria Chick,* Routledge, London.
Toporowski, J. (2004) 'Kalecki's Arguments for Socialism', in: Sadowski, Z. L. and A. Szeworski (eds) *Kalecki's Economics Today,* Routledge, New York.
Toporowski, J. (2005) 'Between Breit and Keynes: Oskar Lange's Theory of Interest', in: Sadowski Z. (ed.) *Oskar Lange a Wspolczesnosc*, Wydawnictwo Polskiego Towarzystwa Ekonomicznego, Warszawa.
Toporowski, J. (2008a) 'Minsky's Induced Investment and Business Cycles', in: *Cambridge Journal of Economics*, vol. 32, pp. 725–737.
Toporowski, J. (2008b) 'The Kalecki-Steindl Theory of Financial Fragility', *paper presented to the 'Crisis in Financialisation' Conference*, SOAS, University of London, London, 30 May.
Toporowski, J. (2009) 'Rosa Luxemburg and Finance', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London.
Toporowski, J. (2011) 'Review of Michal Kalecki by López, G. and M. Assous', in: *EH.net*, available at: http://eh.net/book_reviews/michal-kalecki.
Toporowski, J. (2012a) *Tadeusz Kowalik: Radical Political Economist, Solidarity Advisor, and Critic of Globalised Capitalism (Obituary)*, mimeo.
Toporowski, J. (2012b) 'Wprowadzenie: Tadeusz Kowalik a współczesna ekonomia polityczna' ['Introduction: Tadeusz Kowalik and Modern Political Economy'], in: Kowalik, T. (1971) *Róża Luksemburg, Teoria akumulacji i imperializmu* [*Rosa Luxemburg, Theory of Accumulation and Imperialism*], Ossolineum, Warszawa and Wrocław.
Trigg, A. B. (2006) *Marxian Reproduction Schema*, Routlege, New York.
Trigg, A. B. (2009) 'Where does the Money and Demand Come From? Rosa Luxemburg and the Marxian Reproduction Schema', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London.
Tugan-Baranowski, M. (1905) *Theoretische Grundlagen des Marxismus* [*The Theoretical Foundations of Marxism*], Duncker & Humblot, Leipzig.
Ulatowska, I. (1976) 'Przypisy', in: Lange, O. *Dzieła Tom 5: Ekonometria* Państwowe Wydawnictwo Ekonomiczne, Warszawa.
Waldenberg, M. (1985) 'L'ideologia del Socialismo Polacco tra le due guerre', in: Collotti, E. *L'internazionale operaia e socialista tra le due guerre*, Annali della Fondazione.
Walicki, A. (1979) *A History of Russian Thought: From the Enlightenment to Marxism*, Stanford University Press, Stanford.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Weeks, J. (2010) *Capital Exploitation and Economic Crisis*, Routledege, London.
White, J. D. (1996) *Karl Marx and the Intellectual Origins of Dialectical Materialism*, Macmillan, London.
White, J. D. (2001a) 'Nikolai Sieber and Karl Marx', in: Zarembka, P. (ed.) Marx's Capital and Capitalism; Markets in a Socialist Alternative, in: *Research in Political Economy*, vol. 19, Elsevier/JAI, Oxford.
White, J. D. (2001b) *Lenin: The Practice and Theory of Revolution*, Palgrave, New York.
Zarembka, P. (2001) 'The Declining Importance of Hegel for Marx: James D. White's Provocative Work', in: *Historical Materialism*, no. 8, pp. 355–365.
Zarembka, P. (2002) 'Rosa Luxemburg's Accumulation of Capital: Critics Try to Bury the Message', in: Lehmann, J. (ed.) Bringing Capitalism Back for Critique by Social Theory, in: *Current Perspectives in Social Theory*, vol. 21, JAI/Elsevier Press, New York, pp. 3–45.
Zarembka, P. (2003) 'Lenin as Economist of Production: A Ricardian Step Backwards', in: *Science and Society*, pp. 276–302.
Zasulich, V. (1983[1881]) 'A Letter to Marx', in: Shanin, T. (ed.) *Late Marx and the Russian Road*, Monthly Review, New York.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# Bibliography of Published Works by Tadeusz Kowalik

Compiled by Ewa Karwowski, Hanna Szymborska, and Jan Toporowski

Translated by Ewa Karwowski

The works listed below are a combination of the works listed by Tadeusz Kowalik in his own list of publications, together with titles discovered in the course of research by Hanna Szymborska and Jan Toporowski. The list does not claim to be comprehensive; Tadeusz Kowalik did not keep a full record of his published works. Two gaps in particular remain to be filled. During the 1970s and the 1980s, Tadeusz Kowalik was active in dissident groups, and wrote articles and memoranda as part of this activity. In the same period there were also articles he wrote that were published under the name of sympathisers who were able to publish more freely than he could; he mentioned Edward Lipinski in particular as a front for his publications.

## 1 Books and edited books


Brus, W. and T. Kowalik (1967) *Oskara Langego ekonomia i socjalizm* (in Polish: *Oskar Lange's economics and socialism*), SGPiS, Warszawa.

Górski, J., Kowalik, T. and W. Sierpiński (1967) *Historia powszechnej myśli ekonomicznej 1870–1950* (in Polish: *History of economic thought 1870–1950*), PWN, Warszawa.

Hołda-Róziewicz, H. and T. Kowalik (1976) *Ludwik Krzywicki* (in Polish), Wydawnictwo Interpres, Warszawa.

Kowalik, T. (1958, ed.) *Stanisław Krusiński, Pisma zebrane* (in Polish: *Stanisław Krusiński, Collected works*), Książka i Wiedza, Warszawa.

Kowalik, T. (1959) *O Ludwiku Krzywickim. Studium społeczno-ekonomiczne* (in Polish: *Ludwik Krzywicki. A socio-economic study*), PWN, Warszawa.

Kowalik, T. (1965) *Krzywicki*, Wiedza Powszechna, Warszawa.

Kowalik, T. (1971) *Róża Luksemburg, Teoria akumulacji i imperializmu* (in Polish: *Rosa Luxemburg, Theory of accumulation and imperialism*), Ossolineum, Warszawa-Wrocław, also published in Spanish: Kowalik, T. (1979) *Teoría de la acumulación y del imperialismo en Rosa Luxemburg*, Ediciones Era, México D.F.

Kowalik, T. (1975) *Oskar Lange, Dzieła, Tom 3* (in Polish: *Oskar Lange, Collected works, Volume 3*), Warszawa.

Kowalik, T. (1977) *Rosa Luxemburg. Il pensiero economico* (in Italian: *The economic thought of Rosa Luxemburg*), Editori Riuniti, Roma.

Kowalik, T. (1986) *On crucial reform of "real socialism"*, Wiener Institut für Internationale Wirtschaftsvergleiche, Wien.

Kowalik, T. (1991, ed.) *Zachodni spór o socjalizm rynkowy* (in Polish: *The Western dispute about market socialism*), Warszawa.

Kowalik, T. (1992) *Historia ekonomii w Polsce 1865–1950* (in Polish: *The history of economics in Poland 1865–1950*), Ossolineum, Warszawa-Wrocław.






10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1994, ed.) *Economic Theory and Market Socialism, Selected essays of Oskar Lange*, Edward Elgar, Aldershot.

Kowalik, T. (1995) *From "Self-Governing Republic" to capitalism, Polish workers and intellectuals*, Black Rose Books, Montreal.

Kowalik, T. (1997) *Zmiany systemowe w Polsce (kontekst wewnętrzny i międzynarodowy)* (in Polish: *Systemic changes in Poland (the domestic and international context)*), Polskie Towarzystwo Ekonomiczne, Warszawa.

Kowalik, T. (1997) *Społeczne koszty transformacji* (in Polish: *Social costs of transformation*), Klub Parlamentarny Unii Pracy, Warszawa.

Kowalik, T. (2000) *Współczesne systemy ekonomiczne, powstawanie, ewolucja i kryzys* (in Polish: *Contemporary economic systems, emergence, evolution and crisis*), WSPiZ, Warszawa.

Kowalik, T. (2001, ed.) *Spory wokół Nowej Trzeciej Drogi* (in Polish: *Disputes about the New Third Way*), Wydawnictwo Naukowe Scholar, Warszawa.

Kowalik, T. (2002) *Społeczna gospodarka rynkowa – dekoracja czy program działania?* (in Polish: *Social market economy – decoration or action plan?*), Polskie Towarzystwo Ekonomiczne, Warszawa.

Kowalik, T. (2002, ed.) *Nierówni i równiejsi, sprawiedliwość dystrybucyjna czasu transformacji polskiej* (in Polish: *The unequal and the more equal, distributional justice during the Polish transformation*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2005) *Systemy gospodarcze. Efekty i defekty reform i zmian ustrojowych* (in Polish: *Economic systems. Effects and defects of reform and systemic change*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2009, ed.) *www.Polska Transformacja.pl* (in Polish: *www.Polish Transformation.pl*), Warszawskie Wydawnictwo Literackie MUZA S. A., Warszawa.

Kowalik, T. (2010, ed.) *Stanisław Gomułka i polska transformacja, Dokumenty i analizy* (in Polish: *Stanisław Gomułka and the Polish transformation, Documents and analyses*), Wydawnictwo Naukowe Scholar, Warszawa.

Lange, O., Brus, W., Kowalik, T., and I. Sachs (1972) *Wirtschaftwissenschaft, Hauptströmungen der sozialwisseschaftlichen Forschung, Herausgegeben von der UNESCO*, Ullstein, Frankfurt am Main, also published in English: Lange, O., Brus, W., Kowalik, T., Sachs, I. (1974) *Main Trends of Research in the Social and Human Sciences,* Routledge, London.

## 2 Book chapters

Bugaj, R. and T. Kowalik (1992) 'Towards a mixed economy', in: *Privatization in Eastern Europe*, Friedrich Ebert Stiftung and Renner Institute, Wien.

Kowalik, T. (1964) 'Biography of Michał Kalecki', in: *Problems of Economic Dynamics and Planning, Essays in Honor of Michał Kalecki*, PWN, Warszawa.

Kowalik, T. (1964) 'R. Luxemburg's theory of accumulation and imperialism', in: *Problems of Economic Dynamics and Planning, Essays in Honor of Michał Kalecki*, PWN, Warszawa.

Kowalik, T. (1964) 'Biography of Oskar Lange', in: *On Political Economy and Econometrics, Essays in Honor of Oskar Lange*, PWN, Warszawa.

Kowalik, T. (1964) 'Three conceptions of political economy of socialism', in: *On Political Economy and Econometrics, Essays in Honor of Oskar Lange*, PWN, Warszawa.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1973) 'Zu Oskar Langes klassischem Model des Sozializmus', in: *Sozialismus, Geschichte und Wirtschaft, Festschrift für Eduard März* (in German: 'Oskar Lange's classical model of socialism', in: *Socialism, History and Economy, Festschrift in Honour of Eduard März*), Europaverlag, Wien.

Kowalik, T. (1974) 'Oskar Lange – tolerancja i uniwersalność', in: Biernacki, A. (ed.) *Portrety uczonych polskich* (in Polish: 'Oskar Lange – tolerance and universality', in: Biernacki, A. (ed.) *Portrays of Polish Intellectuals*), Wydawnictwo Literackie, Kraków.

Kowalik, T. (1975) 'Filozofia społeczna Ludwika Krzywickiego', in: Skarga, B. (ed.) *Polska myśl filozoficzna i społeczna* (in Polish: 'Ludwik Krzywicki's social philosophy', in: Skarga, B. (ed.) *Polish Philosophical and Social Thought*), PWN, Warszawa.

Kowalik, T. (1980) 'Racjonalność – zasada działania, postulat czy mit', in: Kamiński, B. and A. Łukaszewicz (eds) *Racjonalność gospodarowania w socjalizmie* (in Polish: 'Rationality – acting principle, postulate or myth', in: Kamiński, B. and A. Łukaszewicz (eds) *Rationality of Planning under Socialism*), PWE, Warszawa.

Kowalik, T. (1983) 'Experts and the working group', in: Kemp-Welch, A. (ed.) *The Birth of Solidarity. The Gdańsk Negotiations, 1980*, Macmillan, London.

Kowalik, T. (1987) 'Three attitudes and three dramas', in: Fink, G., Poell, G. and M. Riese (eds) *Economic Theory, Political Power and Social Justice*: *Festschrift Kazimierz Łaski*, Linzer Universitätsschriften, Springer-Verlag, Wien.

Kowalik, T. (1989) 'Crucial reform of "real socialism"', in: Gabrisch, H. (ed.) *Economic reforms in Eastern Europe and the Soviet Union*, Westview Press, Boulder, Colorado.

Kowalik, T. (1989) 'Toward a mixed socialist economy', in: Flakierski, H and T. Sekine (eds) *Socialist Dilemmas. East and West*, M.E. Sharpe, Armonk, New York.

Kowalik, T. (1991) 'The Polish postscript, 1989', in: Mendell, M. and D. Salee (eds) *The Legacy of Karl Polanyi: Market, State and Society at the End of the Twentieth Century*, St. Martin's Press, New York.

Kowalik, T. (1990) 'Zmiana ustroju – wielka operacja czy proces społeczny', in: Gortat, R. (ed.) *Społeczeństwo uczestniczące, gospodarka rynkowa, sprawiedliwość społeczna* (in Polish: 'System change – great operation or social process', in: Gortat, R. (ed.) *Participating Society, Market Economy, Social Justice*), Instytut Studiów Politycznych PAN, Warszawa.

Kowalik, T. (1990) 'Prywatyzacja czy gospodarka mieszana', in: Wesołowski, W. (ed.) *Losy idei socjalistycznych i wyzwania współczesności* (in Polish: 'Privatisation or mixed socialist economy', in: Wesołowski, W. (ed.) *The Fate of Socialist Ideas and Contemporary Challenges*), Polskie Towarzystwo in cooperation with the Club of Rome, Warszawa.

Kowalik, T. (1990) 'Piętnaście miesięcy Planu Balcerowicza', in: *Studia i Materiały* (in Polish: 'Fifteen months of the Balcerowicz Plan', in: *Studies and Materials*), Ośrodek Prac Społeczno-Zawodowych, KK NSZZ Solidarność, Warszawa.

Kowalik, T. (1991) 'Wobec socjalizmu realnego i postulowanego', in: Siciński, A. (ed.) *Sens uczestnictwa. Wokół idei Jana Strzeleckiego* (in Polish: 'Towards real and postulated socialism', in: Siciński, A. (ed.) *The Sense for Participation. On the Idea of Jan Strzelecki*), Instytut Filozofii i Socjologii PAN, Warszawa.

Kowalik, T. (1992) 'Reform economics and bureaucracy', in: Kovacs, M. and M. Tardos (eds), *Reform and Transformation in Eastern Europe. Soviet-Type Economics on the Threshold of Change*, Routledge, London.

Kowalik, T. (1992) 'Michał Kalecki and early attempts to reform the Polish economy', in: Knell, M. and C. Rider (eds) *Socialist Economies in Transition: Appraisals of the Market Mechanism*, Edward Elgar, Aldershot.
Kowalik, T. (1993) 'Sektor prywatny a prywatyzacja', in: *Polska na rozdrożu* (in Polish: 'The private sector and privatisation', in: *Poland at the Crossroads*), Fundacja Polska Praca, Warszawa.
Kowalik, T. (1993) 'Rysy koncepcji alternatywnej', in: *Stulecie Polskiej Partii Socjalistycznej 1892–1992* (in Polish: 'Outlines of an alternative concept', in: *Centenary of the Polish Socialist Party 1892–1992*), Warszawska Oficyna Wydawnicza, Gryf, Warszawa.
Kowalik, T. (1994) 'Prywatyzacja jako proces społeczny', in: Jakóbik, W. (ed.) *Kontynuacja czy przełom? Dylematy transformacji ustrojowej* (in Polish: 'Privatisation as social process', in: Jakóbik, W. (ed.) *Continuity or Breakthrough? Dilemmas of System Transformation*), ISP PAN, Warszawa.
Kowalik, T. (1994) 'Oskar Lange's market socialism: The story of an intellectual political career', in: Roosevelt, F. and D. Belkin (eds) *Why Market Socialism?* M.E. Sharpe, Armonk, New York.
Kowalik, T. (1994) 'The "Big Bang" as a political and historical Phenomenon: A case study on Poland', in: Berend, I. (ed.) *Transition to a Market Economy and the End of the 20th Century*, Eleventh International Economic History Congress, Südosteuropa Gesellschaft, Milano.
Kowalik, T. (1994) 'Privatization in Poland – social process or another shock?', in: *Privatization in the Transition Process. Recent Experiences in Eastern Europe*, UNDP, Genève.
Kowalik, T. (1994) 'The great transformation and privatization: three years of Polish experience', in: Bryant, C. and E. Mokrzycki (eds) *The New Great Transformation, Change and Continuity in East-Central Europe*, Routledge, London.
Kowalik, T. (1995) 'The free market or a social contract as bases for systemic transformation', in: Hausner, J., Jesop, B. and K. Nielsen (eds) *Strategic Choice and Path Dependency in Post-Socialism. Institutional Dynamics in the Transformation Process*, Edward Elgar, Aldershot.
Kowalik, T. (1996) 'Konserwatywna modernizacja', in: Drozdowski, M. (ed.) *Jałta. Szkice i materiały* (in Polish: 'Conservative modernisation', in: Drozdowski, M. (ed.) *Jalta. Outlines and Materials*), Towarzystwo Miłośników Historii oraz Instytut Historii PAN, Warszawa.
Kowalik, T. (1997) 'Towards a free market or a new mixed market economy', in: Berend, T. (ed.) *Long-Term Structural Changes in Transforming Central & Eastern Europe the 1990s*, Südosteuropa-Gesellschaft in cooperation with the Center for European and Russian Studies, University of California, München and Los Angeles.
Kowalik, T. (1997) 'Transformacja a system docelowy', in: Instytut Rozwoju i Studiów Strategicznych SGH (ed.) *Ustrojowa wizja gospodarki Polskiej* (in Polish: 'Transformation and its destination', in: SGH (ed.) *A Political Vision for Poland's Economic System*), Warszawa.
Kowalik, T. (1997) 'Harmonizacja polityki społecznej i polityki gospodarczej czasu transformacji', in: Belka, M. and W. Trzeciakowski (eds) *Dynamika transformacji polskiej gospodarki* (in Polish: 'Harmonisation of social and economic policies during times of transformation', in: Belka, M. and W. Trzeciakowski (eds) *Dynamics of Polish Economic Transformation*), Polteks, Warszawa.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1997) 'Zmiany w podziale dochodu narodowego w czasie transformacji', in: Belka, M. and W. Trzeciakowski (eds) *Dynamika transformacji polskiej gospodarki* (in Polish: 'Changes in the income distribution during times of transformation', in: Belka, M. and W. Trzeciakowski (eds) *Dynamics of Polish Economic Transformation*), Polteks, Warszawa.

Kowalik, T. (1998) 'Wobec globalizacji nierówności', in: *Praca i polityka społeczna w perspektywie XXI wieku* (in Polish: 'Towards the globalisation of inequality', in: *Work and Social Policy in the 21st Century*), IPISS, Warszawa.

Kowalik, T. (1998) 'Systemowe bariery dla kapitału ludzkiego', in: Mujżel, J. (ed.) *Kapitał ludzki, Stan i perspektywy* (in Polish: 'Systemic barriers to human capital', in: Mujżel, J. (ed.) *Human Capital, Status and Prospects*), Rada Strategii Społeczno-Gospodarczej przy Radzie Ministrów, Warszawa, new version published in: *Przeglądzie Społeczny*, no. 5–6, also published in: Pankowicz, A. (ed.) *Ziemie górskie u progu XXI wieku* (*Mountain Lands on the Brink of the 21st Century*), Związek Podhalan, Zakopane.

Kowalik, T. (1998) 'The experience of ownership transformation of state firms in Poland', in: Ostojic, N.P. and N. Scott (eds) *Experiences and Results of Privatization on the Economies in Transition*, Proceedings of the Second ECPD International Round Table, Belgrade.

Kowalik, T. (1998) 'Konsekwencje społeczne procesu globalizacji', in: Komitet Prognoz PAN (ed.) *Globalizacja gospodarki Światowej a integracja regionalna* (in Polish: 'Social consequences of the globalisation process', in: Forecasting committee PAN (ed.) *Globalisation of the World Economy and Regional Integration*), Warszawa.

Kowalik, T. (1999) 'Privatization and distributive justice, Poland's experience', in: Ostojic, N. P. and N. Scott (eds) *Recent Lessons from Transition and Privatization. Problems of Institutions and Corporate Governance*, ECPD, Belgrade.

Kowalik, T. (1999) 'Polityka kluczem do polskiej transformacji ekonomicznej', in: Jasińska, A. and K. M. Słomczyński (eds) *Władza i struktura społeczna, Księga dedykowana Włodzimierzowi Wesołowskiemu* (in Polish: 'Politics as key to Polish economic transformation', in: Jasińska, A. and K. M. Słomczyński (eds) *Power and Social Structure, Festschrift for Włodzimierz Wesołowski*), Instytut Filozofii i Socjologii PAN, Warszawa.

Kowalik, T. (2000) 'Nowy ład społeczny: ani konieczny ani pożądany', in: Deniszczuk, M. (ed.) *Polska przed nowymi problemami, Barometr społeczno-ekonomiczny 1999* (in Polish: 'New social order: neither necessary nor welcome', in: Deniszczuk, M. (ed.) *Poland Facing New Problems, Socio-Economic Barometer 1999*), Stowarzyszenie Studiów i Inicjatyw Społecznych, Warszawa.

Kowalik, T. (2000) 'Polskie transformacje a emigracja', in: Hausner, J. and T. Kowalik (eds) *Polska ekonomia w świecie* (in Polish: 'Polish transformations and emigration', in: Hausner, J. and T. Kowalik (eds) *The Polish Economy in the World*), PWN, Kraków.

Kowalik, T. (2001) 'Ekonomiści polscy wobec transformacji', in: Wojtyna, A. (ed.) *Czy ekonomia nadąża z wyjaśnieniem rzeczywistości?* ('Polish economists on transformation', in: Wojtyna, A. (ed.) *Does Economics Explain Reality?*), Polskie Towarzystwo Ekonomiczne, Warszawa.

Kowalik, T. (2001) 'The ugly face of the Polish success', in: Blazyca, G. and M. Rapacki (eds) *Poland into the New Millennium*, Edward Elgar, Aldershot.

Kowalik, T. (2001) 'Why the social democratic option failed: Poland's experience of systemic change', in: Glyn, A. (ed.) *Social Democracy in Neo-Liberal Times*, Oxford University Press, Oxford.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. and D. Tosi (2001) 'That great glow in the East', in: Brussiere, E., Dumoulin, M. and G. Trausch (eds) *Europa: The European Idea and Identity, from Ancient Greece to the 21st Century*, Mercatorfonds/ Fundación Academia Europea de Yuste, Antwerpen (also published in French).

Kowalik, T. (2001) 'Społeczna gospodarka rynkowa – konstytucyjne wyzwanie dla Polski', in: Toeplitz, K. T. (ed.) *Człowiek, rynek, sprawiedliwość* (in Polish: 'Social market economy – constitutional challenges for Poland', in: Toeplitz, K. T. (ed.) *Man, the Market, and Justice*), Wydawnictwo Naukowe i Literackie, Warszawa.

Kowalik, T. (2001) 'Możliwości wyboru systemu ekonomicznego. Dahrendorf po dziesięciu latach', in: WSPiZ (ed.) *Tworzenie organizacji* (in Polish: 'The possibility to choose the economic system. Dahrendorf ten years later', in: WSPiZ (ed.) *Creating Organisation*), Warszawa.

Kowalik, T. (2002) 'Kapitał globalny a tendencje egalitarne i antyegalitarne', in: Liberska, B. (ed.) *Globalizacja. Mechanizmy i wyzwania* (in Polish: 'Global capital and egalitarian and anti-egalitarian tendencies', in: Liberska, B. (ed.) *Globalisation. Mechanisms and Challenges*), PWE, Warszawa.

Kowalik, T. (2002) 'Sprawiedliwość dystrybutywna – wyzwanie transformacyjne', in: Kołodko, G. (ed.) *Rozwój polskiej gospodarki, perspektywy i uwarunkowania* (in Polish: 'Distributional justice – challenges of transformation', in: Kołodko, G. (ed.) *The Development of the Polish Economy, Prospects and Features*), WSPiZ, Warszawa.

Kowalik, T. (2002) 'Zmiany systemowe ostatniej dekady: spojrzenie ogólne', in: Bowden, E. V., Bowden, J. H., Kabaj, M., Kowalik, T., Noga, A. and J. Wilkin (eds) *Ekonomia – nauka zdrowego rozsądku, podręcznik amerykańsko-polski* (in Polish: 'Systemic changes of the past decade: a general overview', in: Bowden, E. V., Bowden, J. H., Kabaj, M., Kowalik, T., Noga, A. and J. Wilkin (eds) *Economics – Science of Common Sense, American-Polish handbook*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2002) 'Income inequalities in the transition: Poland in comparative perspective', in: Adaman, F. and P. Divine (eds) *Economy and Society. Money, Capitalism and Transition*, Black Rose Books, Montreal.

Kowalik, T. (2003) 'Systemowa różnorodność w warunkach globalizacji i integracji', in: Kołodko, G. W. (ed.) *Globalizacja, marginalizacja, rozwój*, WSPiZ Warszawa, also published in English: 'Systemic variety under the conditions of globalization and integration', in: Kołodko, G. W. (ed.) *Emerging Market Economies*, Ashgate, Aldershot.

Kowalik, T. (2003) 'Społeczna gospodarka rynkowa – dekoracja czy program działania?', in: Mączyńska, E. and P. Pysz (eds) *Społeczna gospodarka rynkowa. Idee i możliwości praktycznego wykorzystania w Polsce* (in Polish: 'Social market economy – decoration or action plan?', in: Mączyńska, E. and P. Pysz (eds) *Social Market Economy. Ideas and Practical Potential in Poland*), PTE, Warszawa.

Kowalik, T. (2003) 'Antyegalitarne tendencje w Polsce na tle literatury światowej', in: Woźniak, M. G. (ed.) *Nierówności społeczne a wzrost gospodarczy, Tom 1* (in Polish: 'Anti-egalitarian tendencies in Poland against the background of the international literature', in: Woźniak, M. G. (ed.) *Social Inequality and Economic Growth*), Uniwersytet Rzeszowski, Rzeszów.

Kowalik, T. (2003) 'Trzecią drogą do centrum, wzloty i upadki socjaldemokracji europejskiej i polskiej', in: Żuk, P. (ed.) *W poszukiwaniu innych światów* (in Polish: On the Third Way towards the centre, flights of fancy and falls of the European and Polish social democracy', in: Żuk, P. (ed.) *In the Search for other Worlds*), Warszawa.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (2003) 'Polska – Unia Europejska. W obronie różnorodności', in: *Polska po przejściach, barometr społeczno-ekonomiczny 2001–2003* (in Polish: 'Poland – European Union. Defending diversity', in: *Poland after Change, Socio-Economic Barometer 2001–2003*), SSiIS, Warszawa.

Kowalik, T. (2004) 'Polska rewolucja epigońsko-mieszczańska na drodze do Europy', in: Gardawski J. and J. Polakowska-Kujawa (eds) *Globalizacja, gospodarka, praca, kultura* (in Polish: 'The Polish bourgeois revolution on the way to Europe', in: Gardawski J. and J. Polakowska-Kujawa (eds) *Globalisation, Economy, Labour, Culture*), SGH, Warszawa, also published in: *Przegląd Europy Środkowej i Wschodniej*, no. 1, 2003 and *Belorusskij Ekonomiczeskij Żurnal* no. 2(23)/2003.

Kowalik, T. (2004) 'Oskar Lange – między socjalizmem a kapitalizmem', in: Musiał, G. (ed.) *Twórczość naukowa Oskara Langego i jej znaczenie w teorii ekonomii* (in Polish: 'Oskar Lange – between socialism and capitalism', in: Musiał, G. (ed.) *The Academic Work of Oskar Lange and its Importance for Economic Theory*), Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice.

Kowalik, T. (2004) 'Globalizacja, integracja, akcesja', in: Etxezarreta M. and T. Kowalik (eds) *Wokół polityki gospodarczej Unii Europejskiej* (in Polish: 'Globalisation, integration, accession' in: Etxezarreta M. and T. Kowalik (eds) *On Economic Policies of the European Union*), SSiIS, Warszawa.

Kowalik, T. (2005) 'Teoria socjalizmu Oskara Langego w konfrontacji z realiami', in: Sadowski, Z. (ed.) *Oskar Lange a współczesność* (in Polish: 'Oskar Lange's theory of socialism confronted with realism', in: Sadowski, Z. (ed.) *Oskar Lange and Contemporary Times*), PTE, Warszawa.

Kowalik, T. (2005) 'Intelektualne źródła polskiej transformacji', in: Bugaj, R. and K. Kulpińska-Cała (eds) *Polska transformacja ustrojowa, próba dyskursu – zarys perspektyw* ('The intellectual origins of Polish transformation', in: Bugaj, R. and K. Kulpińska-Cała (eds) *Polish Systemic Transformation, Attempted Discourse – Outlined Prospects*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2005) 'Własność, właściciele a sprawiedliwość społeczna', in: Galor, Z. (ed.) *Europa Właścicieli* (in Polish: 'Property, property owners and social justic', in: Galor, Z. (ed.) *The Europe of Property Owners*), Wydawnictwo Prodruk, Poznań.

Kowalik, T. (2005) 'Oligarchiczna triada a demokracja i dobrobyt', in: *Dylematy wyboru modelu rozwoju gospodarczego Polski* (in Polish: 'Dilemma triad, democracy and welfare', in: *Dilemmas Surrounding the Choice of an Economic Development Model for Poland*), Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków.

Kowalik, T. (2005) 'Przyszłość społecznej gospodarki rynkowej w Unii Europejskiej i Polsce', in: Wieteska-Rostek, M. (ed.) *Polska i Ukraina w integrującej się Europie i globalnym świecie XXI wieku* (in Polish: 'The future of social market economy in the European Union and Poland', in: Wieteska-Rostek, M. (ed.) *Poland and Ukraine in an Integrated Europe and the Globalised World of the 21st Century*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2006) 'Jan Drewnowski', in: Kaliński, J. (ed.) *Poczet doktorów honoris causa Szkoły Głównej Handlowej w Warszawie* (in Polish: 'Jan Drewnowski', in: Kaliński, J. (ed.) *Honoris causa doctors of the Szkoła Główna Handlowa in Warsaw*), Oficyna Wydawnicza SGH, Warszawa.

Kowalik, T. (2006) 'Zróżnicowanie i konwergencja ustrojowa w Unii Europejskiej. Czy gospodarki europejskie powinny się amerykanizować?', in: Bieńkowski,

W. and M. J. Radło (eds) *Amerykański model rozwoju gospodarczego, istota, efektywność i możliwość zastosowania,* Warszawa, also published in English: Kowalik, T. (2006) 'Convergence and divergence of the European Union: Are the European economies to be "Americanized"?', in: Bieńkowski, W., Brada, C. J. and M. J. Radło (eds), *Reaganomics goes Global. What Can the EU, Russia and other Transition Countries Learn from the USA?*, Palgrave Macmillan, London.

Kowalik, T. (2006) 'Czy polityka pełnego zatrudnienia należy do przeszłości?', in: Kornaś, J. (ed.) *Nowoczesny Lewiatan, studia nad współczesnym państwem* (in Polish: 'Are full-employment policies outdated?', in: Kornaś, J. (ed.) *The Modern Leviathan, Studies of the Contemporary State*), WESiP, Kielce.

Kowalik, T. (2007) 'Państwo opiekuńcze – powstanie, rozwój, kryzys', in: Jankowski, S. (ed.) *Wybrane problemy polityki społeczno-ekonomicznej, podręcznik* (in Polish: 'The welfare state – emergence, evolution and crisis', in: Jankowski, S. (ed.) *Selected Problems in Socio-Economic Policy, Handbook*), Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa.

Kowalik, T. (2007) 'Ekonomiści wobec ruchów społecznych', in: Sadowski, Z. (ed.) *Przełomowy rok 1956 a współczesność* (in Polish: 'Economists on social movements', in: Sadowski, Z. (ed.) *The Critical Year 1956 and Contemporary Times*), PTE, Warszawa.

Kowalik, T. and P. Kozłowski (2007) 'Czy kapitalizm polski może być etyczny?', in: Klimczak, B. and A. Lewicka-Strzałecka (eds) *Etyka i ekonomia* ('Can Polish capitalism be ethical?', in: Klimczak, B. and A. Lewicka-Strzałecka (eds) *Ethics and Economics*), PTE, Warszawa.

Kowalik, T. (2007) 'Intelektualne źródła przemian ustrojowych w Polsce', in: Chałubiński, M. (ed.) *Transformacje systemowe w Polsce i krajach postkomunistycznych. Studia i rozprawy* (in Polish: 'Intellectual origins of Polish systemic change', in: Chałubiński, M. (ed.) *Systemic Transformations in Poland and Post-Communist Countries*), Akademia Humanistyczna im. A. Gieysztora, Pułtusk.

Kowalik, T. (2007) 'Blaski i cienie polskiej transformacji', in: Kaltwasser, M., Majewska, E. and K. Szreder (eds) *Futuryzm miast przemysłowych. 100 lat Wolfsburga i Nowej Huty* ('Light and shade in Polish transformation', in: Kaltwasser, M., Majewska, E. and K. Szreder (eds) *Futurism of Industrial Cities. 100 Years of Wolfsburg and Nowa Huta*), Korporacja Halart, Kraków, also published in German.

Kowalik, T. (2007) 'Przedmowa', in: Holland, H. *Krzywicki nie znany* (in Polish: 'Foreword', in: Holland, H. *The Unknown Krzywicki*), Książka i Prasa, Warszawa.

Kowalik, T. (2007) 'Struktura własności podstawą nierówności', in: Klebaniuk, J. (ed.) *Oblicza nierówności społecznych, studia interdyscyplinarne* ('Ownership structures as basis for inequality', in: Klebaniuk, J. (ed.) *Faces of Social Inequality, Interdisciplinary Studies*), Eneteia Wydawnictwo Psychologii i Kultury, Warszawa.

Kowalik, T. (2008) 'Ekonomia i socjologia a transformacja systemowa', in: Banaszak, S. and K. Doktór (eds) *Problemy socjologii gospodarki* (in Polish: 'Economics, sociology and systemic transformation', in: Banaszak, S. and K. Doktór (eds) *Problems of Economic Sociology*), Wydawnictwo Wyższej Szkoły Komunikacji i Zarządzania, Poznań.

Kowalik, T. (2008) 'Własność a nierówności i bezrobocie', in: Pacho, W. and M. Garbicz (eds) *Wzrost gospodarczy a bezrobocie i nierówności w podziale dochodów* (in Polish: 'Property, inequality and unemployment', in: Pacho, W. and M.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Garbicz (eds) *Economic Growth, Unemployment and Distributional Inequality*), SGH, Warszawa.

Kowalik, T. (2008) 'George Blazyca on shock therapy and the third way', in: Myant, M. and T. Cox (eds) *Reinventing Poland. Economic and Political Transformation and Evolving National Identity*, Routledge, London, New York.

Kowalik, T. (2008) 'Czy gospodarka japońska "amerykanizuje" się?', in: Gawlikowski, K. and M. Ławacz (eds) *Japonia na początku XXI wieku* (in Polish: 'Is the Japanese economy "Americanising"?', in: Gawlikowski, K. and M. Ławacz (eds) *Japan at the Beginning of the 21st Century*), Wydawnictwo Adam Marszałek, Toruń.

Kowalik, T. (2008) 'W kierunku realnych utopii', in: Żuk, P. (ed.) *Spotkania z utopią XXI wieku* (in Polish: 'Towards real utopias', in: Żuk, P. (ed.) *Meeting the Utopia of the 21st Century*), Oficyna Naukowa, Warszawa.

Kowalik, T. (2008) 'Hybryda czy nowy system?', in: Pomykało, W. (ed.) *Chiny w globalnym świecie* (in Polish: 'Hybrid or new system?', in: Pomykało, W. (ed.) *China in the World*), Fundacja Innowacja, Warszawa.

Kowalik, T. (2009) 'Kapitalizm kasyna', in: *Kryzys. Przyczyny, analizy, prognozy, przewodnik krytyki politycznej* (in Polish: 'Casino capitalism', in: *Crisis. Origins, Analyses, Forecasts, Handbook of Political Criticism*), Wydawnictwo Krytyki Politycznej, Warszawa.

Kowalik, T. (2009) 'Do Eurolandu? Spieszmy się powoli', in: Sopoćko, A. (ed.) *Polska w strefie euro. Nowe perspektywy wzrostu* ('Towards Euroland? Let us make haste slowly', in: Sopoćko, A. (ed.) *Poland in the Euro Area. New Growth Perspectives*), Wydział Zarządzania UW, Warszawa.

Kowalik, T. (2009) 'Luxemburg's and Kalecki's theories and visions of capitalist dynamics', in: Bellofiore, R. (ed.) *Rosa Luxemburg and the Critique of Political Economy*, Routledge, London.

Kowalik, T. (2010) 'Ekonomia polityczna, Klęski socjaldemokratycznej opcji', in: Morawski, W. (ed.) *Modernizacja Polski. Struktury – agencje – instytucje* (in Polish: 'Political economy, Defeats of the social-democratic option', in: Morawski, W. (ed.) *The Modernisation of Poland. Structures – Agencies – Institutions*), Wydawnictwa Akademickie i Profesjonalne, Akademia Leona Koźmińskiego, Warszawa.

Kowalik, T. (2010) 'Zur Niederlage der sozialdemokratischen Alternative', in: Delheim J. and G. Krause (eds) *Sichtbare Hände – Staatsinterventionismus im Krisenkapitalismus* (in Polish: 'About the defeat of the social-democratic alternative', in: Delheim J. and G. Krause (eds) *The Visible Hand – State Interventionism of Capitalism in Crisis*'), Karl Dietz Verlag, Berlin.

Kowalik, T. (2010) 'Szok jako antyterapia. Jak nie należy budować nowego ładu', in: Kotowicz-Jawor, J. (ed.) *Polska i Rosja. Państwo i gospodarka w perspektywie XXI wieku* (in Polish: 'Shock as anti-therapy. How not to build a new order', in: Kotowicz-Jawor, J. (ed.) *Poland and Russia. State and Economy from the Perspective of the 21st Century*), Wydawnictwo KeyText, Warszawa.

Kowalik, T. (2010) 'Kryzys systemu w perspektywie alterglobalizmu', in: Kołodko, G. W. (ed.) *Globalizacja, kryzys i co dalej?* (in Polish: 'Sytemic crisis in the anti-globalisation perspective', in: Kołodko, G. W. (ed.) *Globalisation, Crisis and What Next?*), Wydawnictwo Poltext, Warszawa.

Kowalik, T. (2010) 'Powtórka z pierwotnej akumulacji kapitału', in: Kozłowski P. and H. Domański (eds) *Po 20 latach. Polska Transformacja z perspektywy ekonomicznej,*



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

*socjologicznej i prawniczej* ('The repeat of primitive accumulation of capital', in: Kozłowski P. and H. Domański (eds) *20 Years Later. Polish Transformation from an Economic, Sociological and Legal Perspective*), Wydawnictwo KeyText, Warszawa.

Kowalik, T. and P. Kozłowski (2010) 'Reforma i transformacja', in: Instytut Nauk Ekonomicznych Polskiej Akademii Nauk (ed.) *Przeszłość i teraźniejszość* (in Polish: 'Reform and transformation', in: Instytut Nauk Ekonomicznych Polskiej Akademii Nauk (ed.) *The past and the present*), Wydawnictwo KeyText, Warszawa.

Kowalik, T. (2010) 'Kapitalizm niejedno ma imię', in: *Zrozumieć nowoczesność. Księga jubileuszowa Zygmunta Baumana* (in Polish: 'Capitalism has many names', in: *Understanding Modernity. Festschrift for Zygmunt Bauman*), Wydawnictwo Oficyna, Łódź.

Kowalik, T. (2011) 'Systemowe źródła obecnego kryzysu światowego', in: Kieżun, W. (ed.) *Krytycznie i twórczo o zarządzaniu* (in Polish: 'Systemic origins of the current global crisis', in: Kieżun, W. (ed.) *Critically and Creatively about Management*), Wydawnictwa Akademickie i Profesjonalne, Akademia Leona Koźmińskiego, Warszawa.

## 3 Academic articles

Brus, W. and T. Kowalik (1966) 'Oskar Lange – teoretyk socjalizmu' (in Polish: 'Oskar Lange – theorist of socialism'), in: *Kultura i Społeczeństwo*, no. 2.

Brus, W., Kowalik, T. and I. Sachs (1967) 'Ewolucja ekonomii politycznej a jej miejsce w naukach społecznych' (in Polish: 'The evolution of political economy and its place in social science'), in: *Kultura i Społeczeństwo*, no. 2.

Brus, W., Kowalik, T. and I. Sachs (1967) 'Węzłowe problemy ekonomii współczesnej' (in Polish: 'Key problems of modern economics'), in: *Studia Socjologiczne*, no. 3.

Brus, W., Kowalik, T. and I. Sachs (1967) 'Obszary badań i narzędzia analizy ekonomii współczesnej' (in Polish: 'Areas of research and tools of analysis for modern economics'), in: *Ekonomista*, no. 4.

Brus, W. and T. Kowalik (1970) 'L'économie et le socialisme selon Oskar Lange' (in French: 'Economics and socialism according to Oskar Lange'), in: *Économie et société*, no. 1.

Brus, W. and T. Kowalik (1983) 'Socialism and development', in: *Cambridge Journal of Economics*, no. 3–4.

Bugaj, R. and T. Kowalik (1986) 'Kryzys polski w oczach ekonomistów' (in Polish: 'The Polish crisis in the eyes of economists'), in: *Więź*, no. 10.

Bugaj, R. and T. Kowalik (1991) 'W kierunku gospodarki mieszanej' (in Polish: 'Towards a mixed economy'), in: *Więź*, no. 1, published in German: 'Auf dem Weg zu einer gemischen Ökonomie', in: *Prokla 82 Markt und Demokratie*, March.

Kalecki, M. and T. Kowalik (1971) 'Osservazioni sulla "riforma cruciale"', in: *Politica ed Economia*, no. 2–3, Roma, also published in Polish: Kalecki, M. and T. Kowalik (1980) 'Uwagi o "reformie przełomowej"', in: Kalecki, M., *Dzieła*, Tom 2 (*Collected works*, vol. 2), PWE Warszawa, also published in Spanish: Kalecki, M. and T. Kowalik (1983) in: *Investigación Economica*, no. 42, Mexicó, and in English: M. Kalecki and T. Kowalik (1991), 'Observations on the "Crucial Reform"', in: Osiatyński; J. (ed.) *Collected works of Michał Kalecki*, vol. 2, Oxford.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1955) 'Z historii marksistowskiej myśli ekonomicznej w Polsce (O pierwszych publikacjach Ludwika Krzywickiego)' (in Polish: 'About the history of Marxist economic thought in Poland (Ludwik Krzywicki's first publications)'), in: *Ekonomista*, no. 5–6.

Kowalik, T. (1956) 'Na marginesie polskiego wydania "Historii Ekonomii Politycznej" D. Rozenberga' (in Polish: 'On the margins of the Polish editions of "The History of Political Economy" by D. Rozenberg'), in: *Ekonomista*, no. 2.

Kowalik, T. (1957) 'O Instytucie Gospodarstwa Społecznego' (in Polish: 'The institution of social economy'), in: *Ekonomista*, no. 2.

Kowalik, T. (1958) 'Pisma Ludwika Landaua (recenzja)' (in Polish: 'The works of Ludwik Landau (book review)'), in: *Ekonomista*, no. 5.

Kowalik, T. (1961) 'Z dziejów polskiej myśli społeczno-ekonomicznej' (in Polish: 'History of Polish socio-economic thought'), in: *Ekonomista*, no. 3.

Kowalik, T. (1962) 'Aleksander Łukaszewicz, "Socjalizm ricardianski w historii ekonomii politycznej" (recenzja)' (in Polish: 'Aleksander Łukaszewicz, "Ricardian socialism in the history of political economy" (book review)'), in: *Ekonomista*, no. 5.

Kowalik, T. (1963) 'Teoria ekonomiczna R. Luksemburg w oczach jej krytyków: Włodzimierz Lenin' (in Polish: 'The theory of R. Luxemburg in the eyes of her critics: Włodzimierz Lenin'), in: *Ekonomista*, no. 1.

Kowalik, T. (1963) 'Z prehistorii ekonomii politycznej socjalizmu' (in Polish: 'The prehistory of the political economy of socialism'), in: *Ekonomista*, no. 4.

Kowalik, T. (1964) 'Michał Kalecki' (in Polish), in: *Ekonomista*, no. 3.

Kowalik, T. (1964) 'Oskar Lange' (in Polish), in: *Ekonomista*, no. 3.

Kowalik, T. (1964) 'Socjologia Ludwika Krzywickiego' (in Polish: 'The sociology of Ludwik Krzywicki'), in: *Studia Socjologiczne*, no. 4.

Kowalik, T. (1966) 'Mesjanizm kapitalistycznego uprzemysłowienia: o Józefie Supińskim' (in Polish: 'Messianism of capitalist industrialisation: on Józef Supiński'), in: *Ekonomista*, no. 6.

Kowalik, T. (1967) 'Kapitał Karola Marksa w literaturze polskiej (miscellanea historyczne)' (in Polish: 'Karl Marx's Capital in Polish literature (historical miscellanea))', in: *Ekonomista*, no. 2.

Kowalik, T. (1968) 'Stanisław Szczepanowski – ekspert rozwoju gospodarczego' (in Polish: 'Stanisław Szczepanowski – expert in economic development'), in: *Kwartalnik Historii Nauki i Techniki*, no. 2.

Kowalik, T. (1968) 'Nowy spór o stosunek M. Webera do Karola Marksa' (in Polish: 'New dispute about the relationship of M. Weber to Karl Marx'), in: *Ekonomista*, no. 3.

Kalecki, M., Kowalik, T. and K. Secomski (1969) 'Ekonomia Edwarda Lipińskiego' (in Polish: 'The economics of Edward Lipiński'), in: *Ekonomista*, no. 2.

Kowalik, T. (1969) 'O teorii imperializmu Róży Luksemburg' (in Polish: 'Rosa Luxemburg's theory of imperialism'), in: *Ekonomista*, no. 1.

Kowalik, T. (1969) 'Claude-Henri de Saint-Simon, Pisma wybrane (recenzja)' (in Polish: 'Claude-Henri de Saint-Simon, Selected works (book review)'), in: *Ekonomista*, no. 4/1969.

Kowalik, T. (1970) 'Model socjalizmu Karola Rodbertusa' ('Karl Rodbertus's model of socialism'), in: *Ekonomista*, no. 2.

Kowalik, T. (1970) 'O marksowskim obrazie gospodarki komunistycznej' (in Polish: 'On Marx's image of the comunist economy'), in: *Ekonomista*, no. 4.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1970) 'Oskara Langego wczesne modele socjalizmu' (in Polish: 'Oskar Lange's early models of socialism'), in: *Ekonomista*, no. 5.
Kowalik, T. (1971) 'Wizje socjalizmu w szkole Owena i u Saintsimonistów' (in Polish: 'Visions of socialism in the schools of Owen and the Saint Simonians'), in: *Ekonomista*, no. 2.
Kowalik, T. (1971) 'Jean Jaures, Wybór pism (recenzja)' ('Jean Jaures, Selected works (book review)), in: *Ekonomista*, no. 4.
Kowalik, T. (1971) 'O humanizację ekonomii (recenzja książki E. Lipińskiego: Marks i zagadnienia współczesności, 1969)' (in Polish: 'The humanisation of economics (review of E. Lipiński's book: Marx and contemporary issues, 1969)'), in: *Więź*, no. 3.
Kowalik, T. (1971) 'Młodość i socjalizm Oskara Langego. W poszukiwaniu własnych dróg' (in Polish: 'Youth and socialism of Oskar Lange. In search of his own path'), in: *Kultura i Społeczeństwo*, no. 2.
Kowalik, T. (1971) 'Ekonomia liberalna a program pracy organicznej' (in Polish: 'Liberal economy and the plan of organic work), in: *Kwartalnik Historii Nauki i Techniki*, no. 4.
Kowalik, T. (1971) 'Oskar Lange et la pansée économique' (in Polish: 'Oskar Lange and economic thought'), in: *Perspectives Polonaises*, no. 6 (also published in English and German).
Kowalik, T. (1972) 'Polski spór o ekonomię jako naukę ścisłą w XIX wieku' (in Polish: 'The Polish dispute about economics as hard science in the 19th century'), in: *Ekonomista*, no. 1.
Kowalik, T. (1974) 'Socjologiczny obszar w ekonomii O. Langego' (in Polish: Sociology in the economics of O. Lange'), in: *Studia Socjologiczne*, no. 3.
Kowalik, T. (1975) 'Propozycja socjologii ekonomicznej' (in Polish: 'The proposition of economic sociology'), in: *Ekonomista*, no. 2.
Kowalik, T. (1975) 'Economics and praxiology. Oskar Lange's Political Economy', in: *Organon*, no. 11.
Kowalik, T. (1975) 'Notas sobre la teoría luxemburguiana de la acumulación' (in Spanish: 'Notes on Luxenburg's theory of accumulation'), in: *Materiales. Critica de la cultura*, no. 3.
Kowalik, T. (1976) 'Racjonalność i historyzm' (in Polish: 'Economic rationality and historism'), in: *Ekonomia*, Uniwersytet Warszawski, no. 36.
Kowalik, T. (1978) 'The institutional framework of Dobb's economics', in: *Cambridge Journal of Economics*, no. 2.
Kowalik, T. (1983) 'Próba kompromisu. O Komisji Ekspertów MKS w Gdańsku' (in Polish: 'The attempt of a compromise. About the commission of experts MKS in Gdańsk), in: *Zeszyty Literackie*, no. 2, also published in French: Kowalik, T. (1983) 'Les minutes d'un compromise', in: *Les Temps Modernes*, August–September.
Kowalik, T. (1984) 'Alec Nove, The economics of feasible socialism', in: *Contributions to Political Economy*, no. 30.
Kowalik, T. (1984) 'Review on the economics of feasible socialism (written by Alec Nove, 1983)', in: *Contribution to Political Economy*, vol. 3, no. 1.
Kowalik, T. (1985) 'O Oskarze Langem mniej rocznicowo' (in Polish: 'A few commemorative words about Oskar Lange'), in: *Miesięcznik Literacki*, December.
Kowalik, T. (1987) 'Oskar Lange na nowo odczytywany' (in Polish: 'Oskar Lange reread'), in: *Ekonomista*, no. 5.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1987) 'Oskar Lange's thought reconsidered', in: *Oeconomica Polona*, no. 3/1987.

Kowalik, T. (1988) 'Reforma przełomowa realnego socjalizmu' (in Polish: 'Breakthrough reform of real socialism'), in: *Colloquia Communia*, no. 4–5.

Kowalik, T. (1988) 'Ekonomia i ekonomiści wobec kryzysu' (in Polish: 'Economics and economists on crisis'), in: *Ekonomista*, no. 3–4, 1988, pre-published in: *Zdanie*, no. 12/1987.

Kowalik, T. (1989) 'Michał Kalecki and first attempts to reform the Polish economy', in: *Oeconomica Polona*, no. 2/1989, also published in Polish in: *Nauka Polska*, no. 2.

Kowalik, T. (1989) 'Wiązka praw' (in Polish: 'A bundle of rights'), in: *Zmiany*, no. 1.

Kowalik, T. (1989) Liberałowie i socjaldemokraci, in: *Zmiany*, no. 34–35.

Kowalik, T. (1989) 'Tra l'utopia comunista e l'utopia neo-liberale' (in Italian: 'Between the communist and the neo-liberal utopia'), in: *Problemi del Socialismo*, no. 4/1990.

Kowalik, T. (1991) 'Economia de mercado o economia mixta' (in Portuguese: 'The market economy and the mixed economy'), in: *Jornadas Internacionales de Ciencias Politicas*, July/1991.

Kowalik, T. (1991) 'The costs of "shock therapy", economic transition in Poland', in: *Dissent*, fall.

Kowalik, T. (1991) 'Marketization and privatization: the case of Poland', in: *Socialist Register*.

Kowalik, T. (1992) 'Szwedzkie doświadczenie (w polskiej perspektywie)' (in Polish: 'The Swedish experience (in Polish perspective)'), in: *Przegląd Społeczny*, no. 3.

Kowalik, T. (1992) 'W stronę umowy społecznej' (in Polish: 'Towards a social contract'), in: *Przegląd Społeczny*, no. 1.

Kowalik, T. (1993) 'Can Poland afford the Swedish model?', in: *Dissent*, winter.

Kowalik, T. (1993) 'Socjalizm rynkowy – system czy polityka? Na marginesie ksiażki W. Brusa i K. Łaskiego: Od Marksa do Rynku' (in Polish: 'Market socialism – economic system or politics? On the margins of the book by W. Brus and K. Łaski: From Marx to the market'), in: *Ekonomista*, no. 4.

Kowalik, T. (1994) 'A reply to M. Glasman', in: *The New Left Review*, no. 205.

Kowalik, T. (1994) 'I costi sociali della terapia d'urto' (in Italian: 'The social cost of shock therapy'), in: *Europa, Europe*, Fondazione Istituto Gramsci, no. 2.

Kowalik, T. (1995) 'Skuteczność polityki gospodarczej czy sprawność systemów (O książce Z. Landaua i W. Roszkowskiego, Polityka gospodarcza II RP i PRL)' (in Polish: 'Effectiveness of economic policy or systemic efficiency (About Z. Landau's and W. Roszkowski's book, Economic policies in the Second Polish Republic and the Polish People's Republic)'), in: *Ekonomista*, no. 5–6.

Kowalik, T. (1995) 'W kręgu reformy przełomowej, polityczna "przygoda człowieka myślącego"' (in Polish: 'In the circle of groundbreaking reforms, the political "adventure of the thinking man"'), in: *Ekonomista*, no. 1–2.

Kabaj, M. and T. Kowalik (1995) 'Who is responsible for postcommunist successes in Eastern Europe?', in: *Transition*, no. 7–8.

Kowalik, T. (1996) 'Społeczny charakter ekonomii Edwarda Lipińskiego' (in Polish: 'The social character of Edward Lipiński's economics'), in: *Ekonomista*, no. 6.

Kowalik, T. (1996) 'On the transformation of post-communist societies: the inefficiency of primitive accumulation', in: *International Political Science Review*, no. 3.

Kowalik, T. (1996) '"Wybór" systemu ekonomicznego jako proces społeczny' (in Polish: 'The choice of the economic system as social process'), in: *Roczniki Kolegium Analiz Ekonomicznych (SGH)*, no. 4.
Kowalik, T. (1996) 'Reformy ustrojowe czy rozwiązywanie problemów' (in Polish: 'Systemic reform or problem solving'), in: *Zdanie*, no. 3.
Kowalik, T. (1997) 'The Polish Revolution', in: *Dissent*, spring.
Kowalik, T. (1997) 'Marksizm i skok do królestwa wolności: dzieje komunistycznej utopii (na marginesie książki Andrzeja Walickiego' (in Polish: 'Marxism and the jump into the kingdom of freedom: history of communist utopia' (on the margins of the book by Andrzej Walicki)), in: *Zdanie*, no. 1–2.
Kowalik, T. (1997) 'Czy sprawiedliwość społeczna kosztuje?' (in Polish: 'Is social justice costly?), in: *Ekonomista*, no. 3.
Kowalik, T. (1998) 'Systemowe uwarunkowania polskiej polityki społecznej' (in Polish: 'Systemic conditioning of Polish social policy'), in: *Polityka Społeczna*, no. 1.
Kowalik, T. (1998) 'Kapitał ludzki – polska bariera rozwoju', in: *Przegląd Społeczny*, no. 5–6/1998, also published in English: 'The systemic conditioning of Polish social policy', in: *Labour Focus on Eastern Europe*, no. 59.
Kowalik, T. (1998) 'Wobec globalizacji nierówności' (in Polish: 'Towards the globalisation of inequality'), in: *Zeszyty Naukowe Instytutu Badań Społecznych i Międzynarodowych Fundacji im. K. Kelles-Krauza*, no. 3.
Kowalik, T. (1998) 'Amartya K. Sen – Nobel za badania nierówności' (in Polish: 'Amartya K. Sen – Nobel prize for researching inequality'), in: *Zdanie*, also published in: *Nowe Życie Gospodarcze*, no. 46.
Kowalik, T. (1998) 'Spór o polski ład ekonomiczny' (in Polish: 'Dispute about the Polish economy order'), in: *Przegląd Społeczny*, no. 1–2.
Kowalik, T. (1998) 'Inteligenci jadą do Stoczni Gdańskiej' (in Polish: 'Intellectuals on the way to the Gdańsk shipyard'), in: *Przegląd Społeczny*, no. 3–4.
Kowalik, T. (1998) 'Ewolucja systemu ekonomicznego w USA' (in Polish: 'The evolution of the economic system in the USA'), in: *Przegląd Społeczny*, no. 7–8.
Kowalik, T. (1998) 'W oczekiwaniu na terapię, na marginesie książki G. Kołodki' (in Polish: 'Awaiting therapy, on the margins of the book by G. Kołodki'), in: *Ekonomista*, no. 4/1999.
Kowalik, T. (1999) 'O condicionamento sistêmico da politica social Polonesa' (in Portuguese: 'The systemic conditioning of Polish social policy), in: *Sociedas Em Transformacao*, no. 1.
Kowalik, T. (2001) 'Michał Kalecki, kim był, jakim go znałem i podziwiałem' (in Polish: 'Michał Kalecki, who he was, how I knew and admired him'), in: *Człowiek i Świat*, Fundacja Innowacja, Warszawa, republished in 2006 in: Musiał, G. (ed.) *Twórczość Michała Kaleckiego i jej znaczenie dla teorii ekonomii*, Akademia Ekonomiczna w Katowicach, Katowice.
Kowalik, T. (2003) 'Globalizacja i integracja nie prowadzą do jednego systemu społeczno-ekonomicznego' (in Polish: 'Globalisation and integration do not lead to one socio-economic system'), in: *Studia i Materiały*, no. 4., SSiIS, Warszawa.
Kowalik, T. (2004) 'Olgierd Gedymin: Kapitalizm niemiecki. Szkice o genezie, rozwoju i teraźniejszości, Białystok 2003 (recenzja)' (in Polish: 'Olgierd Gedymin: German capitalism. Outline of its origin, development and present state, Białystok 2003 (book review)'), in: *Ekonomista*, no. 30.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (2004) 'Państwo dobrobytu – druga fala' (in Polish: 'The welfare state – second wave'), in: *Problemy Polityki Społecznej, Studia i Dyskusje*, no. 6.
Kowalik, T. (2004) 'Systemic diversity of modern capitalism', in: *Dialogue and Universality*, no. 10–12.
Kowalik, T. (2004) 'America in an age of settling accounts, review of J. Stiglitz's The roaring nineties', in: *Dialogue and Universality*, no 10–12.
Kowalik, T. (2005) 'Własność źródłem wielu niesprawiedliwości' (in Polish: 'Property ownership, the origin of much injustice'), in: *Przegląd Socjalistyczny*, no. 4–5.
Kowalik, T. (2005) 'Od Stiglitza do Keynesa, wywiad przeprowadzony przez Sławomira Sierakowskiego' (in Polish: 'From Stiglitz to Keynes, interview by Sławomir Sierakowski'), in: *Krytyka Polityczna*, no. 9–10.
Kowalik, T. (2005) 'Rola państwa w transformacji' (in Polish: 'The role of the state in transformation'), in: *Przegląd Socjalistyczny*, no. 2–3.
Kowalik, T. (2007) 'Polska transformacja a nurty liberalne' (in Polish: 'Polish transformation and liberal movements'), presentation at the plenary session of the Congress of Polish Economists (Kongres Ekonomsitów Polskich), November 2007, published in: *Ekonomista*, no. 6.
Kowalik, T. (2007) 'Sylwetka laureata Nagrody Nobla z ekonomii 2007 – Leonid Hurwicz' (in Polish: 'Profile of the 2007 economics Nobel Prize winner – Leonid Hurwicz), in: *Problemy polityki społecznej*, no. 10.
Kowalik, T. (2008) 'Czy kapitalizm może być etyczny?' (in Polish: 'Can capitalism be ethical?'), in: *Annales SWSEiZ*, Salezjańska Wyższa Szkola Ekonomii i Zarządzania, vol. 11, no. 1, Łódź.
Kowalik, T. (2008) 'Euro – kolejny filar ładu społecznego' (in Polish: 'Euro – another pillar of social order'), in: *Studia Ekonomiczne*, no. 1–2.
Kowalik, T. (2009) 'У истоков современного финансового кризиса' (in Russian: 'The origins of the current financial crisis'), in: *Белорусский экономический журнал*, no. 1.
Kowalik, T. (2010) 'Is cooperation of sociologists and economists possible and if so when?', in: *Warsaw Forum of Economic Sociology*, SGH, vol. 1, no. 1.
Kowalik, T. (2010) 'Cięciobsesja' (in Polish: 'Budget cut obsession'), in: *Krytyka Polityczna*, no. 23.

## 4 Other publications

Kowalik, T. and W. Sadowski (1956) 'O krytyce' (in Polish: 'A critique'), in: *Życie Gospodarcze*, no. 19.
Kowalik, T. (1957) 'Miscellanea radzieckie – Nowy etap dyskusji o prawie wartości w ZSRR' (in Polish: 'Soviet miscellanea – A new phase of discussion about the law of value in the USSR'), in: *Życie Gospodarcze*, no. 29.
Kowalik, T. (1957) 'O socjalizmie bez mistyki' (in Polish: 'Socialism without mysticism'), in: *Życie Gospodarcze*, no. 31.
Kowalik, T. (1957) 'Miscellanea radzieckie – Jeszcze o dyskusjach' (in Polish: 'Soviet miscellanea – More discussions'), in: *Życie Gospodarcze*, no. 32.
Kowalik, T. (1957) 'Swoiste curiosum i obsesje' (in Polish: 'Specific curiosity and obsession'), in: *Życie Gospodarcze*, no. 47/1957.
Kowalik, T. (1958) '"Kapitału" tom trzeci' (in Polish: '"Capital" volume three'), in: *Życie Gospodarcze*, no. 8.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1958) 'Lenin wielki rewolucjonista' (in Polish: 'Lenin, the great revolunionary'), in: *Życie Gospodarcze*, no. 16.

Kowalik, T. (1958) 'Wybitna książka w obronie złej sprawy' (in Polish: 'An outstanding book in defence of the wrong cause'), in: *Życie Gospodarcze*, no. 38.

Kowalik, T. (1958) 'Granice ewolucji poglądów L. Krzywickiego' (in Polish: 'The limits of evolution in L. Krzywicki's views'), in: *Życie Gospodarcze*, no. 49.

Kowalik, T. (1958) 'Pierwszy przełom' (in Polish: 'The first breakthrough'), in: *Życie Gospodarcze*, no. 50.

Kowalik, T. (1960) 'Groźba gospodarczego anschlussu' (in Polish: 'The threat of economic Anschluss'), in: *Życie Gospodarcze*, no. 14.

Kowalik, T. (1960) 'Henryk Grossman, polsko-niemiecki teoretyk ekonomii marksistowskiej' (in Polish: 'Henryk Grossman, Polish-German theoretist of Marxist economics'), in: *Życie Gospodarcze*, no. 18.

Kowalik, T. (1968) 'Rosa Luxemburg', in: Sill, D. L. and R. K. Merton (eds) *International Encyclopedia of the Social Sciences*, vol. 9, Macmillan, New York.

Kowalik, T. (1974) 'Oskar Lange – tolerancja i wszechstronność' (in Polish: 'Oskar Lange – tolerance and universality'), in: *Kultura*, 19 August 1974.

Kowalik, T. (1975) 'Capitale' (in Italian: 'Capital'), entry in *Enciclopedia Einaudi*, vol. 2, Torino.

Kowalik, T. (1978) 'Crisi' (in Italian: 'Crises'), entry in *Enciclopedia Einaudi*, vol. 4, Torino.

Kowalik, T. (1980) *Spory o ustrój społeczno-ekonomiczny w Polsce, 1944–1948* (wykłady Towarzystwa Kursów Naukowych) (in Polish: *Disputes over Poland's socio-economy system, 1944–1948*, lectures of the Towarzystwo Kursów Naukowych) Niezależna oficyna Wydawnicza "Nowa", Warszawa, republished in 2006 by INE PAN, Warszawa.

Kowalik, T. (1981) 'Z doświadczeń 1956 r. Rady robotnicze i pierwsze reformy' (in Polish: 'The experience of 1956. Workers' councils and first reforms'), in: *Nowa Trybuna Opolska*, no. 3.

Kowalik, T. (1985) 'Spór o racjonalność ciągle otwarty' (in Polish: 'The dispute about rationality remains open'), in: *Nowe Książki*, December/1984.

Kowalik, T. (1986) 'Walczący ślimak (rozmowa o Oskarze Langem)' (in Polish: 'The fighting snail (conversation about Oskar Lange)'), in: *Wprost*, 27 July 1986.

Kowalik, T. (1987–1989) 'Oskar Lange', 'Lange–Lerner model', 'Karl Kautsky', 'Rosa Luxemburg', 'Central Planning', entries in *The New Palgrave Economic Dictionary*, Macmillan, Basingstoke.

Kowalik, T. (1990) 'Destabilizacja gospodarcza czy nowa umowa społeczna?' (in Polish: 'Economic destabilisation or new social contract?'), in: *Życie Gospodarcze*, no. 28.

Kowalik, T. (1992) 'Misja Kuronia' (in Polish: 'Kuroń's mission'), in: *Życie Gospodarcze*, 12 May 1992.

Kowalik, T. (1994) Comment on the presentation by Drygalski, J., 'Pakt o przedsiębiorstwie państwowym a tempo i kierunek prywatyzacji' ('Pact on state enterprises and the pace and direction of privatisation'), in: *Prywatyzacja w Polsce. Szanse i Zagrożenia*, Instytut Gospodarki Światowej, Warszawa.

Kowalik, T. (1994) 'Is a social contract a utopia?', in: conference proceedings from the conference *Negotiations as the way to social contract*, IPiSS and Friedrich Ebert Stiftung, Warszawa.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (1995) 'Rola państwa w procesie transformacji' (in Polish: 'The role of the state in the transformation process'), in: *Gospodarka Narodowa*, no. 4.
Kowalik, T. (1996) 'Społeczny charakter ekonomii Edwarda Lipińskiego', in: *Społeczne aspekty rozwoju gospodarczego Polski*, Konferencja naukowa dla uczczenia 10 rocznicy śmierci prof. Edwarda Lipińskiego (in Polish: 'The social character of Edward Lipiński's economics', in: *Social aspects of Poland's economic development,* conference in honour of the 10th anniversary of Edward Lipiński's death), PTE, Warszawa.
Kowalik, T. (1996) 'Biegun nierówności' (in Polish: 'Polarising inequality'), in: *Gazeta Wyborcza*, 1 October 1996.
Kowalik, T. (1996) 'Sierpień – epigońska rewolucja mieszczańska' (in Polish: 'July – the bourgeois revolution of the latecomers'), in: *Nowe Życie Gospodarcze*, no. 37.
Kowalik, T. (1997) 'Dzielenie wzrostu' (in Polish: 'Distributing growth'), in: *Gazeta Bankowa*, 26 January 1997.
Kowalik, T. (1997) 'Jak komuch o solidaruchach (recenzja książki J. Główczyka, Kapitalizm po polsku)' (in Polish: 'The communist about the socialist (review of J. Główczyk, Capitalism in Polish)'), in: *Gazeta Wyborcza*, 9 February 1997.
Kowalik, T. (1998) 'Od oligarchicznego bogactwa do oligarchicznej demokracji' (in Polish: 'From oligarchic wealth to oligarchic democracy'), in: *Master of Business Administration*, no. 5–6.
Kowalik, T. (1998) 'Artykuł o książce Kornaia, Stabilizacja i wzrost w procesie transformacji', in: *Nowe Życie Gospodarcze*, no. 13.
Kowalik, T. (1998) 'Lepiej równiej' (in Polish: 'More equal is better'), in: *Polityka*, 18 April 1998.
Kowalik, T. (1998) 'Sygnały z Waszyngtonu' (in Polish: 'Signals from Washington'), in: *Przegląd Tygodniowy*, 9 September 1998.
Kowalik, T. (1999) 'Kaleckian crucial reform of capitalism and after', presentation at the international conference dedicated to the 100th birthday of Michał Kalecki, Polskie Towarzystwo Ekonomiczne, Warszawa.
Kowalik, T. (2000) 'Mity wolnego rynku' (in Polish: 'The myths of the free market'), in: *Przegląd Tygodniowy*, 25 September 2000.
Kowalik, T. (2001) 'Zachodnie państwo opiekuńcze obroniło się, co czeka Polskę?' (in Polish: 'The Western welfare state defended itelf, what is awaiting Poland?'), in: *Oświata i Wychowanie*, no. 3.
Kowalik, T. (2001) 'Społeczne aspekty transformacji a rola państwa' (in Polish: 'Social aspects of transformation and the role of the state'), in: *Gospodarka Narodowa*, no. 9.
Kowalik, T. (2001) 'W czyśćcu historii (na 80-lecie Włodzimierza Brusa)' (in Polish: 'In the purgatory of history (for the 80th birthday of Włodzimierz Brus)'), in: *Gazeta Wyborcza*, 25–26 August 2001.
Kowalik, T. (2001) 'Notas sobre la reforma Crucial do capitalismo de Kalecki e depois', in: Pomeranz, L., Miglioli, J. and G. T. Lima (eds) *Dinamica economica do capitalismo contemporaneo, Homenagem a M. Kalecki*, Universidade de Sao Paulo, and in English: Kowalik, T. (2004) 'Kaleckian crucial reform of capitalism and after', in: Sadowski, Z. L. and A. Szeworski (eds) *Kalecki's economics today*, Routledge, London.
Kowalik, T. (2001) 'Systemowe przesłanki' (in Polish: 'Systemic evidence'), in: *Nauka i Przyszłość*, September 2001.
Kowalik, T. (2001) 'O potrzebie radykalnych zmian w polityce gospodarczej i społecznej naszego kraju, wywiad Z. Słowika' (in Polish: 'About the need to



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

change economic and social policies of our country, interview with Z. Słowika'), in: *Res Humana*, no. 1.

Kowalik, T. (2002) 'Joseph Stiglitz a polska transformacja' (in Polish: 'Joseph Stiglitz and the Polish transformation'), in: *Oświata i Wychowanie*, no. 1.

Kowalik, T. (2002) 'Mój rok osiemdziesiąty dziewiąty' (in Polish: 'My year 1989'), in: *Gazeta Wyborcza*, 23–24 March 2002.

Kowalik, T. (2002) 'Polska miała pecha' (in Polish: 'Poland had bad luck'), in: *Trybuna*, 12 April 2002.

Kowalik, T. (2002) 'System gospodarczy' (in Polish: 'Economic system'), entry in: *Encyklopedia Socjologii* (*Sociological encyclopaedia*), Tom 5, Oficyna Naukowa, Warszawa.

Kowalik, T. (2003) 'Accession to EU – yesterday, today, tomorrow', in: Conference proceedings from the conference *Improvement of economic policy co-ordination for employment and social cohesion in Europe*, Budapest University of Economic Sciences and Public Administration, Budapest.

Kowalik, T. (2003) 'Błędne przesłanki, błędne wnioski' (in Polish: 'Wrong assumptions, wrong conclusions'), in: *Rzeczpospolita*, 20 January 2003.

Kowalik, T. (2003) 'Polska transformacja a lewica (parę uwag adresowanych do działaczy SLD)' (in Polish: 'The Polish transformation and the left (some remarks addressed to SLD members)'), in: *Kontrpropozycje*, no. 4/7.

Kowalik, T. (2003) 'Narodowe fundusze inwestycyjne – góra urodziła mysz, miesięcznik' (in Polish: 'National investment funds – the mountain gave birth to a mouse, a monthly story'), in: *Oświata i Wychowanie*, no. 4.

Kowalik, T. (2003) 'Mój przyjaciel Jerzy Hauser' (in Polish: 'My friend Jerzy Hauser'), in: *Przegląd*, 23 March 2003.

Kowalik, T. (2004) Globalizacja na rozdrożu' (in Polish: 'Globalisation at the crossroads'), in: *Bank i Kredyt*, no. 8.

Kowalik, T. (2004) 'Porozmawiajmy o kapitalizmie, rozmawia Przemysław Wielgosz' (in Polish: 'Let's talk about capitalism, interview with Przemysław Wielgosz'), in: *Trybuna*, 14–15 July 2004.

Kowalik, T. (2005) 'Antyetatyzm jako misja, polemiczny artykuł o książce: Janusz Beksiak redaktor i główny autor, Polska gospodarka w XX wieku, eseje historyczno-ekonomiczne, Łódź, 2003' (in Polish: 'Anti-statism as a mission, polemical article about Janusz Beksiak's book, The Polish economy in the 20th century, socio-historical essays, Łódź, 2003'), in: *Oświata i Wychowanie*, no. 1.

Kowalik, T. (2005) 'Bezdroża "Solidarności", wywiad przeprowadzony przez Andrzeja Zybałę' (in Polish: 'The sideways of "Solidarności", interview by Andrzej Zybał'), in: *Obywatel*, no. 5–25.

Kowalik, T. (2005) 'Trudne wybory po Sierpniu '80, rozmawiają Irena Dryll i Adam Cymer' (in Polish: 'Though choices after August '80, interview with Irena Dryll and Adam Cymer'), in: *Nowe Życie Gospodarcze*, no. 16.

Kowalik, T. (2005) 'Pracy i chleba' (in Polish: 'Work and bread'), in: *Trybuna*, 28 April 2005.

Kowalik, T. (2006) 'Jan Bossak, Systemy gospodarcze a globalna konkurencja (recenzja)' (in Polish: 'Jan Bossak, The economic system and global competition (book review)'), in: *Gospodarka Narodowa*, no. 11–12.

Kowalik, T. (2006) 'Bez buntu się nie obejdzie' (in Polish: 'There is no way without rebellion'), in: *Trybuna*, 2 February 2006.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

Kowalik, T. (2006) 'Polish roots of and debates on R. Luxemburg's theories', presentation at the *International Conference on Rosa Luxemburg's Thought and Its Contemporary Value*, 20–22 March 2006, Wuhan University, China.

Kowalik, T. (2006) 'Wina i wiara Jacka Kuronia' (in Polish: 'Fault and faith of Jacek Kuroń'), in: *Le Monde Diplomatiques*, June.

Kowalik, T. (2006) 'Własność jako źródło nierówności' (in Polish: 'Property as source of inequality'), presentation at the interdisciplinary conference *Nierówności społeczne* (*Social inequalities*), 5–6 June 2006, Institute of Psychology of the Wrocław University, Wrocław.

Kowalik, T. (2006) 'Poland's sudden shift to the right', presentation at the *EuroMemorandum conference*, 30 September 2006, Bruxelles.

Kowalik, T. (2007) 'Miltona Friedmana droga na szczyty' (in Polish: 'Milton Friedman's way to the top'), in: *Oświata i Wychowanie*, February.

Kowalik, T. (2007) 'Chiny – Wielki sukces i nie mniejsze problemy' (in Polish: 'China – Great success and equally large problems'), in: *Le Monde Diplomatique*, February/2007.

Kowalik, T. (2007) 'Barwy Ochronne Donalda Tuska' (in Polish: 'Donald Tusk's protective mimicry'), in: *Le Monde Diplomatique*, December.

Kowalik, T. (2007) 'Polskie reformy (na marginesie książki W. Baki: Zmagania o reformę. Z dziennika politycznego 1980–1990)' (in Polish: 'Polish reforms (on the margins of W. Baka's book: The struggle for reform. Political diary 1980–1990)'), in: *Dziś*, no. 8.

Kowalik, T. (2007) 'Piotr Kozarzewski, Prywatyzacja w krajach postkomunistycznych (recenzja)' (in Polish: 'Piotr Kozarzewski, Privatisation in post-communist countries (book review)'), in: *Nowe Życie Gospodarcze* no. 30.

Kowalik, T. (2008) 'Szok zamiast terapii' (in Polish: 'Shock instead of therapy'), letter by the association 'Kuźnica', in: *Zdanie*, no. 1–2.

Kowalik, T. (2008) 'Dokąd zmierzają Chiny?' (in Polish: 'Where is China heading?'), in: *Dziś*, no. 3.

Kowalik, T. (2008) 'Kornai wśród skorpionów' (in Polish: 'Kornai amidst scorpions'), in: *Gazeta Wyborcza*, 18 October 2008.

Kowalik, T. (2009) 'Recenzja książki Jacka Tittenbruna, Z deszczu pod rynnę, Meandry polskiej prywatyzacji' (in Polish: 'Review of Jacek Tittenbrun's book, Out of the frying pan into the fire, Meanders of Polish privatisation'), in: *Nowe Książki*, January.

Kowalik, T. (2009) 'Kryzys oddalił naszą euroizację' (in Polish: 'The crisis has rolled back our euroisation'), in: *Kwartalnik Nauk o Przedsiębiorstwie*, no. 2.

Kowalik, T. (2009) 'Systemowe źródła obecnego kryzysu światowego' (in Polish: 'Systemic origins of the current global crisis'), in: *Master of Business Administration*, no. 5.

Kowalik, T. (2010) 'Konstytucyjna zasada sprawiedliwości społecznej' (in Polish: 'Constitutional principles of social justic'), presentation at the Constitutional Court, 9 March 2010, in: *Podstawowe założenia Konstytucji Rzeczpospolitej Polskiej*, Wydawnictwo Trybunału Konstytucyjnego, Warszawa.

Kowalik, T. (2010) 'Czy nadchodzi "cywilizacja nierówności"?' (in Polish: 'Is the "civilisation of inequality" approaching?'), in: *Res Humana*, no. 6.

Kowalik, T. (2010) 'Czy PRL był państwem polskim?' (in Polish: 'Was the Polish People's Republic a Polish state?'), in: *Kancelaria Prezydenta RP, Seminaria Lucieńskie 2008–2009*, Warszawa.



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

# Index







10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

This page intentionally left blank



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski

This page intentionally left blank



10.1057/9781137335609 - The Legacy of Rosa Luxemburg, Oskar Lange and Michał Kalecki, Edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski