

**The Economic Theories of Rosa Luxemburg and Michal Kalecki:
Continuity or Rupture?**

by

Alexandre Charron
Bachelor of Arts, University of Ottawa, 2006

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

MASTER OF ARTS

in Interdisciplinary Studies

© Alexandre Charron, 2018
University of Victoria

All rights reserved. This thesis may not be reproduced in whole or in part, by
photocopy or other means, without the permission of the author.

Supervisory Committee

The Economic Theories of Rosa Luxemburg and Michal Kalecki: Continuity or Rupture?

by

Alexandre Charron
Bachelor of Arts, University of Ottawa, 2006

Supervisory Committee

Dr. William Carroll, (Department of Sociology)
Co-Supervisor

Dr. James Lawson, (Department of Political Science)
Co-Supervisor

Abstract

Supervisory Committee

Dr. William Carroll, (Department of Sociology)

Co-Supervisor

Dr. James Lawson, (Department of Political Science)

Co-Supervisor

From the time of its first publication, Rosa Luxemburg's main economic work, *The Accumulation of Capital*, was heavily criticized. This set a precedent towards the dismissal of her economic theory which has continued almost to the present day. Very recently, however, a stream of literature favourable to Luxemburg has begun to emerge. Commentators in this group have attempted to re-evaluate Luxemburg's contribution to Marxian economic theory by, among other approaches, attempting to show her as an important precursor to Michal Kalecki. This work operates within this framework. It attempts to further specify the nature of the theoretical relationship between Luxemburg and Kalecki by closely examining and comparing the economic theories of the two thinkers. What such a study reveals, however, is that this relationship is better defined as a one of rupture rather than of continuity. While Kalecki seems to accept the basic structure of Luxemburg's argument, he modifies and qualifies it in so many respects as to make it almost unrecognizable. But such a divergence between the theories is hardly surprising if we view them in their proper historical contexts. The differing empirical, personal and political backgrounds from which the theories emerged is what would have led to the development of the divergent elements within them. Such substantial differences in the contexts which gave rise to the respective theories underscore the

ill-advised nature of the attempt to draw too strong a link between the economic thought of Luxemburg and Kalecki.

Table of Contents

Supervisory Committee	ii
Abstract	iii
Table of Contents	v
Acknowledgments	vi
Introduction	1
Chapter 1: Rosa Luxemburg's Economic Theory	12
Marx's Reproduction Schemas	13
Luxemburg's Critique of the Reproduction Schemas	19
The Role of Investment in Reproduction	24
Luxemburg's Investment Scepticism	29
The 'Exogenous' Factors	37
Chapter 2: Michal Kalecki's Economic Theory	48
1. Kalecki's Direct Engagement with Luxemburg: Criticisms and General Assessment	49
2. Kalecki's Investment Scepticism and its Consequences for the Reproduction of SCCEs	55
The 'Dual Nature' of Investment and its Contradictory Effects on Reproduction ...	55
The 'Dual Nature' of Investment and the Business Cycle	65
The 'Asymmetry' of Investment and Stagnation in the Long-Term	69
Monopolization of the Economy and Stagnation	75
Section Summary: Kalecki's Investment Scepticism, its Impacts on Reproduction, and Luxemburg's Theory	85
3. Kalecki's Conception of the 'Exogenous Factors'	87
Chapter Summary	95
Chapter 3: The Historical Context of the Economic Theories of Luxemburg and Kalecki	98
1. The Historical Context of Luxemburg's Theory	98
Revisionism	101
Luxemburg against Revisionism	112
Luxemburg against Revisionism: Round Two	123
2. The Historical Context of Kalecki's Theory	131
Empirical Factors	137
Personal Factors	140
Political Factors	145
Conclusion	152
Appendix: Kalecki on the Possibility of Attaining Full Employment	159
The Technical Barriers to Full Employment	160
Stimulating Private Investment	160
Government Spending through Taxation	162
Deficit Spending	165
Income Redistribution	172
The Political Barriers to Full Employment	178
Bibliography	185

Acknowledgments

I owe debt of gratitude to the Social Sciences and Humanities Research Council (SSHRC) and to the Faculty of Graduate Studies at the University of Victoria for their generous financial support; to my supervisors, Bill Carroll and Jamie Lawson, for their guidance and patience in reading multiple, lengthy drafts; and to my family, Rosie and Felix Geuer, for their support throughout.

Introduction

Immediately upon its release in 1913, Rosa Luxemburg's main economic work, *The Accumulation of Capital*, faced heavy criticism, seemingly from all sides within the socialist movement of the time.¹ It was viciously attacked both by the right wing of the Social Democratic Party of Germany (SPD), which opposed the implications which the theories contained in the work had for the political strategy of the socialist movement,² as well as by others who, at least in principle, agreed with Luxemburg's position on such questions.³ Moreover, the book drew the ire of Lenin,⁴ and later of others within the Bolshevik party who sought to build upon his legacy.⁵

As the above suggests, it is probable that Luxemburg's economic thought, as expressed in *The Accumulation of Capital*, was condemned for reasons other than the logical errors which the work also undoubtedly contains. I could enumerate three categories of reasons which likely would have motivated the criticism of the book, beside the intrinsic shortcomings of its arguments. These include: (1) the fact that Luxemburg was a woman at a time when there were very few female intellectuals, let alone theorists of Marxist political economy;⁶ (2) the fact that

¹ Day and Gaido 2012, p. 74; Frölich 1972, p. 159; Albo 2016, p. 37; Bellofiore 2009a, p. 4; Bellofiore 2014, p. 82; Bellofiore and Passarella 2009, p. 101; Ticktin 2012, p. 312.

² Day and Gaido 2012, p. 76; Howard and King 1989, pp. 121-22.

³ Luxemburg 1972a, pp. 79-80; Howard and King 1989, p. 112; Day and Gaido 2012, p. 74; Krätke 2014, p. 15; Ticktin 2012, p. 312; Zarembka 2002, pp. 10-11; Zarembka 2009, p. 70.

⁴ Day and Gaido 2012, p. 75; Krätke 2014, p. 15; Krätke 2016, p. 136; Albo 2016, p. 37; Zarembka 2000, pp. 218-19; Zarembka 2009, p. 70.

⁵ Tarbuck 1972, p. 16; Krätke 2016, p. 141; Bellofiore 2009a, p. 4; Bellofiore and Passarella 2009, p. 101; Trincado 2004, p. 257; Zarembka 2002, p. 11.

⁶ Trincado 2004, p. 242; Bellofiore 2004, p. 281; Bellofiore 2014, p. 82; Krätke 2014, p. 3; Ticktin 2012, p. 310.

Luxemburg was free and open about her willingness to undertake a thoroughgoing critique of Marx at a time when most Marxist thinkers were unable to do anything but summarise and apply Marx's teachings in a spirit of the utmost veneration for the 'master';⁷ and (3) the political implications of Luxemburg's economic argument, as adduced above. As I will later describe in Chapter 3, the main conclusions of *The Accumulation of Capital* – that imperialism is a necessity for the functioning of the capitalist system and that, even despite recourse to the such imperialism, the capitalist system is still bound to eventually collapse – can be used to affirm the necessity for the socialist movement to adopt a revolutionary political strategy, and to refute the arguments advanced by those within the movement who tended to prefer more gradual, reformist measures.

On the other hand, Lenin and the Bolsheviks had their own reasons to dislike the political implications of Luxemburg's theory. They believed that if Luxemburg's emphasis on the inability of capitalism to operate in a self-contained fashion were correct, that the possibility for socialism to be implemented in Russia would be nullified.⁸ They also felt that Luxemburg's argument for the inevitability of capitalist collapse and the socialist revolution which would follow it fomented a certain fatalism on the part of the proletariat and obviated the need for the political organization and leadership undertaken by a strong party apparatus.⁹

⁷ Luxemburg 1972a, pp. 64-5; Krätke 2016, pp. 124, 129-30, 133; Trigg 2009, p. 34; Trincado 2004, p. 267; Zarembka 2014, pp. 74-5; Bellofiore 2014, p. 84; Pastrello 2014, p. 36; Rousseas 1979, p. 4.

⁸ Day and Gaido 2012, p. 75; Howard and King 1989, pp. 157, 167-68, 171-72, 201; Krätke 2016, p. 128; Mattick 1978, pp. 34-5; Mattick 2009, p. 93; Zarembka 2000, p. 205.

⁹ Mattick 1978, p. 45; Zarembka 2002, p. 14.

Whatever the precise role played by these factors, or their combination, in generating the early criticism levelled at *The Accumulation of Capital*, the fact remains that the volume and tenor of this criticism set the tone for nearly all later critical appraisals of Luxemburg's thought and determined her place within the Marxist tradition.¹⁰ Up until very recently, the assessment of Luxemburg's economic theories, in particular, has been almost unanimously negative and dismissive. Though her contributions to the discussion of important issues are noted, her solutions to these issues are almost never taken very seriously.¹¹

Recently however, this trend has begun to reverse itself. A flowering of literature favourable to Luxemburg has sought to rescue her insights from the tangle of errors and false leads that obscures them,¹² and to re-evaluate her place in the history of Marxian economics in the process.¹³ Besides a number of recent articles on Luxemburg, three recent books are of particular importance in this respect: *Rosa Luxemburg and the Critique of Political Economy* (Bellofiore, ed. 2009), *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki* (Bellofiore, Karwowski and Toporowski, eds. 2014), *Rosa Luxemburg: A Permanent Challenge for Political Economy* (Dellheim and Wolf, eds. 2016). Also of significance is the first appearance in English, in 2014, of Kowalik's 1971 work on Luxemburg, *Rosa Luxemburg: Theory of Accumulation and Imperialism*.

The authors of these books, and the chapters which constitute them, fall into three overlapping groups with respect to the contributions which Luxemburg made

¹⁰ Albo 2016, pp. 25, 30; Zarembka 2009, pp. 71, 73; Zarembka 2002, pp. 11, 18.

¹¹ This is the pattern at work in, for example, Bleaney 1976 and Howard and King 1989.

¹² Bellofiore 2014, pp. 87, 94; Albo 2016, p. 40.

¹³ Blackwater 2015, p. 83; Groenewegen 2013, pp. 79-80.

and which they seek to develop. The first of these groups is made up of commentators such as Bellofiore (2004, 2009a, 2009b, 2014), Bellofiore and Passarella (2009), Desai and Veneziani (2009), Pastrello (2014), and Trigg (2006, 2009). These commentators seize on the way in which Luxemburg pays special attention to the flows of money and the circulation of capital in her analysis of reproduction. They consider that these are important issues that need to figure into contemporary macroeconomic modelling as well.¹⁴ They applaud Luxemburg for having pioneered such a method of analysis.¹⁵

Among the recent literature taking a favourable view of Luxemburg, perhaps the largest group, including commentators such as Albo (2016), Foster (2014), Bellofiore (2014), Bellofiore and Passarella (2009), Bellofiore, Karwowski and Toporowski (2014), Harcourt and Krielser (2014), Kowalik (2014, 2009, 2003, 1966), Krätke (2016), Pastrello (2014), Toporowski (2016, 2013), and Trincado (2004), view Luxemburg as an important precursor to Kalecki and to the Keynesian approach to macroeconomics. This comes from the attention that Luxemburg pays to the effective demand side of reproduction¹⁶ as well as from her identification of the key role played by investment therein.¹⁷ Moreover, like Kalecki, Luxemburg

¹⁴ Pastrello 2014, p. 49; Bellofiore 2014, p. 98; Bellofiore 2004, p. 289; Bellofiore 2009b, pp. 59, 62; Bellofiore and Passarella 2009, pp. 111-12; Desai and Veneziani 2009, p. 25.

¹⁵ Pastrello 2014, pp. 45, 49; Bellofiore 2014, p. 98; Bellofiore 2004, p. 290; Bellofiore 2009b, p. 53; Bellofiore and Passarella 2009, p. 107.

¹⁶ Albo 2016, p. 40; Krätke 2016, p. 149; Bellofiore, Karwowski and Toporowski 2014, pp. 3-4; Toporowski 2013b, p. 36; Pastrello 2014, p. 47; Foster 2014, p. 110; Kowalik 2014, pp. 55-6; Kowalik 2009, p. 111; Rouseas 1979, p. 15, n. 12; Harcourt and Krielser 2014, p. 10.

¹⁷ Toporowski 2016, pp. 162-63; Bellofiore 2014, p. 94; Foster 2014, p. 106; Bellofiore and Passarella 2009, pp. 103-04.

showed an interest in identifying the determinants of investment.¹⁸ She also showed herself to be sceptical with regard to the likelihood that sufficient quantities of the latter would be present, especially in the long run, to assure the optimal reproduction of self-contained economies.¹⁹ This ‘investment scepticism’ on Luxemburg’s part is something that Kalecki also inherits from her.²⁰ Authors in this group contend that Luxemburg had a definitive impact on Kalecki. They argue that while it is clear that Kalecki developed his macroeconomic models on the basis of Marx’s Reproduction Schemas,²¹ this leaves out part of the story. This is because, contrary to Kalecki’s own models, the Schemas themselves do not contain any indication that investment levels could fall short of those required to guarantee optimal reproduction, nor any depiction of what the effects of such an event could be on reproduction as a whole.²² The claim is that in integrating chronic shortfalls in investment and effective demand into the Marxian Schemas,²³ Kalecki was following up on Luxemburg’s pioneering critique of the latter, and was doing so on a similar basis.²⁴ Commentators in this group therefore suggest that it is Luxemburg who provides the crucial ‘bridge’ between the classical economics of Marx and the 20th century macroeconomic modelling of Keynes and Kalecki.²⁵

¹⁸ Albo 2016, p. 40; Bellofiore 2014, p. 86; Kowalik 2014, p. 56; Kowalik 2003, pp. xi-ii; Kowalik 1966b, pp. 210-11; Trincado 2004, p. 261.

¹⁹ Bellofiore 2014, pp. 85, 94; Foster 2014, p. 106; Rousseas 1979, p. 15, n. 12; Kowalik 1966b, pp. 210-11; Albo 2016, p. 40.

²⁰ Bellofiore 2014, p. 89; Rousseas 1979, p. 15, n. 12; Kowalik 1966b, pp. 210-11.

²¹ Toporowski 2016, p. 162; Kowalik 2014, p. 6; Kowalik 2009, p. 108.

²² Harcourt and Krielser 2014, p. 15; Kowalik 2014, pp. 4, 57; Kowalik 1966b, p. 206; Bellofiore and Passarella 2009, p. 103.

²³ Kowalik 2014, p. 6.

²⁴ Thomas 2014, p. 1; Kowalik 2014, pp. 4, 65; Kowalik 1966b, pp. 210-11; Trincado 2004, p. 261; Bellofiore and Passarella 2009, pp. 103-04; Toporowski 2016, pp. 162-63; Toporowski 2013b, p. 38.

²⁵ Thomas 2014, p. 1; Toporowski 2016, pp. 162-63; Toporowski 2014, p. vii; Toporowski 2013b, p. 38.

Finally, the third group of commentary favourable to Luxemburg can be found in a number of recent articles, in addition to the above-mentioned books. Authors such as Albo (2016), Bellofiore (2014), Blackwater (2015), Bieler et al. (2016), Brie (2016), Le Blanc (2010), Schmidt (2010, 2012a, 2013a, 2013b, 2014a, 2014b), and Worth (2012) see a major contribution by Luxemburg in her analysis of imperialism and in her argument concerning the need for a variety of external markets to keep reproduction functioning properly. By interpreting Luxemburg's concept of external markets broadly,²⁶ these commentators are able to maintain that the empirical record of 20th century economic history conforms to Luxemburg's theoretical framework by demonstrating that reproduction has always been maintained as a result of the presence of a variety of external factors, which change according to the time period under consideration.²⁷ In the view of these authors, the long boom of the postwar period was the product of factors such as military spending and industrialization in the South.²⁸ Also of signal importance was the growth of the welfare state in the North.²⁹ This was accompanied by the advent of mass consumption and the commodification of new aspects of daily life.³⁰ This is something that was further facilitated by the entrance of women into the workforce³¹ and through the growth of 'unproductive activities' such as

²⁶ Schmidt 2013, p. 2; Schmidt 2014a; Schmidt 2012b, p. 256.

²⁷ Schmidt 2010, pp. 94, 110; Schmidt 2012a; pp. 338-39; Schmidt 2013, p. 12; Schmidt 2014a; Schmidt 2014b, p. 458; Schmidt 2012b, p. 256; Albo 2016, p. 44; Bellofiore 2014, p. 95; Blackwater 2015, p. 80-1.

²⁸ Schmidt 2010, pp. 94, 105, 107; Schmidt 2012a, pp. 339, 349, 351; Schmidt 2013, pp. 12, 15; Schmidt 2014b, p. 465; Bellofiore 2014, p. 95.

²⁹ Schmidt 2010, p. 105; Schmidt 2012a, p. 350; Schmidt 2013, p. 12; Schmidt 2014b, p. 465.

³⁰ Schmidt 2010, pp. 94, 106; Schmidt 2012a, pp. 339, 349, 351; Schmidt 2013, pp. 12-3; Schmidt 2014b, p. 464; Blackwater 2015, p. 81; Brie 2016, p. 283.

³¹ Schmidt 2012a, p. 349; Schmidt 2013, p. 13; Schmidt 2014b, p. 464.

marketing.³² All of these factors underwrote an age of unprecedented prosperity in the postwar period.³³ Following the economic downturn of the 1970s, renewed growth was made possible by a new set of external factors in the Neoliberal era. Among these must again be counted elevated levels of military spending,³⁴ but in addition to this, increases in financialization,³⁵ private debt levels³⁶ and the offshoring of production must also be counted.³⁷ Another new factor also emerged in this period. ‘Accumulation by dispossession’ involves the rolling back of the welfare state³⁸ and the privatization of previously held public goods and assets.³⁹ This is a concept developed by David Harvey, but it echoes Luxemburg’s insistence on the ongoing nature of Marx’s ‘primitive accumulation’⁴⁰ and the penetration of capitalist relations into spheres of life from which these had previously been excluded.⁴¹ In describing these empirical phenomena, and the way in which, like their role in Luxemburg’s theory, they contribute to the continued functioning of capitalist reproduction, the authors under consideration cite not only Kalecki and the Keynesians but also Baran and Sweezy⁴² and the Monopoly Capital school, as

³² Schmidt 2014b, pp. 464-65.

³³ Schmidt 2012a, pp. 339, 351; Schmidt 2013, p. 12; Schmidt 2014b, p. 465.

³⁴ Schmidt 2013, pp. 19, 20; Bieler et al. 2016, p. 436.

³⁵ Schmidt 2010, p. 110; Schmidt 2012a, p. 354; Blackwater 2015, p. 74.

³⁶ Schmidt 2010, p. 110; Schmidt 2012a, p. 354; Schmidt 2013, p. 20.

³⁷ Schmidt 2012a, p. 354.

³⁸ Schmidt 2010, p. 94; Schmidt 2013, p. 19; Schmidt 2014b, p. 470; Worth 2012, p. 149.

³⁹ Schmidt 2010, p. 110; Schmidt 2012a, pp. 339, 354-55; Schmidt 2013, p. 19; Schmidt 2014b, p. 470; Albo 2016, p. 42; Bieler et al. 2016, p. 432; Worth 2012, p. 149; Brie 2016, p. 281.

⁴⁰ Schmidt 2012a, p. 345; Schmidt 2013, p. 6; Schmidt 2014b, pp. 459-60; Albo 2016, p. 41; Le Blanc 2010, p. 164; Kowalik 1966b, pp. 212-13; Kowalik 2009, p. 107.

⁴¹ Schmidt 2013, pp. 6, 19-20; Schmidt 2014b, pp. 469-70; Albo 2016, p. 42; Bieler et al. 2016, p. 432; Worth 2012, pp. 148-49.

⁴² Schmidt 2010, pp. 94, 107; Schmidt 2014b, pp. 464-65; Blackwater 2015, p. 74.

well as David Harvey.⁴³ As a result, Luxemburg's theory can be seen as a precursor not only to Kalecki, but also to the work of these other, later theorists.

The present work operates within the second grouping of contemporary literature on Luxemburg, that which seeks to re-evaluate her economic thought on the basis of a demonstration of its continuity with that of Kalecki. Herein, therefore, I undertake a close comparison of the economic theories of the two thinkers in order to determine the extent of this continuity. What I find, however, is that while there are some elements on which the two theories correspond, taken as a whole, the economic theory of Kalecki cannot be said to be a continuation of Luxemburg's in any meaningful sense. The number of modifications and qualifications which Kalecki applies to Luxemburg's basic theory are simply too great. For example, while Kalecki does concede that the optimal reproduction of self-contained capitalist economies is unlikely, because the chances of sufficient investment taking place in such a context are low, he does not believe, as Luxemburg does, that such reproduction is impossible. Moreover, even should capitalist economies, when left to themselves, fail to operate in optimal fashion, Kalecki denies that this will lead to their actual collapse, as Luxemburg prophesied. Instead, Kalecki's vision of capitalist economies operating at sub-optimal levels is one of ongoing stagnation. Finally, while access to external markets does constitute one of the 'exogenous factors' which Kalecki, like Luxemburg, believes can aid capitalist reproduction, these are not the only recourse which policy-makers have in order to improve the performance of capitalist economies.

⁴³ Schmidt 2010, pp. 94, 110; Schmidt 2012a, p. 355; Schmidt 2013, p. 19; Schmidt 2014b, p. 470; Albo 2016, p. 41; Bieler et al. 2016, p. 432; Worth 2012, p. 148-49.

This last hints at another substantial difference between the economic theories of Luxemburg and Kalecki. While Luxemburg believed that the capitalist mode of production generated its own insuperable contradictions, which would cause it, sooner or later, to collapse upon itself, Kalecki took a more sanguine view of the future of the capitalist system. While readily acknowledging its many flaws and contradictions, he believed that, through intelligent management informed by analyses such as his own, many of these could be at least partially mitigated and capitalist economies made to produce more favourable outcomes for capitalists and workers alike. Such a reform of the capitalist system, moreover, is something which Kalecki believes ought to be pursued by policy-makers. This is in stark contrast to Luxemburg's own view that the socialist movement should not waste its time and energy on attempts to improve the functioning of the current system, but should instead work towards its complete overthrow and replacement with the socialist mode of production.

The relationship between the economic theories of Luxemburg and Kalecki can therefore best be characterized as one of rupture, rather than continuity. I argue that such a rupture should not come as a surprise, however, when the theorists are viewed in the larger context of the history of economic thought. This is because when we re-embed the economic theories of Luxemburg and Kalecki within their historical contexts, we find that they are the products of very different empirical, personal and political factors, which impinge on various aspects of their theories in ways which lead them to differ substantially from one another. For example, Luxemburg was writing at a time in the history of Western capitalism where it really

did seem as though formal imperialism was a fundamental feature of the operation of the economic system and where, as a result of the wars which such imperialism generated, the imminent collapse of the entire economic and social order seemed like a real possibility. Kalecki, on the other hand, had the 'advantage' of having lived through one of the low points of capitalist reproduction, the Great Depression, and having seen that even such an event would not necessarily cause the capitalist system to collapse. Moreover, the period that followed the Depression showed the possibilities of economic management through state intervention. More importantly, Luxemburg developed her economic theory to a definite political purpose. Her objective was to combat a certain strain of socialism which preferred the reformist strategy over the revolutionary one of classical Marxism. Her economic arguments for the necessity of imperialism and of capitalist collapse were meant to refute the theories which these revisionists developed to justify their political preferences. On the other hand, politically, Kalecki seemed more comfortable with just such a gradual, reform-based approach to social change in which workers actually leveraged the improved functioning of the capitalist system to press for greater social power and a larger share of the economic output. Given this, it is not at all surprising that he should have argued against the necessity of capitalist collapse and for the possibility and desirability of economic management.

The argument which I develop below is divided into two parts, consisting of three chapters. In chapters one and two, I describe the basic economic theories of Luxemburg and Kalecki in order to compare their main arguments and assess their similarities and differences. After having arrived, at the close of such a comparison,

at the conclusion that the theories are best described as fundamentally divergent rather than continuous, I thereafter seek out the cause of such a divergence in the respective historical contexts out of which the theories emerged. This is the subject of chapter three, where I attempt to show how various empirical, personal, and political factors would have impinged on the theories, leading to the development of particular aspects within them. This is followed by a concluding chapter, which contains some reflections on the implications which my comparison of the economic theories of Luxemburg and Kalecki, and its conclusion, have for contemporary economic theory in the Marxian tradition. Finally, an appendix at the end of this work addresses a question that was touched on but never answered in the course of my argument: whether Kalecki considered that, in addition to being able to improve its functioning through policy intervention, it was possible to make capitalism work optimally, as represented by the attainment and maintenance of full employment.

Chapter 1: Rosa Luxemburg's Economic Theory

The purpose of this chapter is to describe, in some detail, the essence of Luxemburg's economic theory. This is comprised of an argument made up of three main clauses. Throughout her main economic works, *The Accumulation of Capital* and *The Anti-Critique*, Luxemburg argues that (1) self-contained capitalist reproduction (SCCR) is impossible. The reason for this is that (2) adequate investment in the context of a self-contained capitalist economy (SCCE) can never take place. As a result of this, (3) capitalism, to function at all, requires the existence of various 'exogenous factors', primarily foreign markets secured through imperialism.

In chapter 3, in which I take up the historical contexts out of which the theories of Luxemburg and Kalecki emerged, I argue that, as a result of her political context, Luxemburg was motivated to develop, in *The Accumulation of Capital*, a theoretical proof for the claim of the necessity of imperialism for capitalism. Such an argument however, requires the demonstration of the impossibility of SCCR, because, in the contrary case, capitalism would be capable of operating on its own, without the aid of external markets.⁴⁴ The logical starting point of Luxemburg's economic theory is therefore the argument for the impossibility of SCCR.

On Luxemburg's view, however, positing such an argument requires the refutation of Marx's Reproduction Schemas (RS). The reason for this is Luxemburg's

⁴⁴ Luxemburg 1972a, pp. 77, 148; 2012, p. 76.

belief that the latter are a demonstration of the possibility of SCCR.⁴⁵ I therefore begin by introducing Marx's RS, before moving on to a description of Luxemburg's attempts at refuting them.

Marx's Reproduction Schemas

In chapters 20 and 21 of volume 2 of *Capital*, Marx develops a drastically simplified model of capitalist reproduction. His goal is to scrutinize the exchange relations between society's various producers to determine the conditions that would be required for these relations to take place in proportional fashion.⁴⁶ In order to be able to do this, Marx abstracts away from many of the factors present in real-world capitalism including money, credit and foreign markets. He also groups all capitalist producers into two large categories or 'departments': those who produce means of production belong to department I, while those who produce means of consumption, whether they be for workers or capitalists, belong to department II.⁴⁷ The production of each department is further subdivided into its value components. Accordingly, the total product of each department can be said to consist of three value components: the constant capital (c), or the value of means of production used up in the production process and which must be replaced; the labour power or variable capital (v), or the cost of the wages in the last period of production and which must again be renewed; the surplus value (s), or the profit accruing to the capitalist without any corresponding outlay. The total product of each department is therefore composed of the sum of the portions c , v , and s , or

⁴⁵ Luxemburg 1951, p. 131; Luxemburg 1972a, p. 75; Howard and King 1989, p. 107; Day and Gaido 2012, p. 76; Mattick 2009, p. 94; Bleaney 1976, p. 194; Harcourt and Krielser 2014, p. 10.

⁴⁶ Day and Gaido 2012, p. 913; Harcourt and Krielser 2014, p. 11.

⁴⁷ Marx 1978, p. 471.

$c+v+s$.⁴⁸ Marx then goes on to fill in these categories with concrete quantities which continue to function as examples in much of the discussion which follows. In the example, these are:

Department I: $4000c+1000v+1000s$
 Department II: $2000c+500v+500s$ ⁴⁹

If, as stated, the purpose of the exercise is to determine the possibility of the establishment of proportional exchange relations between the departments, then one key relationship stands out in the above example: the one between the constant capital of department II and the sum of the value of the variable capital and surplus value of department I. This is because this quantity summarizes all of the exchanges that actually take place between the departments. The other part of each department's production is consumed by that department itself. Since department I produces means of production, the means of production which it requires to carry on production is obtained from itself directly. This is the $4000c$.⁵⁰ The same goes for the means of consumption which department II produces. A portion of these is consumed by department II itself and goes towards the variable capital of the workers of this department ($500v$) and the surplus value of its capitalists ($500s$).⁵¹ But another part of each department's output cannot be consumed by itself. Department I's variable capital and surplus value cannot be consumed in the form in which it exists. The same is true for the portion of department II's product corresponding to constant capital. The way in which department II obtains means of

⁴⁸ Marx 1978, pp. 471-72.

⁴⁹ Marx 1978, pp. 473.

⁵⁰ Marx 1978, p. 474.

⁵¹ Marx 1978, p. 473.

production and department I obtains means of consumption which correspond to these value categories is through exchange with the other department. Thus, department I exchanges the portion of its means of production corresponding to its variable capital and surplus value for the portion of department II's product corresponding to its constant capital. In this way, department I receives its necessary means of consumption and department II obtains its required means of production.⁵²

What are the conditions which must be met in order for this exchange between the two departments to take place in proportional fashion? The value of the portion of department I's product corresponding to its variable capital and its surplus value must be equal to the value of the portion of department II's product corresponding to its constant capital.⁵³ Thus the necessary equality between the two departments for proportionality to be maintained is $Ic=I(v+s)$.⁵⁴ In the above example, proportional exchange between the departments is maintained, as Ic (2000) is equal to $Iv+Is$ (1000+1000).

But this model takes place in the context of what Marx refers to as 'simple reproduction': reproduction that takes place always on the same scale.⁵⁵ This means that each department will use the realization of its product only to replenish its previous costs of production but will not increase these costs in order to increase its production. None of the revenues that the department receives as part of its profit or surplus value will be used to this end either. Instead, the whole of this revenue, s ,

⁵² Marx 1978, pp. 473-74, 476-77.

⁵³ Marx 1978, pp. 483, 595.

⁵⁴ Marx 1978, pp. 478, 596.

⁵⁵ Marx 1978, pp. 470-71.

will be spent by the capitalists on means of consumption for themselves.⁵⁶ This means that the quantities depicted above remain stable over time. It is therefore less difficult for proportionalities to be established between them.

But 'simple reproduction' is a theoretical fiction, employed by Marx in order to simplify his analysis.⁵⁷ Nowhere can we find such reproduction in real life.⁵⁸ On the contrary, capitalists' entire purpose seems to be the expansion of production in order that they may increase the level of profit that flows to them.⁵⁹ To this end, capitalists are willing to 'abstain' from consuming some of their surplus value in order that a portion of it may be invested in increasing production.⁶⁰ This is what Marx attempted to model in the abortive chapter 21 of volume 2 of *Capital*, which is titled "Accumulation and Reproduction on an Expanded Scale".

Under such 'expanded reproduction', the key exchange relationship between the two departments identified above becomes far more tenuous. Not only does the constant capital of department II have to correspond to the sum of the variable capital and surplus value of department I, as before. Now the value of the constant capital required by department II also includes the increase in the latter, which results from the current investment in additional production ($IIc+\Delta c$). The same goes for the value of the means of consumption demanded by department I. To the value of the variable capital employed in the previous period is added the additional quantity of means of consumption now required by the increase in labour power

⁵⁶ Marx 1978, p. 579.

⁵⁷ Marx 1978, p. 470.

⁵⁸ Marx 1978, pp. 470, 579; Luxemburg 1951, pp. 107, 162.

⁵⁹ Marx 1976, pp. 739, 742.

⁶⁰ Marx 1978, pp. 579, 565; Marx 1976, pp. 744-45; Luxemburg 1951, pp. 108, 118.

$(Iv+\Delta v)$. Moreover, the value of means of consumption which department I wishes to obtain from department II for the consumption of its capitalists in the form of surplus value is now equal to the quantity of the value which remains in this category after the capitalists have taken from it the quantity which they wish to invest in additional constant and variable capital⁶¹ $(Is-[\Delta c+\Delta v])$. Expressed mathematically, the new equality which must prevail between the departments under expanded reproduction is $IIc+\Delta c = Iv+\Delta v+Is-(\Delta c+\Delta v)$.

But even though such an equality in the exchanges between the departments seems to be a difficult one to maintain, Marx is able to craft a few numerical examples of the RS in which these proportions do indeed obtain over time. I have rendered the first of two RS, which Marx presents in chapter 21 of Volume 2 as follows:

$$\begin{array}{c}
 \textbf{Year 1} \\
 \text{I: } 4000c + 1000v + 1000s \\
 \text{II: } 1500c + 750v + 750s \\
 \downarrow \\
 \text{I: } 4400c(4000c + 400c) + 1100v(1000v + 100v) + 500s \\
 \text{II: } 1600c(1500c + 100c) + 800v(750v + 50v) + 600s \\
 \\
 \textbf{Year 2} \\
 \text{I: } 4400c + 1100v + 1100s \\
 \text{II: } 1600c + 800v + 800s \\
 \downarrow \\
 \text{I: } 4840c(4400c + 440c) + 1210v(1100v + 110v) + 550s \\
 \text{II: } 1760c(1600c + 160c) + 880v(800v + 80v) + 560s \\
 \\
 \textbf{Year 3} \\
 \text{I: } 4840c + 1210v + 1210s \\
 \text{II: } 1760c + 880v + 880s \\
 \downarrow \\
 \text{I: } 5324c(4840c + 484c) + 1331v(1210v + 121v) + 605s
 \end{array}$$

⁶¹ Marx 1978, p. 593.

$$\text{II: } 1936c(1760c + 176c) + 968v(880v + 88v) + 616s$$

Year 4

$$\text{I: } 5324c + 1331v + 1331s$$

$$\text{II: } 1936c + 968v + 968s$$



$$\text{I: } 5856c(5324c + 532c) + 1464v(1331v + 133v) + 666s$$

$$\text{II: } 2129c(1936c + 193c) + 1065v(968v + 97v) + 678s$$

Year 5

$$\text{I: } 5856c + 1464v + 1464s$$

$$\text{II: } 2129c + 1065v + 1065s$$



$$\text{I: } 6442c(5856c + 586c) + 1610v(1464v + 146v) + 732s$$

$$\text{II: } 2342c(2129c + 213c) + 1172v(1065v + 107v) + 745s^{62}$$

What was the larger point that Marx was trying to make with these Schemas?

He certainly was not making the case that the proportional relations which could be reached in the Schemas were the ones which actually took place in the capitalist economy.⁶³ Critical consensus seems to indicate that what Marx was attempting to do in the RS was to determine whether it was even possible for the exchanges between society's producers to take place in proportional fashion, and therefore whether capitalism was capable, even at such a basic level, of ever functioning optimally.⁶⁴ The Schemas do seem to indicate that this is a possibility,⁶⁵ although even here, Marx seems to think that it is a very unlikely one.⁶⁶ This can be deduced from all of the numerous sources of disruption to the proportionality of the exchanges which Marx cites throughout his discussion of the RS in chapters 20 and

⁶² Marx 1978, pp. 586-89.

⁶³ Bleaney 1976, p. 194; Krätke 2016, p. 142; Harcourt and Krielser 2014, p. 11; Day and Gaido 2012, p. 913; Mattick 2009, p. 98; Bellofiore 2009a, p. 3.

⁶⁴ Bleaney 1976, p. 194; Harcourt and Krielser 2014, p. 11; Day and Gaido 2012, p. 913; Bellofiore 2009a, p. 3; Krätke 2016, p. 141.

⁶⁵ Bleaney 1976, p. 194; Bellofiore 2009a, p. 3; Mattick 2009, p. 98; Krätke 2016, p. 141.

⁶⁶ Krätke 2016, pp. 141-42; Harcourt and Krielser 2014, p. 11; Day and Gaido 2012, p. 913; Mattick 2009, p. 98.

21. Moreover, even the very examples of the RS that Marx constructs at the end of chapter 21, in the sheer implausibility of some of their numerical values, can be construed as evidence of Marx's scepticism towards even the most basic possibility of capitalism's optimal functioning. Consider the example reproduced above. On closer examination, it can be seen that the ratio of total surplus-value to investment in department I is always 2:1, while for department II, it is usually 3.3:1 (except in the first year when the investment ratio for department II is much smaller, 5:1). The ratio of the investment, which is dedicated to constant capital over and against that dedicated to variable capital, also differs between the departments. It is 4:1 for department I, and 2:1 for department II.⁶⁷ More likely than the optimal functioning of the capitalist system made possible by the maintenance of the proportional exchanges between the departments then, Marx believes that the more common scenario will be that some proportion or other will diverge from that required and that, therefore, the system will experience crises and sub-optimal performance as a matter of course.⁶⁸

Luxemburg's Critique of the Reproduction Schemas

Luxemburg has been criticized for having misunderstood Marx's purpose in the development of the RS.⁶⁹ Critics have accused her of falling into the same mistaken belief regarding the Schemas as some other commentators, that of considering them a model advanced by Marx of the way capitalist reproduction

⁶⁷ The second RS, which Marx constructs on pages 594-595, is slightly more plausible in this respect.

⁶⁸ Day and Gaido 2012, p. 913; Harcourt and Krielser 2014, p. 11; Mattick 2009, p. 98; Krätke 2016, p. 141-42.

⁶⁹ Harcourt and Krielser 2014, p. 10; Day and Gaido 2012, p. 913; Bellofiore 2009a, p. 3; Mattick 2009, pp. 92, 98.

actually takes place.⁷⁰ This seems unlikely. However, in order for Luxemburg to have been incited to seek to refute the RS, it would not have been necessary for her to have gone quite this far. Because Luxemburg wished to argue that SCCR was impossible, even a belief on her part that the RS showed the possibility that capitalism could be made to work in a self-contained environment would have been sufficient for her to consider the Schemas a 'threat' to her position.⁷¹ It is clear that for Luxemburg the RS constituted just such a demonstration.⁷² It is as a consequence of this that Luxemburg set out to refute the RS, through a variety of approaches.

I should state at the outset that Luxemburg's attempts at refuting the RS contain a number of logical difficulties. The whole thrust of her case against the Schemas consist of the argument that the proportions depicted in them could not be maintained in real life. To demonstrate this, Luxemburg integrates into the RS a number of factors which, she claims, make them more realistic but which, at the same time, cause their proportions to break down. These factors include the existence of money and of a rising organic composition of capital in the economy. The problem with this approach, however, is that the factors which Luxemburg introduces, and the way in which she introduces them, are not always themselves very realistic. Moreover, while Luxemburg, in the interest of creating a model which better reflects real conditions, relaxes some of the original constraints which Marx had placed on the RS, she does not go all the way in this, to the point of allowing

⁷⁰ Bleaney 1976, pp. 193-94; Krätke 2016, p. 142; Harcourt and Krielser 2014, p. 10; Day and Gaido 2012, p. 913; Mattick 2009, p. 98.

⁷¹ Bleaney 1976, p. 194; Luxemburg 1972a, p. 77; Day and Gaido 2012, p. 76.

⁷² Luxemburg 1951, pp. 131, 325, 366; Luxemburg 1972a, p. 75; Bleaney 1976, p. 193; Howard and King 1989, p. 107; Day and Gaido 2012, p. 76; Mattick 2009, p. 94.

factors such as credit and the transfer of capital between departments – factors which would serve to facilitate rather than obstruct the maintenance of proportional relations within the RS. Having mentioned some of the potential difficulties in Luxemburg's refutation of the Schemas, I wish to go no further in discussing them, since my purpose here is only to summarize the arguments which Luxemburg uses to support her refutation of the RS and her conclusion concerning the impossibility of SCCR.

The first approach which Luxemburg takes in trying to refute the Schemas is to directly engage with the numerical quantities depicted in these in an attempt to show that when additional parameters are introduced into the model, which make the latter a more accurate description of reality, the proportional relations contained in the RS begin to break down. Luxemburg notes that the RS, as Marx conceives of them, contain a fixed ratio of constant to variable capital in each round of investment.⁷³ This, for Luxemburg, makes them unrealistic models,⁷⁴ models that are incompatible with Marx's economic theory elsewhere in which he emphasizes that productivity gains, accompanied by a steadily increasing $c:v$ ratio, or organic composition of capital, is one of the hallmarks of capitalist reproduction.⁷⁵ Accordingly, Luxemburg sets about integrating such a rising organic composition of capital in order to determine what its effects might be for the RS.⁷⁶ She assumes that the ratio of constant to variable capital increases steadily over time and does so by equal measure in both departments. Moreover, the rate of surplus value (surplus

⁷³ Luxemburg 1951, p. 335; Luxemburg 1972a, p. 98; Kowalik 1966b, p. 207; Kowalik 2014, p. 58.

⁷⁴ Luxemburg 1972a, p. 98.

⁷⁵ Luxemburg 1951, pp. 335-36; Bellofiore 2009a, p. 3; Mandel 1978, p. 63.

⁷⁶ Luxemburg 1951, p. 337; Kowalik 1966b, p. 209.

value to variable capital) increases along with the organic composition of capital, and also does so equally in both departments.⁷⁷ Finally, and crucially, Luxemburg does not permit the transfer of capital between the departments.⁷⁸

The result of all of this is the following. The rising organic composition of the investment in the economy causes the aggregate demand for means of production to rise relative to the demand for the means of consumption, which falls in accordance with the fall in spending on labour power relative to means of production.⁷⁹

However, because the organic composition of capital, along with the rate of surplus value, has risen in equal proportions in both departments, the increase in the output of the departments occurs in the same proportions as those which previously obtained between them.⁸⁰ In other words, the output of each department has stayed the same relative to the other while the demand for the output of department I has risen simultaneous to the fall in the demand for the output of department II.

Luxemburg therefore arrives at the conclusion that as a result of the increase in the organic composition of capital, department II will meet with a shortfall in the demand for its product while there develops an excess of demand for the products of department I compared to what this department is capable of producing.⁸¹ The proportions required by the RS therefore cannot be maintained and the model breaks down.⁸²

⁷⁷ Luxemburg 1951, pp. 336-37; Bellofiore 2009a, p. 3.

⁷⁸ Luxemburg 1951, pp. 340-41; Luxemburg 1972a, pp. 96-7; Kowalik 1966b, p. 209; Kowalik 2014, p. 62; Bellofiore and Passarella 2009, p. 105; Bellofiore 2009a, p. 4; Day and Gaido 2012, p. 921.

⁷⁹ Kowalik 1966b, p. 207; Bellofiore and Passarella 2009, p. 105; Bellofiore 2009a, p. 4.

⁸⁰ Luxemburg 1951, p. 340; Bellofiore 2009a, p. 4; Day and Gaido 2012, p. 920.

⁸¹ Luxemburg 1951, pp. 336-37; Kowalik 1966b, p. 209; Kowalik 2014, p. 61; Bellofiore and Passarella 2009, p. 105; Bellofiore 2009a, pp. 3-4; Day and Gaido 2012, p. 920.

⁸² Luxemburg 1951, p. 98; Kowalik 1966b, p. 209; Kowalik 2014, p. 62.

Elsewhere, Luxemburg takes an entirely different approach to refuting the RS, one that could be characterized as a more 'general' one. No longer attempting to show how the numerical proportions of the model cannot be maintained, Luxemburg concedes that with a little cunning and forethought, these can indeed be made to work.⁸³ However, according to Luxemburg, this would still not constitute evidence that the proportions depicted in the Schemas could be made to take place in actuality.⁸⁴ As Luxemburg puts it, most anything can be 'put on paper'.⁸⁵ The RS constitute an *ex post* demonstration of the quantitative relations necessary to make the capitalist economy function in optimal fashion; however, there is nothing to guarantee the coming into being of these quantities *ex ante*.⁸⁶ Thus Luxemburg's main criticism of the RS is something of a meta-critique.

The main reason why Luxemburg does not believe that the model of reproduction contained in the RS is capable of taking place in actuality concerns the central role played by investment, both in the Schemas and in actual reproduction, and Luxemburg's scepticism as to the possibility of such investment as is required being able to take place in the context of a SCCE. I will describe the reasons for this scepticism on Luxemburg's part in what follows. Before doing so, however, I will first examine the key role played by investment in reproduction, as both Marx and Luxemburg conceived of it.

⁸³ Luxemburg 1951, pp. 119, 314; Bleaney 1976, p. 191.

⁸⁴ Luxemburg 1951, pp. 119, 300, 314; Luxemburg 1972a, pp. 65, 67-9; Mattick 2009, p. 94; Zarembka 2002, p. 7; Bleaney 1976, pp. 188-89, 191.

⁸⁵ Luxemburg 1951, p. 119.

⁸⁶ Robinson 1951, p. 21; Bellofiore 2014, p. 86; Bellofiore and Passarella 2009, p. 104; Rousseas 1979, p. 12.

The Role of Investment in Reproduction

The key role played by investment in reproduction can already be seen in the numerical quantities that Marx establishes in his examples of the RS. There, investment by one department is seen to be a necessary source of effective demand, which is used to help absorb the products of the other department. In the exchange equation for expanded reproduction, $IIc+\Delta c = Iv+\Delta v+Is-(\Delta c+\Delta v)$, the investment in additional constant capital by department II provides the demand for means of production which allows department I to realize the surplus production which constitutes its surplus value. As a consequence, department I is able to increase its own production, not only by increasing its use of constant capital, which it produces itself, but also through department I being able to obtain from department II the additional means of consumption which its additional workers require. On the reverse side, the fact that department I increases its own employment of workers and thus demand for means of consumption means that department II is able to realize the totality of its product and thereafter obtain the means of production which it requires for the expansion of its own production.

The important role played by investment in additional production as a source of effective demand in SCCEs is perhaps even more clearly seen as a result of a discussion which crops up at various places in *Volume 2 of Capital* and in which Marx seeks to answer the question of where the source of the demand for the surplus product must come from in a SCCE. I call this problem, which Marx at various points tries to solve, the 'surplus absorption problem' (SAP).

The problem can be described as follows. The essence of capitalist production is production for profit. What this means is that capitalists must produce a value which exceeds the value of their costs of production.⁸⁷ The creation of this additional value is the 'miracle' of surplus value that Marx describes in detail in Volume 1 of *Capital*. Capitalists pay the workers their wages, which correspond not to the value that workers actually produce but to the value which they require to purchase the means of production to allow them to reproduce themselves as well as the next generation of workers.⁸⁸ The payment of this wage allows the capitalists to utilize the labour-power of the worker for the entirety of the working day and gives the capitalist ownership over the value that the worker produces in the course of this day.⁸⁹ It so happens that workers are able to produce, in a working day, a value that is greater than the value of the wage which was paid to them by the capitalist.⁹⁰ The difference between these two values is the source of the quantity of value that accrues to the capitalist in the form of surplus value.⁹¹

The potential problem which this dynamic creates for capitalist reproduction is that while, on the one hand, the costs of production are viewed by the capitalists as negatives which must be minimized in the course of production in order to maximize the quantity of value which is produced as surplus value, these same costs, when viewed from the perspective of the economic system as a whole, are nothing other than the revenues that are used to purchase the products of the

⁸⁷ Marx 1978, pp. 196-97, 405.

⁸⁸ Marx 1976, pp. 274-75. Actually, as Marx specifies here, the value of labour-power may well be higher than bare reproduction. It is actually determined by that basket of commodities which a given society at a given period in time determines to be necessities.

⁸⁹ Marx 1976, pp. 271, 278, 292.

⁹⁰ Marx 1976, p. 301.

⁹¹ Marx 1976, p. 320.

capitalist once they have come onto the market.⁹² In order to be able to undertake to produce, the capitalist must spend money up front in order to obtain the necessary means of production, or constant capital, and labour power, or variable capital.⁹³ As a result, these 'costs' now flow into the hands of other capitalists as revenues from the sale of their own products, either the means of production or the means of consumption, which the workers purchase.⁹⁴ When the products of the first capitalist are ready for sale, it is these revenues that are used to purchase them.⁹⁵ The value of the costs expended on the constant and variable capital are used to purchase the portions of the total product which corresponds to them.⁹⁶ If it is the case that the costs of production are the sources of revenue for the realization of the production in the market and if the essence of capitalism to produce as great as possible a value over and above the costs of production, then the following question logically arises: where do the revenues come from, in a SCCE, for the purchase of this additional production corresponding to the surplus value?⁹⁷

Marx poses this question at various points throughout volume 2 of *Capital*. His treatment of it is convoluted and difficult to follow at times. Nevertheless, it can be summarized as follows. Marx develops a model of SCCR in which only two classes exist: workers and capitalists.⁹⁸ Workers can never buy the surplus product. This is because, while they are paid a wage, this only ever corresponds to a small fraction of

⁹² Marx 1978, pp. 197-98, 391, n. 1; Marx 1973, pp. 419-20.

⁹³ Marx 1978, pp. 402, 409.

⁹⁴ Marx 1978, p. 197.

⁹⁵ Marx 1978, pp. 405, 409, 419.

⁹⁶ Marx 1978, pp. 197-98, 409, 422.

⁹⁷ Marx 1978, pp. 404-05, 419, 549.

⁹⁸ Marx 1978, pp. 497, 422.

the value of the total product.⁹⁹ Therefore, the capitalists themselves must purchase the surplus.¹⁰⁰ But with what revenue are capitalists able to purchase the surplus product? In exchange for sale of their total product, capitalists receive three categories of revenues. One corresponds to the value of the constant capital, which they have expended in production. They use these revenues to purchase additional constant capital in order to be able to renew production. It is the same with the quantity spent on wages; with its return in revenue form, capitalists are able to meet their new demand for labour-power.¹⁰¹ The other category of revenue, which capitalists receive through the sale of their product, is the surplus value. It can only be this revenue that is used to purchase the surplus product.¹⁰² We know that capitalists spend a portion of their total revenue on constant capital and another portion on variable capital; on what types of commodities do they spend their surplus value? The answer depends on whether we are considering simple or expanded reproduction. The very definition of simple reproduction is that capitalists do not increase the scale of their production. As a consequence, they spend the entirety of their surplus value on personal consumption.¹⁰³ Marx posits that under simple reproduction, the revenues for the purchase of the surplus product come from the spending of capitalists on personal consumption, which they undertake prior to and during the production process. It is the value of these expenditures that flows back to the capitalists in the form of surplus value through

⁹⁹ Marx 1978, p. 422.

¹⁰⁰ Marx 1978, p. 497.

¹⁰¹ Marx 1978, pp. 471-72.

¹⁰² Marx 1978, pp. 405, 423.

¹⁰³ Marx 1978, p. 410.

the realization of their surplus product.¹⁰⁴ In expanded reproduction, however, the scale of production does expand. This means that instead of consuming the entirety of their profits, capitalists spend a portion of these on investment in new productive capacity.¹⁰⁵ Thus under expanded reproduction, the surplus value which is used to realize the surplus product is spent by capitalists on a mix of personal consumption and investment in additional productive capacity, both means of production as well as means of consumption for workers.¹⁰⁶

Luxemburg arrives at the same solution to the SAP, that the surplus product must be purchased by the capitalists using their profits to invest in additional production, as Marx had.¹⁰⁷ And she does so through some of the same forms of reasoning as Marx had employed. The additional demand cannot come from the workers, who only receive the value of their wage, which besides is only equivalent to a small portion of the total product.¹⁰⁸ In a two-class model, additional demand must therefore come from the capitalists. The spending that capitalists undertake to renew the constant capital used up in production cannot supply this additional demand, as this is already accounted for.¹⁰⁹ Nor can capitalists purchase the surplus product entirely through personal consumption. This would be anathema to the very spirit of capitalism, at the heart of which lies the personal abstention of the capitalists which allows them to increase their own capacities for profit-making.¹¹⁰

Accordingly, under expanded reproduction, capitalists set aside a portion of their

¹⁰⁴ Marx 1978, pp. 409-10, 496.

¹⁰⁵ Marx 1978, p. 418.

¹⁰⁶ Marx 1978, p. 497.

¹⁰⁷ Luxemburg 1951, pp. 133, 329; Luxemburg 1972a, pp. 56-7.

¹⁰⁸ Luxemburg 1951, p. 132; Luxemburg 1972a, p. 55.

¹⁰⁹ Luxemburg 1972a, p. 55.

¹¹⁰ Luxemburg 1951, p. 132; Luxemburg 1972a, pp. 54-5.

surplus value in order to invest it in the expansion of their own production.¹¹¹ It is this category of revenues that must be used to purchase the additional commodities.¹¹²

Such a conclusion gives Luxemburg considerable pause, however. In a SCCE, investment by capitalists in additional production is required to provide the effective demand sufficient to consume the totality of the commodities produced and, in so doing, to assure adequate reproduction. However, Luxemburg believes that there are many reasons to doubt that this type of investment could actually take place in such a context. This investment scepticism on Luxemburg's part and the reasons behind it are what I will now examine.

Luxemburg's Investment Scepticism

At the heart of Luxemburg's central argument for investment scepticism is her sensitivity to the fact that investment is not only a source of effective demand, but also generates an increase in the level of production.¹¹³ Commentators have referred to this dynamic as the 'dual nature' of investment.¹¹⁴ As the previous section showed, in a SCCE, the demand through which the surplus production in the current period is absorbed comes in the form of investment in additional production. Now, capitalists have discretionary power over their investments.¹¹⁵ They will only invest in additional production if it is profitable for them to do so.¹¹⁶

¹¹¹ Luxemburg 1972a, p. 55.

¹¹² Luxemburg 1951 pp. 133, 329; Luxemburg 1972a, pp. 55-7.

¹¹³ Luxemburg 1972a, pp. 57, 67; Luxemburg 1951, pp. 50-1, 133, 330.

¹¹⁴ Trigg 2009, p. 49; Rousseas 1979, p. 15, n. 12; Bellofiore 2014, p. 89; Kriesler and McFarlane 2016, p. 126; Sebastiani 1994, p. 21.

¹¹⁵ Luxemburg 1951, p. 40; Luxemburg 1972a, p. 66.

¹¹⁶ Luxemburg 1951, pp. 38, 40; Versieren 2010, p. 676; Trigg 2009, p. 34.

What this in turn requires is that there be a market for this additional production.¹¹⁷

But where does this market come from? The RS reply that it comes, once again, from investment in even greater productive capacity in the future.¹¹⁸ But such future investment itself requires the assurance of the expansion of the market, which can only be provided by an additional round of investment. And on and on.

Luxemburg considers this to be just too tenuous a dynamic to induce the capitalists to invest.¹¹⁹ She believes that when faced with a current surplus in their production, capitalists will refuse to invest because they will realize that the additional future investment required to realize the current investment is just too uncertain a proposition.¹²⁰ The following passage is illustrative of an argument she employs in numerous places:

Perhaps the capitalists are mutual customers for the remainder of the commodities . . . to use them for the extension of production, for accumulation . . . All right, but such a solution only pushes the problem from this moment to the next. After we have assumed that accumulation has started and that the increased production throws an ever bigger amount of commodities on to the market the following year, the same question arises again: where do we then find the consumers for this even greater amount of commodities? Will we answer: well, this growing amount of goods will again be exchanged among the capitalists to extend production again, and so forth, year after year? Then we have the roundabout that revolves around itself in empty space.¹²¹

Luxemburg often employs such phrases as ‘roundabout’, ‘merry-go-round’ or ‘running in circles’ to describe the dynamic of SCCR.¹²² It is meant to show the dubious view she takes that capitalists would continue investing in a context where “accumulation of capital depends . . . [on] accumulation of capital itself . . . The more

¹¹⁷ Luxemburg 1951, pp. 39, 71, 131; Kowalik 2014, p. 56; Bellofiore and Passarella 2009, p. 100.

¹¹⁸ Luxemburg 1972a, pp. 56-7, 66; Luxemburg 1951, pp. 133, 334.

¹¹⁹ Kowalik 2014, p. 47; Trincado 2004, p. 254; Robinson 1951, p. 20; Thomas 2014, p. 7.

¹²⁰ Luxemburg 1972a, pp. 57, 67; Luxemburg 1951, pp. 50-1, 70-1, 132, 330.

¹²¹ Luxemburg 1972a, pp. 56-7.

¹²² Luxemburg 1951, pp. 73, 132, 330, 335.

capital accumulates, the more it accumulates".¹²³ Instead, she stresses that for capitalists to invest and absorb the current surplus, some additional market for their future commodities must be present *external* to that which would be provided by the capitalists' own investment.¹²⁴ This demand must either be available in the present, in order to absorb the current surplus independent of investment and to give the capitalists an inkling that such a demand will again be present for their new production, or the demand must be foreseeable on the horizon at some point in the future in order to justify current investment.¹²⁵

Luxemburg denies the claim that investment can ever be used to secure reproduction in SCCE on other grounds as well. She considers that if such a situation were to occur, that it would create a state of affairs that would be 'absurd' from the social point of view.¹²⁶ Luxemburg notices that if investment were to be used to absorb the surplus in a SCCE, that it would be likely to take place at ever-higher levels of organic composition of capital. That is, each subsequent round of investment would contain a higher proportion of investment in constant capital relative to variable capital, or labour power.¹²⁷ This would be nothing but the expression of the necessary increase in the productive powers of society over time,¹²⁸ as Marx expressed it, wherein higher relative quantities of constant capital would produce an output that would be greater in absolute terms. When viewed in the aggregate, what this would mean is that more and more of social production

¹²³ Luxemburg 1972a, pp. 50-1.

¹²⁴ Luxemburg 1951, pp. 101-02, 133, 137-38; Luxemburg 1972a, pp. 49-50, 57; Kowalik 2014, p. 48; Trincado 2004 p. 261; Robinson 1951, p. 21.

¹²⁵ Luxemburg 1972a, pp. 101-02; Luxemburg 1951, pp. 39-40.

¹²⁶ Luxemburg 1951, p. 132; Luxemburg 1972a, pp. 57, 74.

¹²⁷ Luxemburg 1951, p. 110.

¹²⁸ Luxemburg 1951, pp. 321-22.

would be used to meet the greater demand for means of production, while an ever smaller share would be set to producing means of consumption for the ever smaller share represented by the wage in the total value of production.¹²⁹ This is precisely the worldview expressed by one of Luxemburg's predecessors Tugan-Baranovski, who did not see this situation as an argument against the possibility of ongoing SCCR. On the contrary, Tugan believed that increases in the levels of investment in the means of production could always be used to make up for the shortfall in aggregate demand left by the decline in the share of consumption caused by the relative decline of the wage.¹³⁰ But Luxemburg fought hard against such a position.¹³¹ She referred to this situation which resulted from SCCR in which more and more production was dedicated simply to the production of means of production in society as "production for production's sake"¹³² and she considered such a state of affairs 'absurd' from the social point of view.¹³³ While she never does say so explicitly, there is the suggestion in Luxemburg's text that it is this very *absurdity* of the situation that also serves to argue against its *reality* for Luxemburg.¹³⁴ She simply does not seem to believe that any system of production and distribution, even capitalism, could behave in such an irrational manner. Certainly many of Luxemburg's critics have also read her argument in this way.¹³⁵

If this type of 'production for production's sake' is 'absurd' from the social point of view, Luxemburg believes that it is so also from the perspective of the

¹²⁹ Luxemburg 1951, pp. 321-22; Bellofiore 2014, pp. 82, 99-100; Bellofiore 2009a, pp. 15-6.

¹³⁰ Kalecki 1971, pp. 147-48; Bellofiore 2014, p. 82; Mattick 2009, p. 95.

¹³¹ Luxemburg 1951, pp. 320, 330, 334-35.

¹³² Luxemburg 1951, p. 335; Luxemburg 1972a, p. 74.

¹³³ Luxemburg 1951, p. 132; Luxemburg 1972a, pp. 57, 74.

¹³⁴ Luxemburg 1951, pp. 320, 330, 334-35.

¹³⁵ Howard and King 1989, pp. 112-13; Kalecki 1971, pp. 147-48.

capitalists.¹³⁶ She repeatedly asks the question of who benefits from this type of SCCR, thereby implying that it is not a situation from which the capitalists themselves gain anything.¹³⁷ Luxemburg concedes that under this type of reproduction, the consumption of the capitalists is able to increase. But she argues that the purpose of reproduction for capitalists is not, and has never been, the increase in their own personal consumption.¹³⁸ Workers are also afforded higher employment levels through ongoing reproduction. However, this obviously could not be the objective sought by the capitalists either since the latter have always striven to hold workers to the minimum socially permissible level of income.¹³⁹ What capitalists are left with under ongoing SCCR, therefore, is an ever-growing mound of means of production which they control.¹⁴⁰ But neither does Luxemburg believe that this outcome is of any interest to the capitalists.¹⁴¹ The reason she gives for this is her conviction that the only objective which capitalists ever pursue through reproduction is the accumulation of profit in *money form*.¹⁴² Thus if ongoing SCCR only results in an ever-greater mass of means of production under the control of the capitalists, then this reproduction is pointless as far as the latter are concerned.

Luxemburg takes another, altogether different, line of argumentation against the reality of investment in a SCCE. She claims that even if capitalists did wish to invest in such a context, that they would be prevented from doing so by what I refer

¹³⁶ Luxemburg 1951, pp. 74, 132; Luxemburg 1972a, p. 57.

¹³⁷ Luxemburg 1951, pp. 330, 334.

¹³⁸ Luxemburg 1951, p. 334.

¹³⁹ Ibid.

¹⁴⁰ Luxemburg 1951, pp. 71, 335; Luxemburg 1972a, p. 57.

¹⁴¹ Luxemburg 1951, pp. 71, 132, 335; Luxemburg 1972a, p. 57.

¹⁴² Luxemburg 1972a, pp. 49, 71; Bukharin 1972, p. 179.

to as the 'money-timing problem'. This can be expressed as follows: in an environment in which credit is absent, capitalists are unable to invest in additional production in order to absorb the current surplus production because the money which finances such an investment must come from the realization of this very surplus which investment is to realize.¹⁴³ This can be more clearly seen by once again breaking up the total product into its value components and tracing the movements of the corresponding revenues, just as I did in my summary of the surplus absorption problem at the start of this chapter. I explained that the revenues corresponding to the portions of the total product c and v are cast into circulation prior to the equivalent commodity values coming onto the market. This means that when demand for the portions of the product c and v arise from the capitalists' purchase of means of production and labour power on the same scale as before, these dispose of the revenues to finance this demand.¹⁴⁴ The case is different with the revenues corresponding to the portion of the commodity value s . Here no equivalent revenues have been cast into circulation prior to production. Rather, the surplus value accrues to the capitalists over the course of production without the necessity of the outlay of any corresponding revenues. The result is that while, as Marx suggests in his discussion of the surplus absorption problem and as the RS demonstrate, the demand for the commodities embodying s must come from the demand of the capitalists for investment in additional means of production and labour power, these do not yet dispose of the revenues necessary to make these

¹⁴³ Luxemburg 1951, pp. 39-40, 137, 143; Luxemburg 1972a, pp. 72-3, 101; Desai and Veneziani 2009, p. 26; Bellofiore 2009a, p. 17; Pastrello 2014, p. 45; Blackwater 2015 p. 80.

¹⁴⁴ Bellofiore 2009a, pp. 9-10; Pastrello 2014, pp. 44-5.

purchases.¹⁴⁵ On the contrary, capitalists must first find a way to realize the commodities embodied in *s* in order to have the money at their disposal to undertake such an investment.¹⁴⁶ To further illustrate this, Luxemburg posits three capitalists, *A*, *B* and *C*.¹⁴⁷ Each is able to sell to the others the portion of their commodities corresponding to their constant and variable capital. But each now comes to the market with commodity values embodying their surplus value. Each wishes to sell these surplus commodities and to use the proceeds to invest in additional production, thereby consuming the surplus commodities of others. However, none has the money to undertake this investment because none has been able to realize their surplus product.¹⁴⁸ And none has been able to realize their surplus product precisely because none of the others has been able to buy it, because they themselves have not been able to realize their own surplus product.¹⁴⁹ Thus, argues Luxemburg, a serious problem for reproduction arises in a SCCE because no capitalist is able to first realize their surplus product in order to be able to realize the surpluses of the others.¹⁵⁰

Luxemburg therefore makes the case, first, that capitalists will not wish to invest in a SCCE, and second, that even if they did wish to that they would be unable to do so because of this ‘money-timing’ problem. But Luxemburg even takes her argument against investment on the basis of the ‘money-timing’ problem one step further. She claims that even if capitalists could somehow overcome this problem in

¹⁴⁵ Bellofiore 2009a, pp. 9-10; Pastrello 2014, pp. 44-5; Blackwater 2015, p. 80.

¹⁴⁶ Luxemburg 1951, pp. 137, 143; Desai and Veneziani 2009, p. 26; Bellofiore 2009a, pp. 9-10, 17; Bellofiore 2014, pp. 98-9; Blackwater 2015, p. 80.

¹⁴⁷ Luxemburg 1972a, p. 72.

¹⁴⁸ Luxemburg 1972a, pp. 72-3.

¹⁴⁹ Luxemburg 1951, pp. 137, 143; Luxemburg 1972a, p. 72; Pastrello 2014, p. 45.

¹⁵⁰ Luxemburg 1972a, p. 73; Luxemburg 1951, p. 137; Bellofiore 2009a, p. 10; Pastrello 2014, p. 52.

the present in order to invest and absorb the current surplus product, that they would still not do so. This is because they would anticipate the impossibility of future investment as a result of the recurrence of the 'money-timing' problem. Since this future investment would be the source of the demand for the increase in production as a result of the postulated current investment, they would see that the product of this investment could therefore not be absorbed and would accordingly not yield a profit. They would thus refrain from undertaking this investment at all.¹⁵¹

These are the arguments which serve to support Luxemburg's investment scepticism. The latter, when combined with the important role played by investment in reproduction, is the main basis for Luxemburg's refutation of the RS.¹⁵² On Luxemburg's view, the proportions depicted in the Schemas can never take place in actuality because capitalists in a SCCE would never undertake sufficient levels of investment in order for this to occur.¹⁵³

In having refuted the RS in this manner, however, Luxemburg believed that she had also shown the impossibility of SCCR.¹⁵⁴ As mentioned, Marx treated the RS as an inquiry into the possibility of maintaining the proportional exchange relations required for the *optimal* functioning of the capitalist system. The consequence of the divergence of the proportions was for him crises and/or stagnation, and not necessarily economic collapse. Luxemburg, on the other hand, seemed to consider that the main question which hung in the balance with the RS was whether or not a

¹⁵¹ Luxemburg 1951, p. 74.

¹⁵² Luxemburg 1951, pp. 132-33, 137, 330, 333-35.

¹⁵³ Luxemburg 1951, pp. 135-37, 335, 350, 354.

¹⁵⁴ Luxemburg 1951, pp. 137, 350-52, 359, 365-66; Luxemburg 1972a, pp. 57-8.

SCCE was even possible.¹⁵⁵ Thus, should the proportions depicted in the Schemas not be capable of being attained, this would show that a SCCE would simply not be capable of functioning.

The 'Exogenous' Factors

Because of the impossibility of sufficient investment taking place in a SCCE therefore, Luxemburg argues that SCCR is impossible. This does not mean however, that for Luxemburg, capitalist reproduction itself can never take place; only that the capitalist system cannot remain confined to one area or country. Instead, it must continually reach outside of itself towards a variety of 'exogenous factors' (to anachronistically apply Kalecki's term) to find the additional effective demand which is required to absorb the portion of the surplus product which investment in additional production cannot.¹⁵⁶ In this section, I will describe some of these 'exogenous factors' as Luxemburg conceives of them. For her, they consist mainly of foreign markets which are secured by countries with the help of imperialistic policies.

For Luxemburg, the most important of these 'exogenous' factors, and source of the necessary additional effective demand, comes in the form of the potential markets which exist outside of the capitalist system as non-capitalist economic organizations and systems.¹⁵⁷ Foreign countries that rely on pre-capitalist systems of production and distribution are the most obvious examples of these.¹⁵⁸ But non-capitalist areas can also exist domestically, within the capitalist country, in small

¹⁵⁵ Luxemburg 1951, pp. 131, 325, 366; Luxemburg 1972a, p. 75.

¹⁵⁶ Luxemburg 1951, pp. 135-36, 351-52, 366-67; Luxemburg 1972a, pp. 58-9, 145-46.

¹⁵⁷ Luxemburg 1951, pp. 351-52, 366, 368; Luxemburg 1972a, pp. 59, 145; Schmidt 2014a, p. 2.

¹⁵⁸ Luxemburg 1951, pp. 135-36, 352, 368; Luxemburg 1972a, pp. 58-9, 145.

pockets of peasants or artisans who have not yet been completely colonized by the logic of capitalism.¹⁵⁹

In order for these non-capitalistically organized areas to be able to absorb the surplus commodities of the capitalist system, these must be transformed from an economic system based on what Luxemburg calls the 'natural' economy, to one of commodity production and exchange.¹⁶⁰ The 'natural' economy consists of groupings of individuals, families and clans that exert control over their own means of production, such as land, and themselves produce the majority of what they consume.¹⁶¹ What additional necessities they require are obtained through barter trading with other such groupings.¹⁶² Since what the capitalist system needs is to sell its products in exchange for money, these types of economic organizations can obviously be of no help in absorbing its surplus commodities.¹⁶³ Capital therefore sets about, with the aid of levers such as war, revolution, taxation, loans and the production of cheap commodities to break up these 'natural' economies.¹⁶⁴ These various interventions have in common that they serve to separate the producers from their means of production in the land and therefore begin to create a proletariat that has no other option but to sell its labour power in order to obtain what it requires to live.¹⁶⁵ In the process, a great number of people become

¹⁵⁹ Luxemburg 1951, pp. 352, 366, 368; Luxemburg 1972a, pp. 58, 145; Schmidt 2010, p. 98; Schmidt 2012a, p. 342.

¹⁶⁰ Luxemburg 1951, pp. 369-71, 386; Schmidt 2010, pp. 98, 106; Schmidt 2012a, p. 342; Schmidt 2014b, p. 459; Krätke 2014, p. 18.

¹⁶¹ Luxemburg 1951, pp. 368-69; Luxemburg 1972a, p. 59; Schmidt 2014b, p. 459.

¹⁶² Luxemburg 1972a, p. 59.

¹⁶³ Luxemburg 1951, p. 368.

¹⁶⁴ Luxemburg 1951, pp. 369, 373-74; Schmidt 2012a, p. 342; Schmidt 2014b, p. 459; Krätke 2014, p. 18.

¹⁶⁵ Luxemburg 1951, pp. 369-71, 386; Luxemburg 1972a, pp. 59, 145.

integrated into the money economy and are forced to obtain all of their necessities through the purchase of commodities, including those produced by capital as its product surplus.¹⁶⁶ This is a process that Marx referred to as ‘primitive accumulation’. But where Marx felt that it constituted only the prelude to the development of capital, Luxemburg saw it as a permanent phenomenon, necessary if capital is to keep reproducing itself.¹⁶⁷

Logically, it may be that it is not necessary for the non-capitalist areas to become fully capitalist for capital to be able to sell its surplus to them. Perhaps for this it is sufficient for them to be transformed from ‘natural’ economies to those organized around simple commodity production,¹⁶⁸ a situation in which producers would be specialized and would obtain the commodities they require through the money economy instead of through barter or by producing them themselves. Even so, Luxemburg makes it clear that she believes that once the process of primitive accumulation has been initiated, the process through which the mass of people are separated from the means of production and are proletarianized, the wheels of the development of a capitalist economic organization have begun to turn.¹⁶⁹ Thus it is that the capitalist system, in seeking to break up the natural economy in order to be able to find demand for its own products, winds up initiating a process that recreates a capitalist organization in these previously non-capitalist areas.¹⁷⁰

¹⁶⁶ Luxemburg 1951, p. 371; Luxemburg 1972a, p. 59.

¹⁶⁷ Luxemburg 1951, pp. 369-71; Luxemburg 1972a, p. 145; Kowalik 2009, p. 107; Kowalik 1966b, pp. 212-13; Schmidt 2012a, p. 345; Schmidt 2013, p. 6; Schmidt 2014b, pp. 459-60; Albo 2016, p. 41; Le Blanc 2010, p. 164.

¹⁶⁸ Luxemburg suggests this on 1951, p. 421 and 1972, pp. 58-9; Schmidt 2014b, p. 459; Krätke 2014, p. 18.

¹⁶⁹ Luxemburg 1951, pp. 369-70, 415-16; Luxemburg 1972a, p. 59.

¹⁷⁰ Luxemburg 1951, pp. 366, 416; Luxemburg 1972a, p. 145.

Luxemburg describes another reason why the development of capitalism out of previously non-capitalist areas may be the inevitable outcome of the interaction between the capitalist system and its non-capitalist environment. She points out that it is not only the case that the SCCE produces a surplus of commodities. Because of the limited potential for the consumption of the surplus commodities in these economies, Luxemburg believes that capitalists will tend to restrict their investment in additional production.¹⁷¹ As a consequence, the SCCE will develop a surplus of un-investible capital alongside its surplus commodities.¹⁷² The non-capitalistically organized areas will therefore tend to function not just as targets for the surplus commodities but also for this surplus capital.¹⁷³ The latter would flow abroad in the form of foreign loans, which the 'new' country could use to finance its consumption of the 'old' country's commodities.¹⁷⁴ Alternatively, the capital exported to the 'new' country could take the form of investment in additional production there.¹⁷⁵ But the loans have to be repaid and the investment has to yield a profit for its investors.¹⁷⁶ How does this take place? Luxemburg suggests that these are ultimately extracted from the remaining peasants and impoverished populations of the 'new' countries.¹⁷⁷ Yet the other obvious solution is for the 'new' countries to develop capitalistically in order to be able to generate their own surpluses.¹⁷⁸

¹⁷¹ Luxemburg 1951, pp. 427, 429; Luxemburg 1972a, p. 126.

¹⁷² Luxemburg 1951, pp. 426-27; Luxemburg 1972a, p. 126.

¹⁷³ Luxemburg 1951, pp. 421, 426-27; Luxemburg 1972a, pp. 59, 145.

¹⁷⁴ Luxemburg 1951, pp. 420-22, 426.

¹⁷⁵ Luxemburg 1951, pp. 421, 426-27; Luxemburg 1972a, pp. 59-60.

¹⁷⁶ Luxemburg 1951, pp. 427, 429.

¹⁷⁷ Luxemburg 1951, pp. 435-36.

¹⁷⁸ Luxemburg 1951, p. 427.

Thus Luxemburg describes a dynamic in which the reproduction of the 'old' capitalist countries relies on a process that eventually results in the transformation of 'natural' economies into newly created capitalistically-organized areas.¹⁷⁹ But this process, when it reaches its end point, also constitutes a threat to the economies of the 'old' countries. The reason for this is that, viewed from the perspective of the aggregate, once a country has become a fully-fledged capitalist one, it ceases to be able to contribute to the absorption of the total surplus production; it now generates its own surplus, both in the form of commodities and capital, for which demand outlets must be found.¹⁸⁰ In this, the 'new' country, no longer the saviour of the 'old', now becomes its competitor.¹⁸¹ It is here that the phenomenon of imperialism emerges as the political manifestation of the increasingly frenzied attempt by the ever-expanding capitalist sphere to secure for itself what remains of the shrinking non-capitalist area.¹⁸²

It is as a result of all of this that Luxemburg believes that the capitalist system has a very definite expiry date stamped on its side.¹⁸³ Capitalism requires the existence of non-capitalist areas. Yet in the process of capitalism using these areas to absorb its surplus commodities and capital, the latter are themselves transformed into capitalistically organized ones. As a result, new non-capitalist areas have to be sought, and with redoubled urgency as a result of the existence of the competition from the newly capitalized areas. But non-capitalist areas are by

¹⁷⁹ Luxemburg 1951, pp. 366, 415-16; Luxemburg 1972a, pp. 60, 145.

¹⁸⁰ Luxemburg 1951, pp. 421, 446.

¹⁸¹ Luxemburg 1951, pp. 367, 421, 446; Luxemburg 1972a, p. 60.

¹⁸² Luxemburg 1951, pp. 367, 417, 446; Luxemburg 1972a, p. 60; Schmidt 2010, pp. 98-9.

¹⁸³ Luxemburg 1951, p. 446; Luxemburg 1972a, pp. 60, 145-46.

definition finite and will eventually cease to exist.¹⁸⁴ When they do so, Luxemburg believes that capitalism will find itself in a situation in which it is no longer able to reproduce itself.¹⁸⁵

Besides the imperialistic relation between capitalist areas and their non-capitalist environments, another 'exogenous' factor, mentioned by Luxemburg as having the potential to supply the additional demand required for the consumption of the surplus commodities produced by the capitalist system, presents itself in the form of government spending on military armaments. Military spending is, it is true, the helpmate of the imperialistic processes through which non-capitalist markets are secured, but it also itself serves as its own 'province of accumulation'.¹⁸⁶

Luxemburg begins her discussion of government military spending and its contribution to furnishing additional effective demand in the final chapter of the *Accumulation of Capital* by saying that spending by 'third persons' including by government, has already been ruled out as a potential source of new demand.¹⁸⁷ This was true under the assumption that the money for this spending could come from no other source than from workers or capitalists. As such, the new consumption created could only in effect take the place of the spending that would have otherwise been undertaken, either by workers or capitalists, had not the amount required for the new spending been taken from them.¹⁸⁸ This is what happens, Luxemburg says in another place, with 'unproductive' consumption by

¹⁸⁴ Luxemburg 1951, p. 446; Luxemburg 1972a, pp. 60, 145.

¹⁸⁵ Luxemburg 1951, pp. 417, 446; Luxemburg 1972a, pp. 60, 145-46.

¹⁸⁶ Luxemburg 1951, pp. 454, 466; Schmidt 2010, p. 99.

¹⁸⁷ Luxemburg 1951, pp. 135, 454.

¹⁸⁸ Luxemburg 1951, pp. 454-55.

classes of persons such as landlords or the feudal aristocracy. The sum required to pay for this had to be taken from the purchasing power which workers would otherwise use to purchase their means of subsistence or which capitalists would use for their own consumption.¹⁸⁹ The case is the same for government spending on arms. If this is financed by a tax falling on the capitalists, then the way these pay for it is to curtail either their own consumption or the spending which they would otherwise undertake to maintain their production on the same scale as before.¹⁹⁰ If the tax falls to the working class, then it is paid for by the workers, who as a result now spend less on their own subsistence.¹⁹¹ In either case, the arms spending is not an addition to aggregate demand, but only a substitution of one type of demand for another.

It is important to note that in her consideration of both the problem of 'unproductive' consumption by feudal and neo-feudal classes and that of government military spending, Luxemburg rejects the possibility that the money for these expenditures could come from the portion of the capitalist profits which the latter use not for personal consumption but for investment in additional production.¹⁹² This is because, as I have explained, this is the only category of revenue that capitalists do not cast into the market ahead of their production, and which therefore has no corresponding money available in circulation to realize its equivalent value in commodities. Instead, it is precisely this portion of the total

¹⁸⁹ Luxemburg 1951, pp. 134-35, 220, 223, 294-95; Luxemburg 1972a, p. 56; Howard and King 1989, p. 113; Pastrello 2014, p. 46.

¹⁹⁰ Luxemburg 1951, p. 456.

¹⁹¹ Luxemburg 1951, p. 455.

¹⁹² Luxemburg 1951, pp. 456, 134-35; Luxemburg 1972a, p. 56.

commodity product for which a source of additional demand must be found in order that it may be realized. Because of this, as I described above in the discussion of the 'money-timing' problem in Luxemburg, it cannot be, in a model which continues to exclude the recourse to credit, that the money to realize this portion of the total product is taken from the money which accrues to capitalists as a result of this very realization: this revenue does not yet exist.¹⁹³

The way in which Luxemburg goes about arguing that military spending constitutes an addition to the aggregate level of demand, involves relaxing a couple of assumptions that had been present in previous discussions of the model of SCCR. The first of these is that that money for the financing of government spending can only come from either workers or capitalists.¹⁹⁴ In the same way that non-capitalist areas can be used to directly provide additional demand, the financing for government spending can come, Luxemburg posits, not just from workers and capitalists, but also from population strata within the country not yet fully integrated into the capitalist system.¹⁹⁵ Taxes can be levied from people forming part of the 'natural' economy or from those such as peasants and artisans who participate in simple commodity production.¹⁹⁶ While it may be, in the case of the latter, that a portion of the commodities which these individuals purchase is produced by the capitalist economy, and thus that the increase in consumption through military spending funded by taxes levied on them is at least partially offset by a decline in other types of consumption, Luxemburg claims that an increase in

¹⁹³ Luxemburg 1951, p. 456.

¹⁹⁴ Luxemburg 1951, p. 455.

¹⁹⁵ Luxemburg 1951, p. 465.

¹⁹⁶ Luxemburg 1951, pp. 458, 464-65.

the tax burden falling on such people would not cause them to curtail their personal consumption all that much but would instead simply push them to work more in order to be able to generate for themselves a higher level of gross income to pay the increased tax bill.¹⁹⁷ Moreover, even if the new tax did cause them have to reduce their own personal consumption, it is likely that at least a portion of the commodities for this consumption were obtained through purchases from simple commodity producers.¹⁹⁸ Thus some of the consumption by this stratum had already been lost to the capitalist system as a source of demand anyway. By contrast, Luxemburg argues that the totality of military spending could be spent on arms and other hardware that is capitalistically produced.¹⁹⁹ In all of these cases therefore, an increase in military spending financed by higher taxes on the non-capitalist stratum of the population would have the effect of increasing the total level of social demand.

Despite her initial claims on the contrary at the start of the chapter, Luxemburg will go on to argue that it is possible for an increase in military spending to increase the aggregate level of demand even if the financing for this spending is taken entirely from the wages of workers through taxation.²⁰⁰ The most plausible argument that she advances to support such a position is one that seems to imply the relaxation of a second assumption, which had been part of discussions of the

¹⁹⁷ Luxemburg 1951, p. 465.

¹⁹⁸ Luxemburg 1951, p. 466.

¹⁹⁹ Ibid.

²⁰⁰ Luxemburg 1951, pp. 456, 460, 464; Bellofiore 2014, p. 90; Kowalik 2014, p. 117; Robinson 1951, p. 27; Howard and King 1989, p. 113.

reproduction of SCCEs: that workers do not save.²⁰¹ At the start of the chapter, Luxemburg says that the argument that spending by government cannot increase the total level of demand relies on two assumptions. The first, which I have just discussed, is that the financing for this spending can only come from workers or capitalists. The second is that this spending must be directed entirely to covering the salaries of the personnel employed by government.²⁰² In this context, she says, government spending indeed cannot increase total demand. By contrast, near the end of the chapter, Luxemburg describes a situation in which government military spending is dedicated exclusively to the purchase of arms, equipment and other capitalistically-produced commodities. In this case, she says, such military spending can indeed increase social demand.²⁰³ With a little reflection, it can be seen that the difference in the effects which Luxemburg claims these two scenarios have on the total level of consumption can only be present in a model of reproduction in which workers are permitted to save a portion of their wages. On the contrary, the difference in the total demand that would result from military spending on personnel or on hardware would be insignificant. In both cases, money would be withdrawn from the revenues of workers, where it would have been consumed in its entirety, and dedicated to other purposes, which likewise would see it fully spent. But differences appear as soon as we imagine a model in which workers save a portion of their wages instead of spending them all. In this case, military spending

²⁰¹ There is another argument which Luxemburg advances in this chapter to support her claim that government military spending can provide an increase in demand even when drawn entirely from the wage through taxation. This argument is either one that I cannot fully understand or one which is not fully valid. Luxemburg argues that such spending will increase total demand because it serves to increase the profits of the capitalists. See Luxemburg 1951, pp. 460ff.

²⁰² Luxemburg 1951, p. 455.

²⁰³ Luxemburg 1951, pp. 456, 465-66.

on the wages of soldiers, officials and administrators financed by a tax on the wage would still leave total demand unaltered. This is because money would be diverted from workers, who would have saved a portion of it, to other, military, employees who would have done the same. However, if the military spending were of the second type, used entirely for the purchase of commodities, then the result would be that revenues would have been diverted from a source, the wage, in which a portion of it was saved, to a destination in which it was spent in its entirety. Thus the total level of consumption would have been increased through this type of spending. Indeed, this is the dynamic which Luxemburg describes as taking place in the case of military spending financed by a tax on the “peasants and the lower middle classes”, who are presumed to save.²⁰⁴ But she must also have in mind the same as applying to workers if she is to argue, as indeed she does, that military spending can serve to increase the level of aggregate demand even if it is drawn fully from the wage.

I have now completed my summary of Luxemburg’s main economic argument, which consists of the claims that because sufficient investment in a SCCE can never take place, SCCR is impossible, and capitalism therefore requires recourse to ‘exogenous factors’ such as foreign markets to be able to function at all. Even given these, however, capitalism is still bound to collapse as these markets become depleted. I can now move on to an examination of Kalecki’s economic theory in order to determine its points of commonality and of divergence with that of Luxemburg. I undertake this in the following chapter.

²⁰⁴ Luxemburg 1951, pp. 465-66; Kowalik 2014, p. 117.

Chapter 2: Michal Kalecki's Economic Theory

My particular objective in this chapter is to summarize Kalecki's economic theory while paying special attention to its points of similarity and of difference with that of Luxemburg, as described in the previous chapter. What emerges as a result is that, while Kalecki's argument seems to share some common features with Luxemburg's, and even seems to take over its basic structure, Kalecki also qualifies or modifies almost all of the major points which make it up.

This chapter is composed of three sections of varied lengths. The first section contains an examination of those texts in which Kalecki directly engages with Luxemburg's theory, in order to identify some preliminary points of similarity and difference between the two theorists. Having found that, in a general assessment of Luxemburg's thought, Kalecki shares many of Luxemburg's positions, including a scepticism towards the taking place of sufficient levels of investment in SCCEs and the problematic impact which this can have on SCCR, the second section seeks to further compare this seeming point of agreement between the two theories by exploring the reasons for Kalecki's own investment scepticism and its consequences for economic reproduction. Finally, section 3 takes up another point of apparent correspondence between the theorists, the 'exogenous factors' and the positive contribution which these can make to capitalist reproduction. In this section, I describe the modification which Kalecki applies to Luxemburg's conception of these factors and the nature of their impact on economic dynamics as Kalecki conceives of them.

1. Kalecki's Direct Engagement with Luxemburg: Criticisms and General Assessment

If one were seeking to identify the points of commonality and of difference between the economic theories of Kalecki and Luxemburg, the logical starting point would be those texts and passages in which Kalecki directly engages with Luxemburg. These, however, are relatively few. Although Kalecki was influenced by Luxemburg's economic theory from the very beginning of his career,²⁰⁵ he dealt with her work directly, with one early exception,²⁰⁶ only near the very end of his career. At that point, prompted by Kowalik, Kalecki undertook an assessment of Luxemburg's theory in light of his own.²⁰⁷ This is contained in two articles, "The Problem of Effective Demand with Tugan-Baranovski and Rosa Luxemburg" (1967) and "The Marxian Equations of Reproduction and Modern Economics" (1968).²⁰⁸ Therefore, I begin with these articles. What these seem to reveal is that, on the one hand, Kalecki takes issue with Luxemburg's argument for the *impossibility* of SCCR due to the *impossibility* of investment ever taking place within this context; but on the other, he is broadly sympathetic to her approach and believes that it correctly points to the *unlikelihood* of sufficient investment taking place in SCCEs, something which usually prevents these economies from functioning properly.

Kalecki repudiated many of the arguments which Luxemburg employed to support her claim that investment in a SCCR can never take place to a sufficient level

²⁰⁵ Kowalik 2009, p. 108; Krätke 2016, p. 149; Toporowski 2013b, p. 36; Toporowski 2014, p. xi; Bellofiore and Passarella 2009, p. 103; Trincado 2004, p. 262.

²⁰⁶ The one early passage where Kalecki explicitly references Luxemburg is Kalecki 1972a, pp. 45-6.

²⁰⁷ Kowalik 2009, p. 108; Bellofiore, Karwowski and Toporowski 2014, p. 3; Toporowski 2013b, p. 36; Toporowski 2014, p. xi; Bellofiore 2014, p. 90.

²⁰⁸ Kowalik 2009, p. 108; Toporowski 2014, p. xi.

to permit SCCR to occur. As I showed in the previous chapter, Luxemburg's primary reason for being sceptical of the possibility of investment in a SCCE is rooted in her concept of the 'dual nature' of investment. When investment is used to absorb the current surplus production (as it must be), the aspect of investment which serves to increase production causes the creation of an even greater surplus in a future time, which will require an even greater level of investment (and growth in production) to be absorbed. When this is combined with the fact that investment takes place on a discretionary basis as a result of anticipated future profits and markets, the ongoing use of investment to assure SCCR does indeed begin to appear dubious. For Luxemburg, capitalists will become conscious of the tenuous prospects for the absorption of the fruits of projected current investment and will chose to forego this investment altogether.

The above is no doubt a valuable insight concerning the precarious nature of SCCR, which, as Luxemburg says, requires accumulation merely in order to accumulate.²⁰⁹ However, in order for such an aggregate picture of the economy to also constitute a deterrent to investment on an individual level requires an additional assumption: as Kalecki points out, that capitalists are able to view the economy from such an aggregate perspective and to act together as a class when taking their investment decisions.²¹⁰ Much evidence suggests that Luxemburg does indeed make this assumption.²¹¹ On this view, therefore, capitalists would see that if

²⁰⁹ Luxemburg 1972a, pp. 50-1.

²¹⁰ Kalecki 1971, p. 151; Kalecki 1968, p. 79; Harcourt and Krielsner 2014, p. 13; Bellofiore and Passarella 2009, p. 102.

²¹¹ Luxemburg 1972a, pp. 70, 74, 102; Bellofiore 2014, pp. 90, 94; Bellofiore and Passarella 2009, p. 102.

they invested to absorb the current surplus that this would only create an even greater future surplus, which could only be absorbed if they again decided to invest.²¹² But Kalecki denies that capitalists ever behave in this way.²¹³ They have neither such a grand perspective on the economy in the aggregate, nor act together in such a unified fashion in taking their investment decisions. Instead, each capitalist takes investment decisions on a more or less individual basis, responding to incentives at the level of the firm²¹⁴ and only to whether this firm's output will be capable of being realized, irrespective of whether this output, in the aggregate, constitutes part of the means of production or consumption consumed in reproduction on the same or on an expanded scale. The result, implied in Kalecki's critique, is that it can indeed happen, as unlikely as it seems when looking at the model in the aggregate, that capitalists as a whole absorb the current surplus through investment in additional production, which itself is again realized by additional investment.

I also described another argument in the previous chapter which Luxemburg uses to reinforce her investment scepticism and support her conclusion concerning the impossibility of SCCR. This had to do with the consequences of the use of investment to secure reproduction in a SCCE and the way in which this creates a situation that Luxemburg considered 'absurd' for both society in general and capitalists in particular. Here again, Luxemburg began with a correct observation. A SCCE in which investment is continually employed to assure reproduction, when

²¹² Kalecki 1971, p. 151; Harcourt and Krielsner 2014, p. 13; Bellofiore and Passarella 2009, p. 102.

²¹³ Kalecki 1971, p. 152; Harcourt and Krielsner 2014, p. 13.

²¹⁴ Bellofiore 2014, p. 93.

wedded to the plausible assumption that subsequent rounds of investment would take place with higher ratios of constant to variable capital, would indeed lead to a greater share of social production being dedicated to the production of means of production relative to means of consumption – “production for production’s sake”, as Luxemburg termed it. And she is certainly also correct that this would constitute a state of affairs that would be ‘absurd’ from the social point of view. A society that produces an ever-greater volume of means of production, which it uses to produce, not additional means of consumption for its citizens, but additional means of production, is certainly not a rational society. Where Luxemburg goes wrong, however, is when she tries to imply that the ‘absurdity’ of this situation is a sufficient argument against its taking place in actuality.²¹⁵ As critics have pointed out, in arguing in this manner, Luxemburg seems to be imputing to capitalism a kind of conscious purpose or teleology which would see the economic system acting only in ways that are rational for society.²¹⁶ This was the line taken by Kalecki against this argument as well. He believed that purchases of additional means of production to absorb the surplus production could indeed sometimes take place, and that the fact that this created a state of affairs on the whole hostile to the social good did not preclude in any way such a dynamic from actually occurring. Capitalists would invest in additional means of production as long as it was profitable for them to do so, whether it was in the interests of society or not.²¹⁷ In fact, Kalecki commended

²¹⁵ Howard and King 1989, pp. 112-13; Kalecki 1971, pp. 147-48.

²¹⁶ Howard and King 1989, pp. 112-13; Bukharin 1972, pp. 163-64.

²¹⁷ Kalecki 1971, pp. 146-48, 155.

Tugan-Baranovski for having made manifest precisely this “antagonistic character” of capitalist economies.²¹⁸

Kalecki’s repudiation of these arguments, which underpin Luxemburg’s investment scepticism, leads him to argue that, contrary to what Luxemburg believed, sufficient investment in a SCCE can indeed sometimes take place, and that, therefore, SCCR is not at all impossible.²¹⁹ We therefore have our first point of divergence between the two theorists.

However, if Kalecki was critical of Luxemburg on this point, overall, he also reserved praise for her and her theory.²²⁰ Usually this was connected to Kalecki’s belief that Luxemburg had correctly grasped that, if SCCR was not impossible, it was at least highly unlikely to take place in optimal fashion.²²¹ On this point, Kalecki also reversed his attitude towards Tugan-Baranovski. I mentioned in the previous chapter that Tugan took a position diametrically opposed to Luxemburg’s. While she believed that SCCR was impossible, Tugan contended that it could and did always take place, that investment in means of production would always take place to the sufficient degree to fill the gap in demand left by the demand for means of consumption.²²² Kalecki denounced this position as well. Tugan’s problem, Kalecki says, is that he mistakes what *could* happen for what actually does. While it may be *possible* for capitalists to invest to a sufficient degree to absorb the totality of the

²¹⁸ Kalecki 1971, pp. 146, 155.

²¹⁹ Kalecki 1971, pp. 146, 150-51; Kalecki 1972a, pp. 45-6; Kalecki 1968, p. 79; Krätke 2016, p. 149; Bellofiore 2014, p. 90; Rousseas 1979, p. 15, n. 12.

²²⁰ Kalecki 1971, pp. 146, 152, 154-55; Kalecki 1972a, pp. 45-6; Kalecki 1968, p. 79.

²²¹ Kalecki 1971, pp. 148-51; Kalecki 1968, p. 79; Bellofiore 2014, pp. 89-90; Rousseas 1979, p. 15, n. 12.

²²² Kalecki 1971, pp. 146-48, 151; Kalecki 1972a, p. 46; Kalecki 1968, p. 79.

surplus product, there is nothing to assure that they will do so.²²³ Even in his repudiation of Luxemburg's argument for investment scepticism, while Kalecki says that capitalists do not ever invest as a class, he adds that if they did, they would do in the way prescribed by Tugan.²²⁴ In other words, they would understand that investment by them in additional production would serve to absorb the current surplus and would therefore always seek to undertake this investment. But the presentation of this dynamic as a counter-factual by Kalecki implies that he does not believe that this is what actually takes place.

Despite his rejection of Luxemburg's argument for the impossibility of SCCR due to the impossibility of sufficient investment therefore, Kalecki does seem to find a point of agreement with Luxemburg in the unlikelihood of sufficient investment taking place in SCCEs, something which is likely to have a detrimental impact on SCCR.²²⁵

Out of this general assessment of Luxemburg's economic theory by Kalecki therefore, there emerges what seems to be a major point of similarity between the two theories. In the next section, I try to assess the full extent of this similarity by describing the precise reasons for Kalecki's own investment scepticism and the nature of the impact which such a shortfall in investment has for economic reproduction as a whole.

²²³ Kalecki 1971, pp. 147-48.

²²⁴ Kalecki 1971, p. 152; Harcourt and Krielsner 2014, p. 13; Bellofiore and Passarella 2009, p. 102.

²²⁵ Kalecki 1971, pp. 147-49; Kalecki 1972a, pp. 45-6.

2. Kalecki's Investment Scepticism and its Consequences for the Reproduction of SCCEs

The 'Dual Nature' of Investment and its Contradictory Effects on Reproduction

In order to explain why Kalecki believes that investment will tend to fall short in SCCEs and the problems that this will create for these economies, I must begin by enumerating the determinants of investment as Kalecki conceives of them. Kalecki considered the determinants of investment to be the last great problem in economics.²²⁶ Nevertheless he was able to identify three main ones: levels of profit and production capacity²²⁷ respectively, as well as what he called 'the principle of increasing risk'.²²⁸ The latter lies beyond my scope: I will focus on the first two.

Profit and capacity levels affect investment in opposite ways. Capitalists base their investment decisions on the anticipated profitability of new investment, something strongly conditioned by current profit levels.²²⁹ In the first instance, therefore, investment is positively correlated to the level of profit.²³⁰ On the other hand, capacity levels have the opposite effect on investment.²³¹ This is due to the fact that with already existing high output capacity, capitalists will be reluctant to invest in even greater capacity for fear that the fruits of this new production will not

²²⁶ Kalecki 1971, p. 165.

²²⁷ Kalecki 1972a, p. 133; Kalecki 1971, pp. 110-11; Sawyer 1985, pp. 54-5.

²²⁸ Kalecki 1971, p. 111; Kalecki 1972a, p. 128; Halevi 2016b, p. 195.

²²⁹ Kalecki 1990, p. 68; Lopez and Mott 1999, p. 294.

²³⁰ Kalecki 1971, p. 112; Trigg 1994, pp. 94-5; Lopez and Assous 2010, p. 222.

²³¹ *Ibid.* This is true when we are speaking of 'capacity'. If, however, we refer, as Kalecki sometimes does, to 'capacity-utilization', then this is, like profit, positively correlated to investment.

be capable of being realized in the market. This is why, at a given level of profit, investment will be inversely correlated to the level of capacity in the economy.²³²

Having established these determinants of investment, we must now enquire into what determines these in turn. This we find to be investment itself, or more precisely, past levels of investment. Even more than Luxemburg, Kalecki was conscious of the 'dual nature' of investment and crafted his economic theory around it.²³³ On the one hand, investment serves to increase the level of effective demand and therefore of profits in the economy. This in turn, serves to make subsequent investment more attractive. On the other hand, the other function of investment is to increase productive capacity, something which serves to temper subsequent investment.²³⁴ As a result of its 'dual nature', therefore, past investment tends to affect the prospects for future investment in contradictory ways.

I now examine each of these aspects of investment and their effects on reproduction in greater detail. I begin with a look at the positive impacts which current investment can have on future investment and reproduction by virtue of raising the demand and profit levels. The argument relies on Kalecki's profits equation, $P=I+Cc$, in which profits are equal to the sum of investment and capitalist consumption.²³⁵ Kalecki arrived at this equation on the basis of Marx's reproduction schemas.²³⁶ However, whereas Marx employed a two-department model made up of one department that produces the means of production and one department

²³² Kalecki 1971, p. 112.

²³³ Bellofiore 2014, p. 89; Kriesler and McFarlane 2016, p. 126; Trigg 2009, p. 49; Rousseas 1979, p. 15, n. 12.

²³⁴ Kalecki 1972a, pp. 148-49; Lopez and Assous 2010, p. 222; Bellofiore, Karwowski and Toporowski 2014, p. 6; Trigg 2009, p. 49; Sebastiani 1994, p. 21.

²³⁵ Kalecki 1971, p. 36; Trigg 2002, pp. 111-12; Trigg 2006, p. 24.

²³⁶ Trigg 2002, pp. 111-12.

producing all means of consumption, Kalecki 're-cast' the model into a three-department framework.²³⁷ There is therefore a department producing investment goods (department 1), a department producing the means of consumption for capitalists (department 2), and a department producing the means of consumption for workers (department 3).²³⁸ Kalecki noticed that the total output of each of his departments was made up entirely of the wages paid out to workers in each department plus the profits of this department's capitalists ($W+P$).²³⁹ This allowed Kalecki to see that the profits of the department producing wage goods are equal to the sum of the wages paid out by the first two departments ($P3=W1+W2$).²⁴⁰ Clearly, total aggregate profits were equal to the sum of the profits of each of the three departments ($P=P1+P2+P3$). But now, Kalecki could substitute the sum of the wages of department 1 and department 2 for the profits of department 3 ($P=P1+P2+W1+W2$, or: $P1+W1+P2+W2$).²⁴¹ Again, since the total output of each department consisted in the department's wages plus profits, this was exactly the same as saying that aggregate profits are equal to the total output of department 1 plus the total output of department 2, or the sum of the total production of investment goods and the total production of capitalist consumption goods ($P=I+Cc$).²⁴²

This equation has some significant consequences. It allows Kalecki to

²³⁷ Ibid.

²³⁸ Kalecki 1968, p. 73.

²³⁹ Kalecki 1968, p. 74.

²⁴⁰ Ibid.

²⁴¹ Kalecki 1971, pp. 80-1.

²⁴² Ibid.

enunciate his famous dictum that, “capitalists earn what they spend”,²⁴³ which has sometimes been called the “widow’s curse”²⁴⁴ or the “Kalecki principle”.²⁴⁵ It means that capitalists are “masters of their fate,”²⁴⁶ because, by choosing to spend more on either investment or consumption, they are also able to raise the amount of profit they receive.²⁴⁷

Of course it may be objected that this is the wrong conclusion to draw from this formula: simply positing the equality between profits and capitalist spending may not establish the direction of causality of this equation.²⁴⁸ Instead of saying that profits are determined by capitalist spending, would it not be more logical to believe that capitalist spending is determined by profit levels?²⁴⁹ Indeed, this was the way the classical economists conceived of it, that capitalist spending had to come out of profits and therefore that the higher the level of profits, the higher the level of potential spending.²⁵⁰

The argument that Kalecki uses to refute this claim is somewhat difficult to follow. He argues that if profits determined capitalist spending, then there would never be any change in either of the two variables.²⁵¹ Stable profit levels would lead to an equal level of spending, which in turn would lead to an equal level of profits. The fact that both profit and spending levels fluctuate over time is sufficient to make

²⁴³ Trigg 2002, pp. 104, 111-12; Trigg 2006, p. 4; Feiwel 1975, p. 112; Lopez and Assous 2010, p. 31.

²⁴⁴ Trigg 2002, p. 104; Reuten 1998, pp. 200, 217.

²⁴⁵ Trigg 2002, pp. 104, 107, 111-12; Trigg 2006, p. 4.

²⁴⁶ Kalecki 1990, p. 80; Kalecki 1971, p. 13.

²⁴⁷ Kalecki 1971, pp. 12-13; Kalecki 1990, pp. 79-80; Sardoni 1989, p. 214; Trigg 2006, p. 4; Trigg 2002, pp. 111-12; Feiwel 1975, p. 112.

²⁴⁸ Kalecki 1971, pp. 78-9; Feiwel 1975, p. 114.

²⁴⁹ Kalecki 1954, p. 55; Feiwel 1975, p. 119; Kowalik 2014, p. 66.

²⁵⁰ Kowalik 2014, p. 66; Trigg 2014, p. 207; Lopez and Assous 2010, p. 74; Robinson 1968, p. 111.

²⁵¹ Kalecki 1971, p. 79; Feiwel 1975, p. 114.

the scenario an implausible one as far as Kalecki is concerned.²⁵² According to Kalecki, since we notice variations in these quantities, it must be that one of the two is an independent variable, which is subject to change by the actors involved, and which thereafter influences the other, dependent variable.²⁵³ Of the two variables, spending levels are the only one which capitalists have control over. They can decide how much to invest and consume, but not how much profit will accrue to them.²⁵⁴ As a consequence, capitalist spending levels must be the independent variable that pulls along profit levels.²⁵⁵

Because Kalecki considers the level of capitalist consumption to be relatively stable over time, what this formula and its established direction of causation means is that investment is the key variable in determining the level of profit at the aggregate level.²⁵⁶ Kalecki provides an in-depth illustration of how this process works, referencing the reproduction schemas. Kalecki invites readers to imagine that capitalists have decided to increase their investment levels.²⁵⁷ The effect of this is first felt in department 1. Two situations are possible at this point, or any combination of them. If department 1 is operating at full capacity already then the effect of the increase in demand for means of production is a rise in prices.²⁵⁸ This increases the profits of the capitalists in department 1 to a degree equivalent to the

²⁵² Ibid.

²⁵³ Kalecki 1968, p. 75; Kalecki 1971, pp. 78-9.

²⁵⁴ Kalecki 1968, p. 75; Kalecki 1971, pp. 78-9; Feiwel 1975, p. 114; Kowalik 2014, p. 66; Trigg 2014, pp. 206-07.

²⁵⁵ Ibid.

²⁵⁶ Feiwel 1975, p. 116.

²⁵⁷ Kalecki 1972a, pp. 43-4; Kalecki 1968, p. 75.

²⁵⁸ Kalecki 1990, pp. 136, 156; Kalecki 1968, p. 75.

increase in capitalist spending on means of production.²⁵⁹ On the other hand, if excess capacity exists in department 1, the capitalists in this department will increase their output of means of production.²⁶⁰ Their profits are increased but not to the same extent as the increase in capitalist investment.²⁶¹ This is because an increase in output also entails costs. The capitalists of department 1 increase their purchases of means of production. Since this comes from the same department, this quantity must be counted as part of the increase in profits of department 1. But the department 1 capitalists also increase employment.²⁶² The total quantity of the wages that they pay to their workers increases. This means that a portion of the new buying power flows to workers.²⁶³ Kalecki reminds us that the profits of department 3 are equivalent to the wages of workers in departments 1 and 2. Thus, the expansion of the wage levels of the workers in department 1 increases the profits in department 3 by a corresponding amount.²⁶⁴ But of course, here in department 3 the same situation would prevail as that which initially did in department 1. The additional demand for wage goods either causes prices of these goods to rise, meaning an increase in the profits of department 3 equivalent to the portion of the new buying power transferred to wages; or, increased demand leads to increased output.²⁶⁵ In the latter case, a portion of the new demand for products of department 3 transfers back to department 1 in the form of demand for additional means of production. The process can continue ad infinitum, but the net effect is

²⁵⁹ Kalecki 1972a, p. 44; Kalecki 1990, p. 136.

²⁶⁰ Kalecki 1990, pp. 136, 156, 190; Kalecki 1968, p. 75.

²⁶¹ Kalecki 1972a, p. 44.

²⁶² Kalecki 1990, pp. 136, 156; Kalecki 1968, p. 75.

²⁶³ Kalecki 1972a, p. 44; Kalecki 1990, pp. 79, 136, 190; Kalecki 1968, p. 75.

²⁶⁴ Kalecki 1972a, p. 44; Kalecki 1968, p. 75.

²⁶⁵ Kalecki 1990, pp. 75, 79.

that the profits of capitalists (through some combination of an increase in profits of departments 1 and 3)²⁶⁶ increase to an amount equivalent to the initial increase in investment spending.²⁶⁷

An increase in investment therefore serves to increase demand and aggregate profit levels in the economy. When this happens, however, because profits function as a positive determinant of investment, an increase in the level of profits as a result of an increase in investment is likely to lead to a further increase in investment.²⁶⁸ Because this further investment will itself, in turn, lead to further future investment and profits,²⁶⁹ Kalecki refers to the dynamic in which profits and investment move together in an upward direction as one that is ‘self-sustaining’²⁷⁰ or ‘self-stimulating’.²⁷¹ It means that any rise or fall in either of the factors will entrain a corresponding movement in the other.²⁷²

The operation of this dynamic can be seen not only at the macro level, but also at what we could call the ‘meso’ level of the departments. I have just described how an increase in investment demand causes an increase in profits and output in department 1. The increase in output means that department 1 increases its level of employment, which increases the demand for consumption goods and the profits and output of department 3. While it was recognized that department 3 also responded to this increase in demand by expanding its own investment and thus

²⁶⁶ The increase in investment is equal to the sum of the increase of the profits of departments 1 and 3 (Kalecki 1972a, p. 44; Kalecki 1990, p. 191).

²⁶⁷ Kalecki 1972a, pp. 43-4; Kalecki 1990, pp. 79, 136, 156; Kalecki 1971, p. 36.

²⁶⁸ Kalecki 1990, pp. 156, 191; Kalecki 1968, p. 78, in the opposite direction.

²⁶⁹ Kalecki 1972a, p. 142 graphs this issue; Kalecki 1971, pp. 149-50, describes the reverse case.

²⁷⁰ Kalecki 1972a, p. 144; Kalecki 1968, p. 73.

²⁷¹ Kalecki 1972a, p. 147.

²⁷² Kalecki 1972a, p. 147; Kalecki 1968, p. 73.

further increasing demand for the goods of department 1, it was assumed that the total increase in profits and output of all the departments was equal to the initial increase in investment as stipulated by Kalecki's profits equation ($P=I+Cc$). In numerous passages however, Kalecki seems to suggest that the dynamic through which additional demand for the products of one department leads to additional profits and investment by that department and therefore additional demand, profits and investment in another department can be a 'cumulative'²⁷³ one. It builds on itself so as to establish levels of output, profits and investment which go beyond the original increase in investment.²⁷⁴ What in fact happens is the following. The increased demand for the products of department 1, and the higher profitability prospects there, cause this department to increase its investment. This leads to new demand for the products of department 3, which causes this department to increase its own investment. This increased investment by department 3 in turn causes an additional increase in demand for the products of department 1 and a further rise in profitability prospects there. This is the classic feedback cycle, caused by an original increase in investment spending, which has become known as the "multiplier" effect.²⁷⁵ Moreover, although the consumption of capitalists is usually considered 'relatively inelastic',²⁷⁶ there is some indication that as the profits of the capitalists in departments 1 and 3 increase, so will their consumption out of them.²⁷⁷ This will

²⁷³ Kalecki 1990, p. 141; Kalecki 1972a, p. 146.

²⁷⁴ Kalecki 1971, p. 96; Kalecki 1990, pp. 136-37, 140-41, 210, 217-18, in the reverse direction; Lopez and Assous 2010, p. 52.

²⁷⁵ Lopez and Assous 2010, pp. 31-2; Pastrello 2014, p. 47; Sordi and Vercelli 2010, p. 9; Reuten 1998, p. 202; Trigg 2006, pp. 12-3, 58-9.

²⁷⁶ Feiwel 1975, p. 116.

²⁷⁷ Kalecki 1954, p. 55; Kalecki 1990, p. 137; Lopez and Assous 2010, p. 31; Feiwel 1975, p. 116; Levy-Orlick 2014, p. 24, in reverse.

lead to a rise in profits for the capitalists of department 2.²⁷⁸ The net result of this dynamic may be that the level of profits increases by even more than the amount of the initial investment, even though, in the meantime, the level of investment will also have increased correspondingly.

In this way therefore, increases in investment lead to increases in profits and further investment, which place the economy on an upward growth path that seems capable of perpetuating itself over time. Were this demand- and profit-enhancing aspect of investment the latter's only feature, it would be difficult to see how the upward movement of the economy, once initiated, could ever be checked. However, as I noted, there is another side to investment, that which increases capacity levels and which has the opposite effect on subsequent investment and thus on the direction of movement in the level of economic reproduction.

It is possible to gain a better understanding of the negative impact which the capacity-enhancing aspect of investment has on subsequent investment by consulting another of Kalecki's formulas, $P/K = P/Y * Y/K$, where P = profits, K = capital stock and Y = output.²⁷⁹ Under this conception, what Kalecki considers important in determining future investment is not the level of either profit or capacity in any absolute sense, but the level of *profit per unit of capital* (P/K).²⁸⁰ A decline in the value of this metric is likely to engender a fall in the level of subsequent

²⁷⁸ Kalecki 1990, p. 137.

²⁷⁹ Kalecki 1990, pp. 98-9. These terms should not be confused with the others that I have previously discussed. I remind the reader that these were: I = investment, Cc = capitalist consumption, and W = workers' wages.

²⁸⁰ Kalecki 1990, pp. 68, 192; Kalecki 1972a, pp. 133, 140-41; Kalecki 1971, p. 31; Lopez and Assous 2010, p. 222.

investment.²⁸¹ The formula allows us to see in greater detail the way in which an increase in productive capacity negatively affects this profits-per-capital ratio when all other variables, including demand levels, are held constant. One possible outcome of this scenario is that the new capacity is employed to produce additional output. Since the level of demand has not changed, however, this results in overproduction. This causes a fall in prices,²⁸² which means that the ratio of profits to output (P/Y) falls. Because the profit per unit of capital (P/K) is partially a function of the profits to output (P/Y) ratio, the former falls along with the latter.²⁸³ The other possible outcome of an increase in the level of capacity without a change in the level of demand is that capitalists, instead of increasing their production, keep it constant. Since capacity levels have increased, this results in a fall in the level of capacity-utilization,²⁸⁴ or output per unit of capital (Y/K).²⁸⁵ Moreover, Kalecki tells us that this also causes, like overproduction, a fall in the ratio of profit per output (P/Y).²⁸⁶ This is undoubtedly because, in calculating this ratio, we have to consider, in the calculation of profits, not only the costs of the capital employed, but also that of the unused capital. Thus if the costs associated with the unused capital have increased, while output and incomes have remained the same, then the level of profit has fallen relative to output. In this case, therefore, the ratio of profits per unit of capital (P/K) will be pushed downwards by a fall in both the profits per output

²⁸¹ Kalecki 1990, pp. 68, 369; Kalecki 1971, p. 131; Kalecki 1972a, pp. 140-41; Feiwel 1975, pp. 192-93; Lopez and Assous 2010, p. 222; Toporowski 2004, p. 218.

²⁸² Kalecki 1990, p. 68.

²⁸³ Kalecki 1990, pp. 99-100.

²⁸⁴ Kalecki 1990, pp. 192, 369; Kalecki 1971, p. 31; Toporowski 2004, p. 218; Sebastiani 1994, p. 97; Feiwel 1975, p. 192.

²⁸⁵ Sawyer 1989, p. 279.

²⁸⁶ Kalecki 1990, p. 99.

(P/Y) and the output per capital (Y/K).²⁸⁷ Thus, it can be seen that regardless of whether capitalists respond to increases in capacity levels by producing more or by lowering their level of capacity-utilization, a fall in the ratio of the profit per unit of capital (P/K) is likely to result. The fall in the value of this metric, in turn, serves to dampen the levels of future investment.

The 'Dual Nature' of Investment and the Business Cycle

So much for the 'dual nature' of investment and its contradictory effect on economic reproduction and subsequent investment. I said, however, that the purpose of this section was to establish the reasons underlying Kalecki's investment scepticism and its effect on reproduction. But solely from the above, it is difficult to tell whether one aspect of investment is likely to win out over the other, and which of these aspects this is likely to be. It is certainly not yet possible to affirm that the 'dual nature' of investment, all on its own, necessarily causes the shortfall in investment which creates difficulties for economic reproduction. It will be possible to do this however, once I have thoroughly described Kalecki's concept of the business cycle. In this context, it will be possible to see how the 'dual nature' of investment, specifically its productivity-enhancing aspect, does lead, eventually yet inevitably, to a decline in investment, which in turn triggers a downturn in the level of economic reproduction.

For Kalecki, the business cycle is derived from the above description of the effects of each of the twin aspects of investment on subsequent investment and reproduction by adding the consideration of the different timeframes in which each

²⁸⁷ Kalecki 1990, pp. 99-100; Kalecki 1972a, p. 140; Lopez and Assous 2010, p. 222.

of these aspects impacts the economy. More precisely, the business cycle is created because, while the demand- and profit-enhancing aspect of investment makes itself felt in the economy right away, the other aspect, the capacity-enhancing side, is only experienced with some delay. New investment orders represent an immediate source of additional effective demand.²⁸⁸ This serves to increase sales and profits and to stimulate yet another increase in investment.²⁸⁹ This causes the economy to move on an upward trajectory in the way already described.²⁹⁰ By contrast, the other aspect of investment, its contribution to the social productive capacity, only enters into the picture with some delay.²⁹¹ This is no doubt due to some of the concrete realities associated with the use-value of the investment.²⁹² Investment goods such as machines take some time to build, be shipped, installed and integrated into the productive process. After some time, however, the new productive capacity of the investment does start to take effect.²⁹³ This serves to halt the upward progress that the economy has been experiencing and to initiate a downturn.²⁹⁴

A better understanding of both of the upward and downward phases of the cycle can be gained with reference to the $P/K=P/Y*Y/K$ formula already presented. In the first phase of the process, in the interval separating the booking of new investment and its coming online, new demand causes either prices to rise (and also

²⁸⁸ Kalecki 1990, p. 54; Lopez and Assous 2010, pp. 32, 222.

²⁸⁹ Kalecki 1990, pp. 54, 68, 78, 192; Kalecki 1972a, p. 146; Lopez and Assous 2010, p. 222.

²⁹⁰ Kalecki 1972a, p. 146; Kalecki 1990, p. 192; Trigg 1994, pp. 94-5.

²⁹¹ Kalecki 1990, pp. 54, 68, 78-9; Kalecki 1971, p. 9; Lopez and Assous 2010, pp. 32, 222.

²⁹² Kalecki 1990, p. 54.

²⁹³ Kalecki 1990, pp. 54, 68, 78, 192; Lopez and Assous 2010, pp. 32, 222; Trigg 1994, pp. 94-5.

²⁹⁴ Kalecki 1990, pp. 78, 141-42, 191; Kalecki 1971, pp. 9, 32; Lopez and Assous 2010, pp. 95-6; Trigg 1994, pp. 94-5

therefore P/Y), or output to increase (and with it Y/K). The result is a higher rate of profit per unit of capital (P/K).²⁹⁵ Even without having recourse to the equation it can be seen that if demand rises without any increase in capacity, not only will profits rise, but capacity-utilization will have to increase in order for the new demand to be met. However, the new productive capacity soon begins to enter the economy. Since the increase in effective demand corresponding to each new unit of investment has already entered the economy, each new increase in capacity that now takes place faces a stable level of demand.²⁹⁶ This results in a similar dynamic to the one described in the previous section and which I now reiterate. If the same level of demand is met with a rising level of capacity, either the level of capacity-utilization (Y/K) has fallen, or capacity-utilization is maintained and prices (and P/Y) fall. Thus the level of profit per unit of capital (P/K) also declines. This also makes sense intuitively. If profit levels are stable due to the increase in demand levels already having taken place in the past, the increase in capacity means that this stable level of profits now has to be shared amongst a greater quantity of capacity, making the profit per each unit of capital decline.²⁹⁷ The decline in both capacity-utilization and profits will of course dampen the incentive to invest and therefore trigger a downturn by initiating the 'self-stimulating' relation between profits and investment, now operating in the opposite direction.²⁹⁸

The foregoing describes how an upward movement of the economy, as a result of the way in which additional demand and profit are generated as a

²⁹⁵ Kalecki 1990, pp. 68, 99-100.

²⁹⁶ Kalecki 1962, p. 139; Kalecki 1972a, p. 146; Lopez and Assous 2010, p. 222.

²⁹⁷ Kalecki 1972a, p. 140; Lopez and Assous 2010, p. 222.

²⁹⁸ Kalecki 1990, pp. 68, 192; Kalecki 1972a, pp. 146-47; Trigg 1994, pp. 94-5.

consequence of prior investment, gives way after an interval, to an economic downturn. This happens as the other aspect of investment, which serves to enhance productive capacity, comes into play to depress the profit rate and to dampen the incentive for further investment. But Kalecki's business cycle theory tells us that this is not the end of the dynamic; for, just as the upward movement in the economy leads to a downturn, this downturn will, in its own right, eventually give way to a subsequent upturn.

Here again, the temporal delay which takes place between the realization of the two aspects of investment plays a crucial role in both sustaining the downturn and, at a given point in time, transforming it into its opposite.²⁹⁹ From the peak of the boom, a lower level of investment causes a decline in profits and further decline in investment in a 'self-sustaining' dynamic.³⁰⁰ But if the dual effects of investment were felt concurrently, the decrease in the level of investment and demand would be accompanied by a slowdown in the increase in productive capacity. This would serve to dampen the downward movement of the economy by acting as a spur to investment. But in the downturn as well as the upturn, the effects of the changes in the level of investment on productive capacity do not make themselves felt immediately, but only with a delay.³⁰¹ As a result, the downturn in profit and investment levels does not immediately alter capacity levels.³⁰² The downturn is sustained because declining demand and profit levels face an unchanged level of

²⁹⁹ Kalecki 1972a, p. 147; Kalecki 1990, p. 78.

³⁰⁰ Kalecki 1972a, pp. 146-47.

³⁰¹ Kalecki 1990, pp. 68, 78; Kalecki 1972a, p. 147.

³⁰² Kalecki 1972a, p. 147; Kalecki 1990, p. 78.

capacity.³⁰³ This causes the capacity-utilization (Y/K) and levels of profit per unit of capital (P/K) to fall. The decline in the productive capacity takes some time to manifest itself. This again is related to the concrete use-value of the investment goods. When investment falls off, means of production do not suddenly disappear from factory floors. Instead, they persist until the end of their useful or material lives.³⁰⁴ It is at this point, when capitalists opt not to replace them, that declining capacity levels finally start to register. Because the effects of declining investment on capacity levels have been delayed, it is likely that capitalists have unintentionally overshot the mark in this respect. This is noticed all at once as capacity levels suddenly dip below demand levels.³⁰⁵ It is at this point that the process, which initiated the downturn from the top of the boom, is reversed as capacity-utilization and profits per unit of capital rise, initiating greater investment.³⁰⁶

The 'Asymmetry' of Investment and Stagnation in the Long-Term

I set out in this section to describe the reasons why Kalecki believes that investment in SCCEs will tend to fall short and the negative impact which this is likely to have on SCCR. The previous subsection on the business cycle accomplished this to some extent by showing that as a result of the productivity-enhancing side of investment, and the time delay in the latter manifesting itself in the economy, a downturn in economic reproduction was, sooner or later, bound to take place. It may be objected, however, that Kalecki's analysis of the business cycle alone is not

³⁰³ Kalecki 1990, p. 78 has capacity not only unaltered in the downturn while demand is falling, but actually still rising due to the delay in the delivery of past investment orders.

³⁰⁴ Kalecki 1990, p. 52.

³⁰⁵ Kalecki 1972a, p. 147; Kalecki 1990, pp. 52, 78, 191; Toporowski 2004, p. 218.

³⁰⁶ Kalecki 1990, pp. 52, 68, 191; Kalecki 1972a, p. 147; Trigg 1994, pp. 94-5; Toporowski 2004, p. 218.

sufficient in this respect. The reason is that while the business cycle does demonstrate the likelihood of investment shortfalls and economic downturns, these also just as surely give way to the opposite effect, the resumption of investment, leading to the economy's rebound. Stepping away from individual points in the cycle therefore, overall, the latter cannot be said to provide support for the claim that Kalecki, like Luxemburg, believes that investment in SCCEs is unlikely to take place at adequate levels and that, as a result, SCCR will be negatively impacted. In order to fully demonstrate Kalecki's investment scepticism therefore, and its impacts on reproduction, I have to move beyond the medium-term timeframe of the business cycle to a description of Kalecki's conception of the long-term. There, it is not only the 'dual nature' of investment, the increase in both profits and capacity levels which investment produces, but the 'asymmetry' of these effects, which leads, not to periodic ups and downs in economic activity, but to the permanent, ongoing stagnation of SCCEs caused by chronic investment shortfalls.

For Kalecki, the business cycles that I have just described are short- and medium-term phenomena that form part of a larger dynamic, the long-run secular trend of the economy.³⁰⁷ While in the short-term, investment may fluctuate between higher and lower levels, when the long-term is considered, investment is seen to be chronically deficient.³⁰⁸

The reason for this investment shortfall in the long-term is, once again, the 'dual nature' of investment. However, while in the context of the business cycle, each

³⁰⁷ Kalecki 1968, p. 78; Kalecki 1962, p. 134; Sebastiani 1994, p. 32.

³⁰⁸ Kalecki 1968, p. 79; Kalecki 1962, p. 134; Kalecki 1971, p. 150; Sawyer 1985, pp. 115-16; Sawyer 1989, p. 276; Sebastiani 1994, pp. 32, 66, 76.

of these aspects of investment seemed to have a more or less equal impact on the economy overall (even though these effects, thanks to the time delay in the implementation of changes in the capacity level, were never fully felt simultaneously), there is some indication that when it comes to the long-term trend, the effects of the aspect of investment which works to raise the level of productive capacity will tend to predominate over the other which serves to raise demand and profits.³⁰⁹ This is why some commentators have taken to referring not only to the 'dual nature' of investment in Kalecki, but also to its 'asymmetry'.³¹⁰

The mechanism through which the 'asymmetry' of investment impacts subsequent investment levels in the long-term can be seen through Kalecki's modeling of the long-term effects of government policies aimed at attaining and maintaining full employment through stimulating private investment.³¹¹ Call the level of productive capacity necessary to meet the required (full employment) output of the economy in the next round of production I_c . Call the level of aggregate demand required to absorb the current output and to place the economy on a path to full employment I_f .³¹² On the basis of empirical evidence, Kalecki assumes that it will usually be the case that I_f will be larger than I_c ,³¹³ that the level of investment required to provide the demand necessary to generate full employment will be larger than that required to provide for the productive requirement of society at this

³⁰⁹ Kalecki 1990, pp. 378-79; Sebastiani 1994, pp. 15-6, 22, 66, 97, 115; Sebastiani 1991, p. 272; Sebastiani 1989, p. 26; Sawyer 1985, p. 84.

³¹⁰ Sebastiani 1994, pp. 15-6, 115; Sebastiani 1991, p. 272; Sebastiani 1989, p. 26.

³¹¹ Kalecki 1990, pp. 379-81; Sebastiani 1994, pp. 21-3, 97; Paladini 1989, p. 223; Sawyer 1985, pp. 84-6.

³¹² Kalecki 1990, pp. 377-78; Sawyer 1985, p. 84.

³¹³ Kalecki 1990, pp. 378-79; Sawyer 1985, p. 84.

level of output.³¹⁴ In other words, this is a situation in which each new unit of investment provides a greater contribution to the social powers of production than to aggregate effective demand levels. If, despite this, in such a situation, a level of investment equivalent to I_f is nevertheless undertaken, with each round of production, though the 'correct' amount of demand will be present, an excess of productive capacity will also be produced.³¹⁵ This excess in productive capacity in each round will be equal to the difference between I_c and I_f .³¹⁶ If this difference occurs in more than one round of production, the difference between society's productive powers and its level of effective demand will begin to accumulate. At a certain point, given the amount of excess capacity building up in the economy, and, as I explained above, the consequence of this for the profit per unit of capital, it will become difficult to continue investing.³¹⁷ Investment levels will be bound to fall off.

The problem of the 'asymmetry' of the effects of investment, according to which each new round of investment increases effective demand by less than productive capacity, is only exacerbated over time by technological change and the way in which the latter serves to make investment even more productive. As a result of this, as time goes by and the productivity of each new unit of investment is enhanced, the difference between our two variables above also increases.³¹⁸ This is due, on the one hand, to the fall in the level of the variable I_c caused by the fact that a lower level of investment is now required to produce the same level of output as

³¹⁴ Kalecki 1990, pp. 380-81; Sebastiani 1994, p. 97.

³¹⁵ Kalecki 1990, pp. 369, 379, 381; Sebastiani 1994, pp. 21-2, 97; Paladini 1989, p. 223; Feiwel 1975, pp. 190, 192-93; Sawyer 1985, p. 85.

³¹⁶ This is made clear in the graph on Kalecki 1990, p. 380.

³¹⁷ Kalecki 1990, p. 369; Sebastiani 1994, p. 22; Sawyer 1985, p. 85-6.

³¹⁸ Kalecki 1990, p. 380.

before. On the other hand, the level of the variable I_f moves in the opposite, upward, direction.³¹⁹ Because technological change has also made production less labour-intensive,³²⁰ a greater level of demand is now required to raise production levels sufficiently for full employment to be reached.³²¹ This serves to compound the tendency towards investment declines caused by the split between I_c and I_f described above. As a result, either the withdrawal of investment caused by the piling up of unused productive capacity happens sooner, or the level of investment in the economy is even lower than it otherwise could be.³²²

In the above model, as elsewhere in Kalecki's writings, full employment can be said to symbolize the optimal functioning of the capitalist economy. Therefore, should the long-term trend be for investment levels to fall below those required for the maintenance of full employment, this would be equivalent to a demonstration that investment has a tendency in the long-term to fall below those levels required for the optimal functioning of the capitalist economy; or, to fall to such a level that reproduction is negatively impacted.

But what, more concretely, is the impact which Kalecki believes that such investment shortfalls will have on capitalist reproduction in the long-term? This has already been hinted at in the previous subsections. Lower levels of investment will

³¹⁹ Kalecki 1990, pp. 379-80.

³²⁰ Kalecki 1990, pp. 379-80; Kalecki 1991, pp. 381-82; Kalecki 1941, p. 179.

³²¹ Kalecki 1991, pp. 381-82. To be more precise, previous to taking account of the technological change, both variables, I_f and I_c were rising. This is due to the fact that continuously higher levels of investment were needed to generate full employment because of the assumption of ongoing population increases (Kalecki 1990, pp. 379-80). At the same time, I_c also rose because greater investment was required to generate sufficient output for the growing level of employment. However, before technological change, these two variables increased in parallel fashion. Once productivity increases are taken account of however, the upward slope of I_f becomes steeper while that of I_c becomes gentler (Kalecki 1990, pp. 380-81, 384).

³²² Kalecki 1990, p. 381.

mean lower levels of demand and therefore of profits.³²³ Output will also be lower, since lower production will be adequate to meeting the reduced demand.³²⁴ At the same time, low investment will signify lower employment levels and so lower aggregate wages.³²⁵ The combination of low wages and profits mean that aggregate income in the economy will also be lower.³²⁶ Thus, decreased investment will lower the levels of output, employment and incomes in the economy. Moreover, as has also been described, lower levels of profits, wages, and demand will mean reduced subsequent investment levels, to an extent that the economy may become mired in a self-perpetuating dynamic of stagnation.³²⁷

As a result of the ‘asymmetry’ of investment therefore, Kalecki believes that in the long term, SCCEs will tend to experience shortfalls in investment, leading to the chronic stagnation of these economies. This is why, though Kalecki’s writings are filled with descriptions of movement in the economy, when speaking about the long-term he often refers to a concept like ‘equilibrium’.³²⁸ The fluctuation in investment, profits, employment and output are short-term ones which take place over the course of the business cycle: in the long term, these are all oscillations around a nearly static trend line.³²⁹ Kalecki also mentions the propensity for self-contained capitalist economies to become trapped in simple reproduction,³³⁰ which connotes a situation in which there is no growth in investment and therefore neither of output,

³²³ Kalecki 1971, p. 149; Sawyer 1989, pp. 279-80.

³²⁴ Kalecki 1971, p. 31; Kalecki 1990, p. 192; Sawyer 1989, p. 280.

³²⁵ Kalecki 1971, pp. 31, 149-50; Kalecki 1990, p. 192.

³²⁶ Kalecki 1971, p. 150.

³²⁷ Kalecki 1971, pp. 31, 150; Kalecki 1990, p. 192.

³²⁸ Kalecki 1972a, p. 147; Kalecki 1990, pp. 188, 217-18, 226.

³²⁹ Kalecki 1968, p. 79; Kalecki 1962, p. 134; Kalecki 1971, p. 150; Sawyer 1985, pp. 115-16; Sawyer 1989, p. 276; Sebastiani 1994, pp. 32, 66, 76.

³³⁰ Kalecki 1968, pp. 78-9; Kalecki 1971, p. 150; Kalecki 1990, p. 51.

employment, nor incomes.³³¹ Despite the fact that levels of output, employment and incomes may vary within the business cycle, overall and at nearly all points in the cycle, except perhaps at the very top of the boom, these levels fall significantly short of their potential.³³²

Monopolization of the Economy and Stagnation

With the above description of the way in which the ‘asymmetry’ of investment leads to investment shortfalls and to the stagnation of SCCEs in the long run, I have nearly completed my description of the factors underlying Kalecki’s investment scepticism and of the consequences of the latter for economic reproduction. However, one other important factor also contributes to the shortfall in investment and economic stagnation under Kalecki’s theory – the progressive monopolization of capitalist economies.

Kalecki’s monopoly capital view opposes itself to the neoclassical perspective on the economy in which exist perfect competition and flexible prices. In the neoclassical model, two key assumptions serve to keep investment, output and therefore also employment, elevated.³³³ In the neoclassical view, the economy is made up of a large number of small firms who compete with each other on the basis of price.³³⁴ Because the firms are small, none is able, through its own pricing, to

³³¹ Kalecki 1962, p. 139; Kalecki 1971, pp. 31, 149-50; Kalecki 1990, p. 192; Sawyer 1989, p. 280; Sebastiani 1994, pp. 32, 66.

³³² Sawyer 1985, pp. 115-16; Sawyer 1989, p. 276; Lopez and Assous 2010, p. 118.

³³³ Baran and Sweezy 1966, p. 54. The dynamic affecting investment and output levels, present in the context of competitive capitalism, which I describe as a part of the neoclassical model, is also one that exists in Marx’s theory. This is noted by Sebastiani 1994, p. 109; Sebastiani 1991, p. 266; Sawyer 1985, p. 169; Robinson 1968, p. 111; Cogoy 1987, pp. 21-2; and Kerr 1997, pp. 27, 32.

³³⁴ Foster 2014, p. 53; Feiwel 1975, p. 104; Halevi and Kriesler 2016, p. 179; Halevi 2016b, p. 275.

influence the level of the average price in its sector.³³⁵ The firms under this conception are 'price takers'.³³⁶ Firms are therefore constrained in their pricing decisions. They are unable to set prices very much above the level of their competitors, or risk losing market share to the producers of the cheaper commodities. On the contrary, they would prefer to be able to lower their prices below what other firms are charging in order to attract more customers.³³⁷ But they are constrained in doing this by the already small level of profits which prevail in competitive economies and thus the high level of their production costs (relative to their current prices). The way in which the firms would be able to lower their prices and still maintain unit profits would be for them to find a way to lower the costs involved for the production of each unit of output.³³⁸ The way that this is done is through investment in more productive technologies³³⁹ which increase total costs, but which increase output to an even greater extent, making each unit of output cheaper to produce. Firms in context of competitive capitalism therefore, who compete on the basis of price, are therefore compelled to continuously increase their levels of investment and output.³⁴⁰ Moreover, once one firm is able to lower its costs and its prices through investment in more efficient production, other firms are required to follow suit or risk losing the competitive struggle over market share to the more innovative firm.³⁴¹ Thus, these firms are compelled to increase their

³³⁵ Kalecki 1991, p. 32; Foster 2014, p. 53; Halevi 2016b, p. 275.

³³⁶ Baran and Sweezy 1966, p. 53; Feiwel 1975, p. 104.

³³⁷ Kalecki 1991, p. 32; Sardoni 2011, p. 119.

³³⁸ Baran and Sweezy 1966, p. 93; Sardoni 2011, p. 119; Sawyer 1985, p. 169; Kerr 1997, pp. 27, 32, 34.

³³⁹ Baran and Sweezy 1966, p. 93; Sardoni 2011, p. 119; Halevi 2016b, p. 275; Sawyer 1985, p. 169; Kerr 1997, pp. 27, 32, 34.

³⁴⁰ Halevi 2016b, p. 275; Robinson 1968, p. 111; Kerr 1997, p. 27.

³⁴¹ Baran and Sweezy 1966, p. 93; Sardoni 2011, p. 119; Robinson 1968, p. 111.

investments as well, merely in order to keep up.

In a context of competitive capitalism therefore, output and investment levels seem to remain stable – somewhere near their maximum levels – while prices are subject to variation, particularly in the downward direction as firms find ways to lower their costs. This dynamic of stable output and mutable prices is also seen as a consequence of fluctuations in demand in a competitive context. Because competitive firms are already producing at full capacity, an increase in demand will only serve to raise profits through an increase in prices.³⁴² Conversely, a decline in demand will not result in any scaling back of production, but will instead reduce the profits of firms through a fall in prices.³⁴³ High levels of competition, combined with price flexibility therefore serve to keep the output and investment of firms high throughout the business cycle.

This neoclassical model of perfect competition and flexible prices is one which Kalecki rejects as a false representation of capitalist economies.³⁴⁴ On the contrary, he believes that the monopolization of various sectors in the economy – their dominance by a small number of firms – is characteristic of capitalism.³⁴⁵ This feature contributes to the stagnation of SCCEs in the long term, to the existence of low levels of investment and capacity-utilization as well as of demand, employment, output and aggregate incomes, compared to what they otherwise could be.

³⁴² Sawyer 1985, p. 21; Halevi 2016a, p. 136.

³⁴³ Halevi 2016a, p. 136; Halevi 2016b, p. 275.

³⁴⁴ Sawyer 1985, p. 8, 20; Halevi and Kriesler 2016, p. 179.

³⁴⁵ Feiwel 1975, p. 103; King 2002, p. 42; Sawyer 1985, pp. 8, 20.

It is Kalecki's view that over time previously competitive sectors of the economy are taken over by a small number of large firms.³⁴⁶ Where previously the impact of one firm's pricing decisions over the average price was negligible, when a small number of firms are responsible for total output in a sector, the prices of individual firms now start to influence the average price considerably.³⁴⁷ Monopoly firms move from being 'price takers' to 'price makers'.³⁴⁸ There are additional reasons why under monopoly capitalism, firms begin to exercise almost total control over the price. The smaller number of firms makes it easier and more likely that firms can collude to match prices with their competitors, either by explicit agreement, or tacit 'price leadership'.³⁴⁹ Just as in the case of competitive capitalism, firms in a monopoly setting will not raise their prices much beyond that of their competitors out of fear of losing market share.³⁵⁰ Contrary to the competitive situation, however, monopoly firms are loath to undercut their competitors on the basis of price.³⁵¹

Monopoly capital firms are conscious of the fact that price competition is not in any firm's interests. Capitalists cut prices constantly as soon as increases in productivity causes costs to fall and makes it possible to lower prices while maintaining a profit. This means that firms only ever enjoy very narrow profit margins.³⁵² When monopoly capitalism presents firms with the opportunity to set

³⁴⁶ Kalecki 1954, p. 17; Toporowski 2013a, p. 101; Sardoni 2011, p. 119.

³⁴⁷ Kalecki 1954, p. 17; Feiwel 1975, p. 103; Sawyer 1985, pp. 24-25.

³⁴⁸ Feiwel 1975, pp. 103, 104; Sawyer 1985, p. 28; Baran and Sweezy 1966, p. 53.

³⁴⁹ Kalecki 1954, p. 17; Feiwel 1975, p. 103; Sawyer 1985, p. 25.

³⁵⁰ Kalecki 1954, p. 12; Kalecki 1940, p. 97; Feiwel 1975, p. 97; Sawyer 1985, pp. 23-4; Lopez and Assous 2010, p. 72.

³⁵¹ Kalecki 1940, p. 97; Baran and Sweezy 1966, pp. 62-3.

³⁵² Sawyer 1988, p. 63; Baran and Sweezy 1966, pp. 57-8.

their own prices without the risk of being undercut by competitors, capitalists agree that all sellers would benefit from avoiding price competition and keeping prices high.³⁵³ Though with keeping prices too high comes the risk that demand will be lower than it otherwise would be, or that new entrants into the market could be attracted by the high profit rates,³⁵⁴ monopoly capital firms set their prices at a level on the sloping price/demand curve which is the most advantageous as far as their total profits are concerned.³⁵⁵

Prices will therefore be higher in any monopoly context than they would under a competitive scenario.³⁵⁶ The result of this is that because the price/demand curve slopes downwards, the level of demand under monopoly will be lower than it would be under competitive capitalism. This is fine as far as the individual firms are concerned because the smaller level of demand is compensated by the higher prices which each unit of output can fetch in the market.³⁵⁷ However, it also means that under monopoly capitalism, contrary to the competitive situation, firms tend to operate at less than full capacity, producing less total output than they are capable of.³⁵⁸ The fact that monopoly firms operate with surplus capacity means that they are less interested in undertaking new investment.³⁵⁹ This means that under

³⁵³ Feiwel 1975, p. 103; Baran and Sweezy 1966, pp. 59, 62. This does not mean that monopoly capital firms cease competing with each other altogether, but only that price is now no longer the basis of their competition (Halevi and Kriesler 2016, p. 179). Instead, firms use advertising and marketing to steal market share from their competitors. They use artificial product differentiation to protect their own market position (Kalecki 1954, p. 17; Feiwel 1975, p. 104; Sawyer 1985, p. 25; Robinson 1980, p. 188).

³⁵⁴ Kalecki 1954, p. 17; Feiwel 1975, p. 103.

³⁵⁵ Kalecki 1954, p. 12; Kalecki 1991, pp. 31-2; Feiwel 1975, p. 97; Sardoni 2011, p. 109; Cogoy 1987, p. 14.

³⁵⁶ Kalecki 1954, p. 17; Feiwel 1975, p. 104; Sawyer 1985, p. 24.

³⁵⁷ Kalecki 1991, p. 31, 33; Cogoy 1987, p. 14.

³⁵⁸ Kalecki 1991, p. 33; Toporowski 2013a, p. 60; Sardoni 2011, p. 109; Chilosi 2004, p. 71.

³⁵⁹ Toporowski 2013a, p. 60; Baran and Sweezy 1966, p. 82.

monopoly capitalism, demand, output, employment and, ultimately, total aggregate incomes, are lower than they otherwise could be. Monopoly firms also actively suppress new technologies and innovations, which in other contexts can be the catalysts for upturns in the business cycle.³⁶⁰

In a competitive economy, fluctuations in demand barely changed the level of output. Instead, what fluctuated were prices. Under monopoly capitalism, however, when changes in demand take place, because prices do not change, the response of firms must be to vary their levels of production.³⁶¹ Output, employment and possibly investment can rise when demand increases.³⁶² However, when demand levels decline, prices still remain fixed; instead, output decreases and surplus capacity grows.³⁶³ This further suppresses investment and demand.³⁶⁴ The downturns in the business cycle therefore tend to be more severe and prolonged under monopoly capitalism.³⁶⁵

In this way, monopoly capitalism tends to cause greater levels of economic stagnation. High and fixed prices mean lower levels of demand, capacity utilization and investment throughout the business cycle. But the greater the extent of monopolization of the economy – what Kalecki refers to as the ‘degree of monopoly’ – the lower the levels of demand, output and incomes. This is because a greater ‘degree of monopoly’ is invariably translated into a greater mark-up of prices over

³⁶⁰ Kalecki 1954, pp. 158-59; Kalecki 1991, p. 190; Baran and Sweezy 1966, pp. 94-5.

³⁶¹ Kalecki 1990, p. 57; Feiwel 1975, p. 101; Sawyer 1985, pp. 21, 40; Halevi 2016a, p. 136.

³⁶² Kalecki 1990, p. 58; Feiwel 1975, p. 101; Sawyer 1985, p. 40; Halevi 2016a, p. 136.

³⁶³ Kalecki 1990, p. 58; Halevi 2016a, p. 136.

³⁶⁴ Toporowski 2013a, p. 60.

³⁶⁵ Kalecki 1990, pp. 58-9; Toporowski 2013a, p. 60; Halevi 2016a, p. 136.

costs.³⁶⁶ The effects of these higher mark-ups on economic reproduction can be illustrated in more detail using Kalecki's description of the effects of a decline in the share of the wage in total aggregate income. The reason why a decline in the wage share can be used as a proxy to measure the impact of an increase in the 'degree of monopoly' is that a decline in the wage share is also precisely what takes place as a result of the increase in the mark-up which accompanies a rise in the 'degree of monopoly'.³⁶⁷

Kalecki's description of the likely impact of a reduction in the share of wages relative to profit on economic dynamics is also a refutation of the mainstream neoclassical model of the same phenomenon.³⁶⁸ The latter argues that a decline in wages will actually spur economic growth because it will increase profit levels, which will spur additional investment.³⁶⁹ Kalecki argues that such a model again relies on some unrealistic assumptions associated with perfect competition and flexible prices.³⁷⁰ For a reduction in the wage level to spur economic growth, the shortfall in demand left by the shrinking of the wage would have to immediately be offset by an increase in capitalist consumption or investment.³⁷¹ Kalecki argues that this is unlikely to happen.³⁷² In the first place, capitalists take their investment

³⁶⁶ The 'degree of monopoly' and the price mark-up are actually two separate phenomena, the former causing the latter (Kalecki 1954, p. 15; Feiwel 1975, p. 97; Sawyer 1985, pp. 9, 15, 20; Robinson 1980, pp. 188-89). However, Kalecki sees them as so closely correlated that he often treats them as synonymous (Kalecki 1991, p. 33, for example). Thus he refers to a higher or lower 'degree of monopoly' to indicate a higher or lower mark-up (Toporowski 2013a, p. 101).

³⁶⁷ Kalecki 1990, p. 189; Kalecki 1954, pp. 29, 161; Feiwel 1975, pp. 101, 113; Toporowski 2013a, pp. 101, 119; King 2002, p. 42; Bleaney 1976, p. 248; Sawyer 1985, p. 15.

³⁶⁸ Kalecki 1990, p. 41; Kalecki 1991, p. 28; Sawyer 1985, p. 110; Lopez and Assous 2010, p. 74.

³⁶⁹ Kalecki 1991, p. 28; Toporowski 2013a, p. 83; King 2002, p. 44; Lopez and Assous 2010, p. 74.

³⁷⁰ Kalecki 1991, p. 31; Sawyer 1985, p. 111.

³⁷¹ Kalecki 1990, pp. 41-2, 160, 188; Kalecki 1991, p. 28; Sawyer 1985, p. 80; Lopez and Assous 2010, p. 77.

³⁷² Kalecki 1990, pp. 42, 188; Kalecki 1991, p. 28.

decisions with some anticipation. Current investment levels are a function of past investment decisions.³⁷³ The promise of higher profits may not be enough to convince capitalists to increase their investment; they would likely prefer to make certain that these higher profit prospects were realized before undertaking any changes in their investment schedule.³⁷⁴ But even if capitalists did decide that they immediately wished to increase their output following a decline in wages, this would likely cause an increase in investment only in the context of competitive capitalism, where firms are already operating at near full capacity and an increase in output can only take place through increased investment.³⁷⁵ But in the monopoly context, where substantial unused capacity exists, should firms wish to increase their output, they could do so simply by bringing some of this unused capacity back online.³⁷⁶

Therefore, because a decline in the wage share is unlikely to lead to an increase in investment, especially in a monopoly context, the decline in demand that takes place because of the decline in the wage is not compensated for. This means that the profit level does not increase as a result of the decline of the wage, but remains equivalent to the previous level of capitalist consumption and investment, as per Kalecki's profits equation.³⁷⁷ The prospective profit offered by the decline in the cost of wages is not realized.³⁷⁸

³⁷³ Kalecki 1990, pp. 42, 189; Kalecki 1954, p. 61; Toporowski 2013a, p. 83; King 2002, p. 44.

³⁷⁴ Kalecki 1990, p. 189; Kalecki 1991, p. 28; King 2002, p. 44.

³⁷⁵ Kalecki 1990, p. 43.

³⁷⁶ Kalecki 1990, p. 42.

³⁷⁷ Kalecki 1954, p. 61; Feiwel 1975, pp. 101, 113, 123; Toporowski 2013a, p. 83; King 2002, p. 44; Sawyer 1985, p. 80.

³⁷⁸ Kalecki 1990, p. 189; Kalecki 1991, p. 29 Lopez and Assous 2010, p. 77.

The mechanism through which this prospective profit is neutralized and the consequences that this has for economic reproduction, however, vary according to whether we are embedding our model in a neoclassical framework, where prices are fluid, or in a context of monopoly capitalism, where they are relatively fixed.³⁷⁹ Kalecki argues that, in a competitive context, although a fall in wages is unlikely to increase the level of economic reproduction, at least it may not serve to undermine it too much either. This is because of the price flexibility that prevails in this context. In this case, the way in which the higher prospective profit is erased and actual profit is returned to the level equivalent with past capitalist consumption and investment is through the decline in prices, which takes place as a consequence of the fall in demand caused by the decline in the wage.³⁸⁰ The fall in prices serves to neutralize the rise in potential profits, but it also serves to offset the decline in the nominal wage. As a result of the decline in prices therefore, the real wage does not change.³⁸¹ This means that total incomes also remain unchanged following the decline in wages.³⁸² Moreover, since the real wage has not changed, total demand and therefore output and employment remain the same as well.³⁸³

Should a decline in wages take place in a monopoly context, however, where prices are inelastic, the results will be rather different, and far more damaging to the economy as a whole. As I have explained, monopolies hold prices stable and instead respond to changes in the level of demand by altering their output and capacity

³⁷⁹ Kalecki 1991, p. 29; Kalecki 1991, p. 31; Lopez and Assous 2010, p. 76.

³⁸⁰ Kalecki 1990, p. 189; Kalecki 1991, pp. 29-30; Toporowski 2013a, p. 119; King 2002, p. 44; Sawyer 1985, p. 111; Lopez and Assous 2010, p. 76.

³⁸¹ Toporowski 2013a, p. 119; King 2002, p. 44; Sawyer 1985, p. 111; Lopez and Assous 2010, p. 76.

³⁸² Lopez and Assous 2010, p. 76.

³⁸³ Kalecki 1990, p. 43; Kalecki 1991, p. 29.

utilization. In the case of a fall in demand caused by a fall in wages therefore, the only recourse of monopoly firms would be to reduce their output and idle a portion of their capacity.³⁸⁴ It is the lower level of sales at the same unit prices that causes the increased prospective profit to decline in this case.³⁸⁵ But because prices have not changed as a result of the fall in demand, the real wage has fallen as well.³⁸⁶ The same level of profits and a lower level of wages means that the decline in wages will have caused total incomes to fall.³⁸⁷ Moreover, since it was necessary to reduce output, employment is lower and capitalists have a higher level of unused capacity.³⁸⁸ This serves to undermine investment, incomes and employment further in the future as well.³⁸⁹

It can be seen therefore that a fall in the wage share caused by an increase in the mark-up of prices over costs resulting from an increase in the degree of monopoly, leads to a lower level of demand, income, output and employment; in short, the higher the degree of monopoly, the greater the stagnation of the economy.³⁹⁰ Now, if it is the case, as Kalecki believes it is, that the degree of monopoly tends to rise over time in a capitalist economy,³⁹¹ then this can only mean

³⁸⁴ Kalecki 1990, p. 190; Sawyer 1985, p. 200.

³⁸⁵ Kalecki 1990, p. 189-90; Feiwel 1975, p. 113; Lopez and Assous 2010, p. 77.

³⁸⁶ Kalecki 1954, p. 61; Kalecki 1991, pp. 35-6; Feiwel 1975, pp. 113, 123; King 2002, p. 44; Lopez and Assous 2010, p. 76.

³⁸⁷ Kalecki 1954, p. 61; Feiwel 1975, p. 123; Sawyer 1985, p. 80; Lopez and Assous 2010, pp. 76-7.

³⁸⁸ Kalecki 1990, pp. 44, 190; Kalecki 1991, p. 36; Feiwel 1975, pp. 113, 123; King 2002, p. 44; Sawyer 1985, pp. 15, 80; Lopez and Assous 2010, pp. 76-7.

³⁸⁹ Kalecki 1990, p. 44; King 2002, p. 44.

³⁹⁰ Kalecki 1954, p. 156; Feiwel 1975, p. 123.

³⁹¹ Kalecki 1954, p. 161; Kalecki 1991, p. 17; Feiwel 1975, p. 103; Toporowski 2013a, p. 101; King 2002, p. 42.

that the tendency towards stagnation will be progressively sharpened in the long run.³⁹²

Section Summary: Kalecki's Investment Scepticism, its Impacts on Reproduction, and Luxemburg's Theory

Having now fully established the nature of Kalecki's investment scepticism and the impacts which this has for the reproduction of SCCEs, I can now assess the extent of the correspondence between Kalecki's theory and that of Luxemburg with respect to these issues. As described, like Luxemburg, Kalecki believes that there is a tendency for investment shortfalls to occur in SCCEs. Also like her, Kalecki considers this to be partly the result of the 'dual nature' of investment and the way in which investment not only increases demand but also society's powers of production. However, there is more to Kalecki's investment scepticism. In the long term, it is not only the 'dual nature' of investment, but also the 'asymmetry' of these aspects and the fact that investment tends to increase productive capacity more than aggregate demand, which causes investment levels to decline. The tendency for investment levels to fall short is also exacerbated by one additional factor for Kalecki, the tendency towards the progressive monopolization of capitalist economies. Thus, although Kalecki shares Luxemburg's perspective that shortfalls in investment are likely to occur, especially in the long term, the precise mechanism which lies behind Kalecki's investment scepticism differs considerably from Luxemburg's.

In addition to sharing Luxemburg's basic scepticism towards investment, Kalecki also followed her in considering that shortages in investment are likely to

³⁹² Kalecki 1954, pp. 156, 161; King 2002, p. 42; Bleaney 1976, p. 248.

have deleterious effects on the reproduction of SCCEs. However, an even more substantial point of difference between the theories of the two thinkers can be found here, in the different effects which Luxemburg and Kalecki believe investment shortfalls will have on the economy. Luxemburg, for one, was confident that the inability of SCCEs to generate sufficient internal levels of investment would cause SCCR to breakdown and capitalism to collapse.³⁹³ This can be seen clearly in her description of what happens when the foreign markets secured through imperialistic policies either no longer exist or are no longer accessible.³⁹⁴ Kalecki, on the other hand, did not see the collapse of the capitalist system as in any way necessary or imminent, even in the case of SCCEs functioning far below their optimal levels.³⁹⁵ Instead, as I have described in this section, for Kalecki, low investment levels cause SCCEs to function in a state of permanent, ongoing stagnation in which incomes, employment, and output remained trapped at a level far below their social potential.³⁹⁶

The mechanisms underlying Kalecki's investment scepticism, therefore, in addition to his view of the nature of the effects which low levels of investment would have for SCCR, constitute some very significant departures from Luxemburg's

³⁹³ Luxemburg 1951, pp. 366, 417; Luxemburg 1972a, pp. 60, 126, 145-46; Kowalik 2009, p. 111; Kowalik 2003, p. xiv; Tarbuck 1972, p. 21.

³⁹⁴ Though it is notable that Luxemburg also discusses another possibility. In a couple of places she says that the shortage in demand left by the shortfall in investment could cause capitalists to restrain their investment, mitigating the effects of the underconsumption by giving rise to a surplus of unused capital which would in turn seek outside destinations for investment (Luxemburg 1951, pp. 421, 426-28, 446). These are tantalizing tidbits which suggest a kind of proto-stagnationist strain in Luxemburg's thought.

³⁹⁵ Kalecki 1990, p. 48; Kalecki 1991, p. 362; Kowalik 2003, p. xiv; Kriesler and McFarlane 2016, p. 120; Halevi 2016a, p. 139.

³⁹⁶ Kalecki 1968, pp. 78-9; Kalecki 1971, pp. 31, 149-50; Kalecki 1990, pp. 188, 192, 217-18; Sawyer 1985, pp. 115-16; Sawyer 1989, pp. 280, 282; Sebastiani 1994, p. 66; Lopez and Assous 2010, p. 118.

arguments. As a result, while it can be said that Kalecki accepted, in very broad fashion, the first two points of Luxemburg's tripartite argument, those concerning the unlikelihood of sufficient investment levels taking place in a SCCE and, as a consequence, the unlikelihood of SCCR occurring in optimal fashion, he did not do so without modifying each of these points considerably.

3. Kalecki's Conception of the 'Exogenous Factors'

Up to this point in the chapter, I have only dealt with the first two items in what I have said is the three-part argument which Luxemburg advances. I have described how, despite making some major changes to it, Kalecki broadly accepted Luxemburg's claims concerning the unlikelihood of sufficient investment taking place in a SCCE, and the negative impacts which this is likely to have on SCCR. Perhaps because of the adoption of these points, however, Kalecki also absorbs a version of Luxemburg's third point, the one concerning the vital role played by 'exogenous factors' in capitalist reproduction.³⁹⁷ These are the various elements that exist outside of SCCEs, such as external markets and government spending, which capitalist economies rely upon to improve their functioning. Kalecki refers to these variously as 'external',³⁹⁸ 'exogenous',³⁹⁹ 'supporting'⁴⁰⁰ and 'development' factors.⁴⁰¹ It is to describing Kalecki's own version of these and their impacts on economic dynamics that I now turn.

Befitting the pattern already established in Kalecki's use of Luxemburg's

³⁹⁷ Kalecki 1971, pp. 146, 150, 153, 155; Kalecki 1972a, p. 46; Kalecki 1968, p. 79; Bellofiore 2014, p. 92; Bellofiore 2004, p. 289; Harcourt and Krielsner 2014, pp. 12-3; Pastrello 2014, pp. 47, 52; Thomas 2014, p. 10.

³⁹⁸ Kalecki 1971, pp. 151, 155.

³⁹⁹ Kalecki 1962, pp. 134, 150.

⁴⁰⁰ Kalecki 1971, p. 148.

⁴⁰¹ Kalecki 1954, p. 161.

concepts, Kalecki also does not accept this idea without major qualifications. In the first place, because Kalecki does not agree with Luxemburg that SCCR is impossible, the 'exogenous factors' are not, for him, *essential* for capitalist reproduction to take place at all.⁴⁰² Instead, for Kalecki, such factors are merely helpful to capitalist economies, enabling them to break out of their stagnation and embark upon acceptable growth paths.⁴⁰³ Even beyond this, though, Kalecki modifies the concept. He changes the boundaries governing the items which the concept embraces and further specifies the impacts which these can have on capitalist reproduction. I examine all of this in what follows.

In the previous chapter, I discussed Luxemburg's concept of external markets and how these created the additional demand necessary to absorb the current surplus in the capitalist system. Critics of Luxemburg, including Kalecki, found fault with her conception of imperialism and foreign markets. They believed that Luxemburg's position was that any increases in exports would be useful in increasing the level of consumption for the domestic surplus.⁴⁰⁴ Kalecki took issue with such a conception, making the distinction between *gross* and *net* exports in contributing to the increase in demand.⁴⁰⁵ A country may well have a high level of gross exports, but if these are accompanied by a large quantity of commodities which it imports, some or all of the demand created by its exports will be offset by the way in which these imports take the place of what would otherwise be demand

⁴⁰² Kalecki 1971, p. 151; Kalecki 1972a, p. 46; Bellofiore 2014, pp. 89-90.

⁴⁰³ Kalecki 1971, pp. 16, 18, 29-30, 151; Kalecki 1972a, p. 46; Kalecki 1968, p. 79; Kalecki 1990, pp. 52, 194; Mamica 2015, pp. 102-03; Sebastiani 1994, pp. 20, 32, 66, 76.

⁴⁰⁴ Kalecki 1971, p. 152; Bellofiore 2014, p. 90; Bellofiore 2004, p. 289; Harcourt and Krielsner 2014, p. 14; Levy-Orlik 2014, p. 27; Bellofiore and Passarella 2009, p. 103.

⁴⁰⁵ Kalecki 1971, p. 15.

for domestically produced commodities.⁴⁰⁶ Rather, for a country to increase the market for its commodities through exports, it has to register an increase in *net* exports: an increase in exports over a potential increase in imports.⁴⁰⁷

Kalecki believed that such an increase in net exports would be difficult to achieve, however. He argued that this was because an increase in the exports of one country would tend to bring with it an increase in its imports as well. In the first place, increased exports would entail a higher demand for inputs by manufacturers now producing a greater output. Such inputs may not be available domestically and may have to be imported.⁴⁰⁸ Kalecki also recognized that when the exports of one country increased, the recipient country would be forced to find a way to pay for these goods. If one country consistently provides the demand to absorb the surplus commodities of another country, becoming a net importer of this country's goods, then this 'new' country at the same time becomes a net exporter of money to the 'old' country.⁴⁰⁹ Where does the latter obtain the money for this? One option is for the 'new' country to become capitalist itself and to generate its own surplus.⁴¹⁰ Another possibility is for the 'new' country to borrow the money for the imports

⁴⁰⁶ Kalecki 1971, p. 16, 152; Bellofiore 2014, p. 90; Bellofiore 2004, pp. 289-90; Levy-Orlik 2014, p. 27; Bellofiore and Passarella 2009, p. 103.

⁴⁰⁷ Kalecki 1971, pp. 15, 152-53; Harcourt and Krielsner 2014, p. 14; Bellofiore 2014, p. 90; Bellofiore and Passarella 2009, p. 103. I am not convinced that Luxemburg was completely ignorant of the need to distinguish between gross and net exports. In her discussion of the creation by rival countries of 'spheres of influence', she mentions that these simultaneously rely on protective tariffs to guard their home markets against other countries' exports (Luxemburg 1951, pp. 450-51). Thus she seems to have been aware of the potential for trade to cut both ways, to increase demand for the home country's commodities by providing access to foreign markets, while also restricting this same demand by bringing in imports which take the place of domestically-produced goods.

⁴⁰⁸ Kalecki 1971, pp. 16-7, 23-4.

⁴⁰⁹ Kalecki 1971, pp. 21-2; Bleaney 1976, p. 195.

⁴¹⁰ Howard and King 1989, p. 114; Albo 2016, p. 39.

from the 'old' one.⁴¹¹ But in this case, such a loan will have to be repaid. In either case therefore, the 'new' country may be driven to begin producing its own surplus commodities for export.⁴¹² As this happens, the 'new' country may cease to be a net source of demand for the products of the 'old'.⁴¹³ It may seek a destination for its own imports in the 'old' country's domestic market and it may start to compete with the 'old' country for other markets abroad. Recall that this is a dynamic which Luxemburg also identified as arising concomitantly with the export of commodities, as a result of the increase in the export of capital in the form of foreign loans and investment, and which would lead to the progressive diminution of options for the realization of the surplus commodities, the intensification of imperialistic competition, and the eventual breakdown of the capitalist system. However, Kalecki simply argues, on a similar basis, that foreign markets are not able to provide quite as much additional demand as Luxemburg believed they would.⁴¹⁴

For Kalecki, 'exogenous' factors include not only the foreign market or that which exists domestically in the stratum of the population that is not capitalistically organized; he extends the concept of the external market to include government spending.⁴¹⁵ He refers to such spending as 'domestic exports' since it exists outside of the model of the SCCE which includes only the consumption of the capitalist and working classes.⁴¹⁶ Of course, Luxemburg too had begun to consider certain types of

⁴¹¹ Kalecki 1971, pp. 16, 21-2, 152; Bellofiore and Passarella 2009, p. 103; Howard and King 1989, p. 113; Albo 2016, p. 39.

⁴¹² Kalecki 1971, p. 22; Albo 2016, p. 39.

⁴¹³ Sweezy 1942, p. 205; Albo 2016, p. 39.

⁴¹⁴ Kalecki 1971, pp. 152-53; Levy-Orlik 2014, p. 27; Bellofiore and Passarella 2009, p. 103.

⁴¹⁵ Kalecki 1968, p. 79; Kalecki 1971, p. 153; Bellofiore 2014, p. 90; Harcourt and Krielsner 2014, p. 14; Bellofiore and Passarella 2009, p. 103.

⁴¹⁶ Kalecki 1971, pp. 18, 153; Harcourt and Krielsner 2014, p. 14; Bellofiore 2009b, p. 60; Bellofiore

government spending in the same way, as I described in her discussion of military expenditures. Kalecki, however, faults her for being too narrow in her conception of the types of government spending which can be used to increase demand levels.⁴¹⁷ He argues that the specific nature of the expenditure is immaterial and therefore that any type of government spending may have the same result as far as the increase in consumption levels are concerned.⁴¹⁸

But if for Kalecki, the destination of spending by government is irrelevant, this is not the case for the source of its financing. He criticizes Luxemburg for not paying close enough attention to this issue.⁴¹⁹ I described in the previous chapter that Luxemburg had found a way to argue that government spending could increase demand levels even if it was financed by a tax that fell entirely on the wages of workers. Kalecki denies this possibility.⁴²⁰ If financing for government spending is drawn from the wage, then the new consumption that is gained by the spending of the government is a one-for-one substitution for the consumption of workers that is lost as a result of the tax's effect on the real wage.⁴²¹ I described how Luxemburg had initially also advanced such a position, but had thereafter reversed herself, and how the most reasonable basis for her to do so involved the relaxation of the assumption that workers do not save. Kalecki, however, is unwilling to relax such an

and Passarella 2009, p. 103.

⁴¹⁷ Kalecki 1971, p. 154; Krätke 2016, p. 149; Harcourt and Krielsner 2014, p. 14; Kowalik 2014, p. 118.

⁴¹⁸ Kalecki 1990, pp. 158, 160, 182.

⁴¹⁹ Kalecki 1971, p. 153; Kalecki 1968, p. 79; Kalecki 1990, p. 160; Harcourt and Krielsner 2014, p. 14; Levy-Orlik 2014, p. 27; Bellofiore and Passarella 2009, p. 103.

⁴²⁰ Kalecki 1971, pp. 153-54; Kalecki 1968, p. 79; Lopez and Assous 2010, pp. 136-37; Bellofiore 2014, p. 90; Bellofiore and Passarella 2009, p. 103.

⁴²¹ Kalecki 1971, p. 153; Kalecki 1968, p. 79; Lopez and Assous 2010, pp. 136-37; Worswick 1999, p. 286; Harcourt and Krielsner 2014, p. 14; Robinson 1951, p. 27; Levy-Orlik 2014, p. 27.

assumption.⁴²² As a result, for him, if government spending is to increase aggregate demand, the financing for it cannot come from a tax on workers. Such a tax must instead fall primarily upon the capitalists.⁴²³

Even here, however, additional considerations apply. Capitalists cannot respond to this increase in their taxes by raising their prices to preserve their profits. If they do so, a fall in the real wages of workers would be the result. This would mean that the new spending by government would again be offset by a corresponding decline in the consumption of workers and no net increase in demand would take place.⁴²⁴ Increases in aggregate demand could occur only if, by contrast, the tax fell on the capitalists and these did not respond by raising their prices.

In this case, the result would be the following. The profits of capitalists would initially decline. However, Kalecki believed that despite this, capitalists would be unlikely to decrease their levels of consumption and investment in the short term, since such expenditures are booked far in advance.⁴²⁵ As a result, their net profits (equal to investment plus consumption, as per the profits equation) would not change.⁴²⁶ The new taxation and government spending would instead increase the gross profits accruing to capitalists by an equivalent amount.⁴²⁷ This amount could then be taxed away again in the next cycle. The larger consequence of the new tax therefore would be that the net profits of capitalists would have remained

⁴²² Kalecki 1990, pp. 69, 156; Kalecki 1971, p. 124; Kalecki 1954, p. 55; Worswick 1999, p. 286.

⁴²³ Kalecki 1971, p. 153; Kalecki 1968, p. 79; Lopez and Assous 2010, pp. 136-37; Worswick 1999, p. 286; Bellofiore 2014, p. 90; Bellofiore and Passarella 2009, p. 103.

⁴²⁴ Kalecki 1971, pp. 37-8; Lopez and Assous 2010, p. 137; Worswick 1999, pp. 286-87.

⁴²⁵ Kalecki 1971, pp. 36-7, 39; Lopez and Assous 2010, pp. 137-38; Worswick 1999, p. 286.

⁴²⁶ Kalecki 1971, p. 39; Lopez and Assous 2010, p. 137; Worswick 1999, p. 286.

⁴²⁷ Kalecki 1971, p. 39; Lopez and Assous 2010, p. 137-38.

unchanged while the level of aggregate demand and consumption in the economy would have increased by the amount of government taxation and spending.⁴²⁸

Luxemburg had not been able to consider the possibility that the source of the financing for the military spending could come from that portion of the capitalists' surplus value that had to be destined, not for their personal consumption, but for investment in additional production. This was because, if she was willing to relax one assumption pertaining to SCCE, she would not do so when it came to another: the exclusion of credit. I described in the previous chapter the way in which, in the absence of credit, the money needed to realize the portion of the surplus value corresponding to investment could not come from this investment: the money for this was not yet in the hands of the capitalists and would not be so until this portion of their surplus product was realized. This is what I have referred to as the 'money-timing' problem.

However, if Kalecki held fast to the assumption that workers do not save, he had fewer qualms about relaxing the exclusion of credit in his model of reproduction. The 'money-timing' problem does not therefore constitute a barrier in his theorizing.⁴²⁹ It is for this reason that Kalecki is able to envision that the source of the financing for government spending which creates additional demand is able to come from the portion of the capitalists' profits which corresponds to their investment in additional production. What he does in fact is to reverse the "receipt-outlay sequence" to allow spending by government to take place *before* the money

⁴²⁸ Kalecki 1971, pp. 40, 154; Lopez and Assous 2010, pp. 137-38; Worswick 1999, pp. 286-87.

⁴²⁹ Bellofiore 2014, pp. 93, 98-9.

for this spending actually exists.⁴³⁰ This can take place for Kalecki both in the case in which government spending is eventually financed by taxation, as discussed above, and where the spending is deficit-financed. What happens with the latter is that new spending by government increases the demand and the profits of the capitalists by a corresponding amount.⁴³¹ This new surplus of profits can thereafter be deposited by the capitalists in banks in order to cover the original loan.⁴³² As far as the sources of the financing for government spending are concerned, for Kalecki, this type of deficit spending is an even better way to increase aggregate demand than by spending financed by taxes on capitalist profits.⁴³³ In the case of the former, not only do demand and consumption increase by an amount corresponding to the government deficit, but so do profits.⁴³⁴

For Kalecki, just as for Luxemburg, 'exogenous factors' play a crucial role in economic dynamics. Although he does not believe, as she does, that they are the *sine qua non* of capitalist reproduction, he does consider that they are instrumental in helping capitalist economies break out of stagnation tendencies and move towards a path of expansion and growth. In this way, in Kalecki's view, net exports and government spending create a similar dynamic as that described above with reference to increases in investment in a SCCE.⁴³⁵ This is why Kalecki amends his profits equation to read that total profits are equal to the sum of capitalists'

⁴³⁰ Kalecki 1971, pp. 29, 83-4; Sawyer 1985, p. 127; Bellofiore 2014, p. 89; Pastrello 2014, p. 53.

⁴³¹ Kalecki 1971, p. 84; Kalecki 1990, p. 191; Sawyer 1985, p. 127.

⁴³² Kalecki 1971, pp. 29, 153-54; Kalecki 1976, pp. 43-4; Kalecki 1990, p. 193.

⁴³³ Kalecki 1971, p. 154; Kalecki 1968, p. 79; Kalecki 1990, p. 182; Harcourt and Krielser 2014, p. 14; Levy-Orlik 2014, p. 27.

⁴³⁴ Kalecki 1971, p. 154; Kalecki 1990, pp. 359-60; Kalecki 1972a, pp. 48-9; Lopez and Assous 2010, p. 131; Feiwel 1975, pp. 119-20; Levy-Orlik 2014, p. 27.

⁴³⁵ Kalecki 1971, pp. 15, 18; Kalecki 1990, p. 360.

consumption, investment, the export surplus, and government deficits.⁴³⁶ All of these provide the additional demand that raises profit levels.⁴³⁷ The latter, in turn, being the foremost determinant of investment, causes investment to rise. Along with higher investment come higher levels of employment, demand, and profits, which raise investment even further.⁴³⁸ Such a self-reinforcing dynamic feeds on itself to place the economy upon a self-sustaining upward trajectory.⁴³⁹ It is for this reason that once this upward movement had been initiated by the original stimulus, in the form of foreign markets or government spending, this stimulus can be gradually withdrawn without precipitating a downturn.⁴⁴⁰

Chapter Summary

I have now arrived at the point at which I can summarize the fruits of my attempt to compare the economic theories of Luxemburg and Kalecki in order to establish the points of similarity and of difference between them. This comparison was based on what I referred to as Luxemburg's 'tripartite argument'. This consisted of the claims that SCCR was impossible because sufficient levels of investment in the context of a SCCE could never take place. As a result, 'exogenous' factors were required to prevent the collapse of capitalist economies. To start with, Kalecki dismissed the 'impossibility thesis'⁴⁴¹ contained in this argument. He argued that sufficient investment could sometimes take place in SCCEs. Because of this, and other reasons, he also dismissed Luxemburg's claim that SCCR was impossible.

⁴³⁶ Kalecki 1971, pp. 18, 82, 84; Feiwel 1975, pp. 119-20.

⁴³⁷ Kalecki 1990, pp. 359-60; Kalecki 1972a, pp. 46, 48-9; Lopez and Assous 2010, p. 131; Feiwel 1975, pp. 119-20.

⁴³⁸ Kalecki 1971, pp. 15-6, 18, 30.

⁴³⁹ Kalecki 1971, pp. 15-6, 18.

⁴⁴⁰ Kalecki 1990, pp. 158-59, 191, 194; Kalecki 1971, p. 30.

⁴⁴¹ Bellofiore 2014, p. 90.

Consequently, no 'exogenous factors' were required merely to keep the economic system from collapsing. Despite these differences, however, Kalecki broadly accepted Luxemburg's arguments concerning the unlikelihood of sufficient investment taking place in SCCEs and the negative impacts which this would have for SCCR. Even so, however, Kalecki proceeded to modify substantially each of these points as well. Though Kalecki's investment scepticism is partly based on the 'dual nature' of investment, it also contains other elements. These include the 'asymmetry' of investment as well as the tendency towards monopolization, all of which prevent sufficient levels of investment from taking place. Perhaps the largest modification which Kalecki makes to Luxemburg's argument, however, comes in the form of his conception of the nature of a poorly functioning capitalist economy. While Luxemburg believed that shortfalls in investment would cause SCCEs simply to collapse, Kalecki substituted the idea of stagnation, in which economies did not actually break down but functioned at sub-optimal levels of incomes, employment and output. Finally, while accepting the utility of 'exogenous' factors for capitalist reproduction, Kalecki also partly modified the contents of this category. He placed his emphasis less on exports and more on government spending. He further specified the conditions under which such factors could indeed have a beneficial effect on the economy.

On the basis of this comparison of the two theorists' arguments, and of Kalecki's very substantial revision of Luxemburg's theory which the comparison reveals, Kalecki's economic theory cannot in any meaningful sense be seen as a continuation of the theory put forward by Luxemburg. Rather, if Kalecki did use the

foundation of Luxemburg's tripartite argument, he seems to have erected an almost entirely new theoretical edifice on top of it. In the next chapter, I will argue that this divergence between the two theories was a reflection of the very different historical contexts out of which they emerged.

Chapter 3: The Historical Context of the Economic Theories of Luxemburg and Kalecki

Following the close analysis and comparison of the economic theories of Luxemburg and Kalecki which I have undertaken in the previous two chapters, I can now move on to seek the reasons for the divergences uncovered between these in the historical contexts which formed the background to their respective development. The first part of this chapter deals with Luxemburg's historical context, while Kalecki's is addressed in the second.

1. The Historical Context of Luxemburg's Theory

In seeking an explanation for the divergence of the two theories in the differing historical contexts which produced them, it is useful to specify which elements of the theories, in particular, we are seeking to explain in this way. This allows us to be more exact in setting out the causal chain which leads from a particular set of background factors to the individual arguments out of which the theory is constructed. According to my previous analysis, Luxemburg's basic economic theory consists of the following main arguments: investment in a SCCE is impossible; because of this, SCCR is impossible; as a result, for capitalism to be able to function, a constant expansion of markets, through imperialism, is required. To this list of arguments, I could also add Luxemburg's claim that despite having access to imperialism, capitalism will still collapse inevitably because eventually no new markets will be available. In the first chapter, I explained the way in which the first two of Luxemburg's arguments are actually logically derivative of her desire to

demonstrate the necessity of imperialism. I mentioned that this necessitated the claim that SCCR is impossible and that the impossibility of investment in a SCCE in turn was simply the mechanism through which the previous proposition could be posited. Thus, in a first instance, the only argument that requires an external explanation is the one for the necessity of imperialism. The impossibility of investment in a SCCE and the consequent impossibility of SCCR, however, could also be said to be derivative of another argument, that concerning the inevitability of capitalist collapse. The impossibility of SCCR does not demonstrate the necessity of collapse on its own, because as Luxemburg herself argues, capitalism could in this case be maintained by recourse to imperialism, the possibility of SCCR was used by some opponents of Luxemburg to argue against the inevitability of capitalist collapse.⁴⁴² Indeed, if SCCR were possible, collapse would no longer be inevitable.⁴⁴³ Thus Luxemburg's need to demonstrate the impossibility of SCCR could also derive from her desire to refute the arguments against the inevitability of collapse. Thus it can be seen that the only two points in Luxemburg's basic economic theory which need explanation through recourse to external phenomena are the necessity of imperialism and the inevitability of economic collapse in spite of it.

In the second section of this chapter, I will explain the development of Kalecki's theory on the basis of a nearly equal mix of personal, historical and political factors. In the case of Luxemburg, however, I explain the development of her economic argument primarily in terms of the political debates in which she was involved at the time of its composition. There is good reason for this predominance

⁴⁴² Luxemburg 1951, p. 325; Day and Gaido 2012, p. 76.

⁴⁴³ Luxemburg 1951, p. 325; Luxemburg 1972a, pp. 75-6.

of the political background in the case of Luxemburg. Luxemburg was concerned above all with politics and did the bulk of her writing in this area. She was involved in the socialist movement at a time and place in its history when the latter held real social power. As a result, its internal debates over political strategy and orientation had enormous real-world consequences. Luxemburg actively took part in all of these debates. Consequently, as many commentators have noted, Luxemburg's economic ideas tended to be the products of her prior political positions.⁴⁴⁴

In this section I will argue that Luxemburg's economic arguments concerning the inevitability of collapse and the necessity of imperialism came out of the one overriding debate which took place within the Social Democratic Party of Germany (SPD),⁴⁴⁵ in various phases, over the course of Luxemburg's life. This was the debate over the political strategy which ought to be employed by the party, whether revolutionary, as the classical Marxists believed, or reformist, as the adherents of the so-called Revisionist theory thought. I will argue that Luxemburg's affirmation of the necessity of economic collapse was meant as a response to the claim of the Revisionists. They argued that reformist tactics were appropriate precisely because the collapse of the system, and therefore socialist revolution, was unlikely to take place.⁴⁴⁶ Later, in the context of a looming imperialist world war, those within the party who preferred a reformist approach argued that because imperialism was an incidental feature of capitalism, imperialism and its war could be avoided through various measures without needing to eliminate the capitalist system in any sudden

⁴⁴⁴ Howard and King 1989, pp. 106, 114; Day and Gaido 2012, p. 76.

⁴⁴⁵ Howard and King 1989, p. 67.

⁴⁴⁶ Howard and King 1989, p. 114; Day and Gaido 2012, p. 76; Sweezy 1967, pp. 480, 483; Schmidt 2012b, pp. 254-55; Ticktin 2012, p. 316; LeBlanc 2010, p. 169.

revolutionary way. It was in opposition to this perspective that Luxemburg argued that since imperialism was a necessity for capitalism, the former could not be done away with without eliminating the latter, and that this was best done through an immediate socialist revolution. I begin by describing revisionism and Luxemburg's response to it in the following subsections, before moving on in the latter portion of this section to the debate over the theory of imperialism within the SPD.

Revisionism

Revisionism involved a rethinking of orthodox Marxism's conception of the mechanics of social change. Classical Marxism was dialectical-materialist. Social change took place solely on the basis of changes in the material conditions of society.⁴⁴⁷ Marx had applied to the material realm the schema that Hegel had developed to understand and predict the changes which took place in the ideal realm.⁴⁴⁸ For Marx, the development of the forces of production constituted the trans-historical vector that drove the progress of society.⁴⁴⁹ The latter moved from one mode of production to the next, with each successive mode of production serving to increase the forces of production.⁴⁵⁰ But each mode of production also contained contradictions.⁴⁵¹ The forces of production were able to develop, but also faced a check in the form of these contradictions.⁴⁵² These contradictions built over time until a point was reached when the forces of production could develop no further. When this happened, the current mode of production would be replaced by

⁴⁴⁷ Marx 1972, pp. 164-65; Tudor 1988, p. 25; Frölich 1972, p. 49.

⁴⁴⁸ Marx 1976, pp. 102-03.

⁴⁴⁹ Marx 1972, pp. 137, 192, 194; Marx 1973, pp. 540-41; Marx 1975, p. 425.

⁴⁵⁰ Marx 1972, pp. 194-95; Marx 1973, p. 541; Marx 1975, p. 426.

⁴⁵¹ Marx 1972, pp. 196-97; Marx 1976, p. 103.

⁴⁵² Marx 1972, pp. 192, 194-95, 477-78; Marx 1973, p. 415; Marx 1975, p. 425.

the following mode, which allowed the forces of production to develop once more.⁴⁵³ In the case of capitalism, the fundamental contradiction prevailing in the economic sphere was that between the forces of production and the capacity to realize the products of this production on the market.⁴⁵⁴ Marx imagined that as this contradiction gained strength, it would result in a series of crises and eventually in complete collapse of the capitalist system.⁴⁵⁵ This movement in the material conditions of society entraining changes in the mode of production was for classical Marxists one that was necessary and predictable.⁴⁵⁶ It was when the workers became conscious of the truth concerning the dialectical-materialist nature of society and began to realize the inevitability of capitalist collapse that they would be driven to wage a revolution that would inaugurate the new mode of production, socialism. This would once again allow the forces of production to continue along their developmental path.⁴⁵⁷ With such a description of the transition from capitalism to socialism, which was based on the material conditions of society and on the necessity of the development of the forces of production along their dialectical path, Marx and his followers believed that socialism had been removed from its previous utopian footing, which relied only on the idealism and morality of

⁴⁵³ Marx 1972, pp. 137-38, 194-95; Marx 1973, pp. 541, 749.

⁴⁵⁴ Marx 1969, pp. 55-6; Marx 1973, p. 415; Marx 1981, pp. 352-53, 357-59.

⁴⁵⁵ Marx 1969, p. 56; Marx 1973, pp. 410-11, 540, 706; Marx 1981, p. 358; Tudor 1993, p. xix; Nettl 1966, p. 531; Frölich 1972, p. xvi.

⁴⁵⁶ Howard and King 1989, p. 69; Tudor 1988, p. 25; Tudor 1993, pp. xix, xxvi; Waters 1970, pp. 10-11; Nettl 1966, p. 229; Frölich 1972, p. 49.

⁴⁵⁷ Marx 1973, pp. 410, 540, 542, 708, 749-50; Luxemburg 1970, p. 66; Luxemburg 1972a, p. 76; Tudor 1993, p. xix; Nettl 1966, p. 229. The other factor, besides the necessity of the economic collapse of capitalism, and the realization of this necessity, which pushed the workers to wage revolution, was the heightening of the class antagonism between capitalists and workers, which accompanied the growth in the unequal distribution of incomes and power between the classes (Frölich 1972, p. xvii).

the workers and their willingness to revolt, and placed on a more scientific foundation.⁴⁵⁸

This conception of social change was the official position of the SPD into the 1890s: Karl Kautsky articulated a version of it in the programme to the Erfurt congress of 1891.⁴⁵⁹ However, already in this same period, many within the party were beginning to question this theory. This questioning eventually coalesced into a movement called Revisionism, whose foremost theorist was Eduard Bernstein.⁴⁶⁰ Bernstein, in a series of articles published in *Neue Zeit* between 1896 and 1898,⁴⁶¹ and then in a book later translated as *The Preconditions of Socialism*,⁴⁶² repudiated Marx's argument for the necessity of economic collapse and the inevitability of a socialist revolution and argued instead that more gradual and legal reformist methods were the surer, more preferable path to the socialist transformation of society.⁴⁶³

For Bernstein, Marx's work was a mix of 'pure science'⁴⁶⁴ and ideology.⁴⁶⁵ The task of social democracy at this point in its history was to carry out an examination of the whole theory in order to be able to separate the two.⁴⁶⁶ Bernstein believed that Marx's theory of social change belonged to the latter group.⁴⁶⁷ As a consequence, what Bernstein set out to do was to modify it on the

⁴⁵⁸ Tudor 1988, p. 25; Tudor 1993, pp. xxv-xxvi; Waters 1970, pp. 10-11; Frölich 1972, p. 49.

⁴⁵⁹ Howard and King 1989, p. 69; Tudor 1988, p. 7; Tudor 1993, p. xix; Nettl 1966, pp. 116-17.

⁴⁶⁰ Looker 1972, p. 18; Frölich 1972, p. 47; Cliff 1959, p. 13; Day and Gaido 2012, p. 11.

⁴⁶¹ Howard and King 1989, p. 73; Tudor 1988, p. 14; Frölich 1972, p. 47.

⁴⁶² Bernstein 1993.

⁴⁶³ Howard and King 1989, pp. 72, 77; Tudor 1988, p. 10.

⁴⁶⁴ Looker 1972, p. 14; Tudor 1993, p. xxiii.

⁴⁶⁵ Bernstein 1988e, pp. 234, 243; Bernstein 1993, pp. 34-5, 198-99; Tudor 1993, pp. xxiv-xxv

⁴⁶⁶ Bernstein 1988h, p. 325; Looker 1972, p. 14.

⁴⁶⁷ Bernstein 1993, pp. 31-2, 34-5, 199.

basis of new empirical developments which worked to mitigate the tendencies towards economic collapse and revolution.⁴⁶⁸ Included were the development of cartels, the credit system and the means of transport and communications, as well as some additional elements.

The cartelization of the economy was a phenomenon which Marx had observed. However, it had intensified since his death.⁴⁶⁹ This development served to mitigate some of capitalism's crisis tendencies.⁴⁷⁰ Since monopolies were able to keep profits elevated, they were able to counteract the falling rate of profit somewhat.⁴⁷¹ Being able to control large shares of the market and of production, and free of some of the pressures of competition, monopoly firms were better able to plan their output to correspond to actual market conditions.⁴⁷² As such, some of the problems identified by Marx concerning the anarchy of production could be mitigated.⁴⁷³ Problems of generalized overproduction could be averted as monopoly firms were able to restrain production in the circumstances of market downturns instead of producing commodities which could not be sold.⁴⁷⁴

Another development in the history of capitalism that served to mitigate the crisis tendencies of the system was the extension of credit.⁴⁷⁵ This is another factor

⁴⁶⁸ Bernstein 1988b, p. 166; Bernstein 1988d, p. 217; Howard and King 1989, p. 74; Tudor 1988, p. 33; Tudor 1993, pp. xix-xx, xxiv; Looker 1972, pp. 14-6; Nettle 1966, pp. 204-05.

⁴⁶⁹ Howard and King 1989, p. 65; Tudor 1988, p. 15.

⁴⁷⁰ Bernstein 1993, pp. 90-1; Howard and King 1989, p. 77; Tudor 1988, p. 9; Tudor 1993, p. xx; Looker 1972, p. 15; Day and Gaido 2012, pp. 211-12.

⁴⁷¹ Bernstein 1993, pp. 91, 96.

⁴⁷² Bernstein 1993, p. 90; Howard and King 1989, p. 77.

⁴⁷³ Bernstein 1993, p. 92; Frölich 1972, p. 55; Cliff 1959, p. 18.

⁴⁷⁴ Bernstein 1993, pp. 90-2, 94; Howard and King 1989, p. 77.

⁴⁷⁵ Bernstein 1988b, p. 166; Tudor 1988, p. 9; Tudor 1993, p. xx; Looker 1972, p. 15; Nettle 1966, p. 205.

whose positive impacts on the system had been acknowledged by Marx.⁴⁷⁶ For Bernstein, the credit system helped smooth out the contradiction between the forces of production and the market.⁴⁷⁷ With credit, buying power could be extended from those individuals which had too much of it to those who did not have enough of it.

Bernstein also took note of the impact which other empirical developments could have in mitigating capitalism's crisis tendencies. The greater development of the means of transportation and communication could help eliminate those crises caused by the separation in time and space which existed between producers and their markets.⁴⁷⁸ The diversification of industries within the economy meant that crises taking place in one industry would have less of chance of spreading to the economy as a whole and becoming a general crisis.⁴⁷⁹ Moreover, the tremendous growth in the world market could help absorb large quantities of surplus production.⁴⁸⁰ However, the continuous growth in the size of the world market was less of a necessity for the survival of the capitalist system than some economists had claimed. The reason was that market growth could occur not only 'extensively' but also 'intensively', by increasing sales not only abroad but also in the home country.⁴⁸¹ Such growth in the domestic market, Bernstein believed, was theoretically limitless.⁴⁸²

⁴⁷⁶ Bernstein 1993, p. 85.

⁴⁷⁷ Bernstein 1993, p. 86.

⁴⁷⁸ Bernstein 1988b, p. 166; Bernstein 1993, p. 88; Howard and King 1989, p. 77; Tudor 1988, p. 9; Tudor 1993, p. xx.

⁴⁷⁹ Bernstein 1988b, p. 166; Bernstein 1993, pp. 87-8; Howard and King 1989, p. 77.

⁴⁸⁰ Bernstein 1988b, p. 166; Bernstein 1993, p. 96.

⁴⁸¹ Bernstein 1993, pp. 89-90.

⁴⁸² Bernstein 1993, p. 90.

Bernstein used evidence of such factors which could serve to mitigate capitalism's crisis tendencies to argue against Marx that economic collapse was no longer a necessity.⁴⁸³ He did not argue that collapse could or would no longer take place, only that it was impossible to determine whether it would or not.⁴⁸⁴ But because collapse had become uncertain in this way, so had the possibility of socialist revolution.⁴⁸⁵

Another series of empirical developments that Bernstein read as limits on the possibility of revolution were those which reduced the political contradictions of society. Marx had argued that an increase in class polarization and antagonisms between capitalists and workers was also required for the advent of the revolution.⁴⁸⁶ Bernstein described the numerous empirical developments which in his mind were diffusing such contradictions.

To begin with, the owners of capital were not becoming fewer.⁴⁸⁷ The progress of cartelization did not indicate that capital ownership was becoming more concentrated. Thanks to the increase in stock-holding, the opposite effect may actually have been being produced.⁴⁸⁸ Although Bernstein believed that cartelization was progressing in some industries, it was perhaps not progressing in the economy as whole, or not doing so as fast as some believed.⁴⁸⁹ This was because small firms

⁴⁸³ Bernstein 1988b, pp. 165-66; Bernstein 1988d, p. 223; Howard and King 1989, p. 77; Tudor 1988, pp. 10, 19, 33; Tudor 1993, pp. xix-xx; Looker 1972, p. 15; Nettl 1966, pp. 204-05.

⁴⁸⁴ Bernstein 1988d, p. 223; Bernstein 1988g, p. 306; Bernstein 1993, p. 96; Tudor 1988, pp. 8, 10; Tudor 1993, pp. xxviii, xxxiv.

⁴⁸⁵ Bernstein 1988b, pp. 166-67; Tudor 1988, pp. 8, 33.

⁴⁸⁶ Bernstein 1988b, p. 160.

⁴⁸⁷ Bernstein 1988f, p. 288; Bernstein 1993, pp. 58, 61; Tudor 1993, p. xx.

⁴⁸⁸ Bernstein 1993, pp. 58, 86; Frölich 1972, p. 55; Day and Gaido 2012, p. 212.

⁴⁸⁹ Bernstein 1988a, p. 92; Bernstein 1988b, pp. 162, 164; Bernstein 1988f, pp. 288-89; Howard and King 1989, p. 76; Tudor 1988, pp. 9, 18.

were persisting in numerous industries that were better suited to smaller-scale production.⁴⁹⁰ Bernstein gave the examples of wood, leather, and metal work,⁴⁹¹ as well as of agriculture.⁴⁹² Moreover, cartelization was itself favouring the creation of new small firms.⁴⁹³ These were able to take advantage of the cost savings on production inputs that the more efficient production of larger firms was able to generate. In addition, the small firms made use of the surplus capital of the larger monopolies as well as of the surplus labour-power which these continuously 'liberated'.⁴⁹⁴ Finally, the increased profits and incomes of the larger firm provided an increased market for the production of luxuries, which Bernstein believed were produced overwhelmingly on a smaller scale.⁴⁹⁵

The working class, on the other hand, was not becoming more numerous and impoverished.⁴⁹⁶ Wages were rising, as were the living standards of workers.⁴⁹⁷ This fact along with the implementations of gradual reforms to working conditions, exerted a counter-revolutionary influence on the working class.⁴⁹⁸ Moreover, through the stock market, the working class was able to take part in the ownership of capital.⁴⁹⁹ Not only were the wages of workers rising, but the latter were becoming increasingly differentiated as a result of the differentiation of

⁴⁹⁰ Bernstein 1988b, pp. 161-62; Bernstein 1993, pp. 66-9; Howard and King 1989, pp. 76, 84; Tudor 1988, p. 9; Tudor 1993, p. xx; Nettl 1966, p. 205.

⁴⁹¹ Bernstein 1993, p. 69.

⁴⁹² Bernstein 1988a, p. 164; Bernstein 1988f, p. 289; Bernstein 1993, p. 73; Howard and King 1989, p. 73; Tudor 1988, p. 15; Looker 1972, p. 15.

⁴⁹³ Bernstein 1988a, p. 92; Bernstein 1988b, p. 163; Bernstein 1993, p. 70.

⁴⁹⁴ Bernstein 1993, p. 70.

⁴⁹⁵ Bernstein 1993, p. 71.

⁴⁹⁶ Tudor 1993, p. xx.

⁴⁹⁷ Bernstein 1993, p. 63; Howard and King 1989, pp. 75-6; Tudor 1988, p. 9; Cliff 1959, pp. 18-9.

⁴⁹⁸ Bernstein 1988f, p. 289; Day and Gaido 2012, p. 212.

⁴⁹⁹ Frölich 1972, p. 55; Cliff 1959, p. 18; Day and Gaido 2012, p. 212.

occupational skill levels.⁵⁰⁰ This was creating upward social mobility for some workers, who were now coming to constitute a new middle class.⁵⁰¹ This same phenomenon was also creating a series of sub-classes within the working class which worked to counteract the formation of a common class identity.⁵⁰² Finally, Bernstein identified an increase in production by co-operatives. Members in these co-ops seemed to constitute a separate class outside of the traditional worker-capitalist dichotomy, while also providing an instance of actual socialist practice in small pockets within the capitalist economy.⁵⁰³

As a result of the existence of both the factors which mitigated economic collapse as well as class antagonisms, the likelihood of a future socialist revolution had been greatly reduced. But this would pose a difficulty for the socialist movement only if revolution constituted the only plausible path to socialism. In Bernstein's opinion, this was not the case. At the same time as certain empirical developments had served to reduce the likelihood of revolution, these and others, had served to make a more gradual, reformist path to socialism more possible than ever.⁵⁰⁴

The most important of these new factors for Bernstein was the progress which had taken place in the area of democratization. Bernstein said that it was not surprising that Marx should have espoused the revolutionary strategy, since in his

⁵⁰⁰ Bernstein 1988e, p. 235; Bernstein 1993, pp. 62, 106-07; Howard and King 1989, p. 76; Tudor 1988, p. 9.

⁵⁰¹ Bernstein 1988d, p. 217; Bernstein 1993, p. 63; Looker 1972, p. 15.

⁵⁰² Bernstein 1988e, p. 235; Bernstein 1993, pp. 104, 106-07; Howard and King 1989, pp. 76, 84; Tudor 1988, p. 9.

⁵⁰³ Bernstein 1993, p. 87; Frölich 1972, p. 45.

⁵⁰⁴ Bernstein 1988b, p. 166; Bernstein 1988d, p. 221; Howard and King 1989, p. 72; Tudor 1988, p. 19.

day workers were largely excluded from the political process.⁵⁰⁵ Thus, they had recourse only to revolutionary activity if they wanted to effect social change.⁵⁰⁶ Recently, however, workers had succeeded in forming powerful trade unions and political parties such as the SPD through which they had managed to actually participate in the legislative process and to enact reforms which have favoured them.⁵⁰⁷ The effectiveness of such developments had made revolutionary activities superfluous.⁵⁰⁸ Indeed, Bernstein had great faith in the ability of workers to affect deep social change through the medium of the state and of the political process, should sufficient levels of democratization be attained.⁵⁰⁹ Although the state in its present form had been created by the capitalist class to advance the latter's own interests, the state was at its root nothing but a neutral tool which could be taken over and deployed to just about any purpose.⁵¹⁰ The workers would therefore be able to use it to advance their own agenda. Moreover, Bernstein believed that true democracy would prevent the tyranny of the minority over the interests of the majority, while also protecting the rights of the minority.⁵¹¹ Instead, high levels of democratization would encourage co-operation and compromise between all interested parties while making sure that the common good would always triumph

⁵⁰⁵ Bernstein 1988d, p. 217; Bernstein 1993, p. 145; Tudor 1988, p. 37.

⁵⁰⁶ Bernstein 1988d, p. 221; Bernstein 1993, p. 145; Looker 1972, p. 35; Tudor 1993, p. xxxi; Frölich 1972, p. 52.

⁵⁰⁷ Bernstein 1988f, p. 289; Bernstein 1993, p. 143; Tudor 1988, p. 16; Tudor 1993, p. xx; Looker 1972, p. 15.

⁵⁰⁸ Bernstein 1993, pp. 145, 205; Howard and King 1989, p. 78; Tudor 1988, p. 37; Looker 1972, p. 15.

⁵⁰⁹ Bernstein 1988d, p. 221; Bernstein 1988f, p. 289; Bernstein 1993, pp. 102, 143; Tudor 1993, p. xx, xxxi.

⁵¹⁰ Bernstein 1993, pp. 144, 158; Tudor 1988, p. 16; Tudor 1993, p. xxxi.

⁵¹¹ Bernstein 1993, pp. 141-42.

over particular interests.⁵¹² True democracy would create an environment of collaboration between the economic classes⁵¹³ so that, while these would not completely cease to exist, they would do so within the confines of the political process.⁵¹⁴ So much faith did Bernstein have in the power of democratization for effecting progressive social change in fact, that he often treated democracy not only as a means to attaining socialism in a gradual manner, but also as an end in itself which was almost synonymous with socialism.⁵¹⁵

Another empirical development that demonstrated the possibility of a gradual transition to socialism was the rise in the wages and living standards of workers, which had taken place of late as a result of a steadily growing economy and of the work of trade unions.⁵¹⁶ For Bernstein, such a reality had worked to belie the 'iron law of wages' in which Marx and the other classical economists believed.⁵¹⁷ On the contrary, historical experience has demonstrated that the wages of workers can rise beyond some bare or cultural minimum. At the same time, the higher wages of workers had not caused a fall in the rate of profit of the capitalists,⁵¹⁸ or, if they had, this had not proved an obstacle to the ongoing reinvestment of profits.⁵¹⁹ For Bernstein, such developments proved that it was possible for workers to increase their incomes steadily and gradually to take ownership over an ever-larger share of

⁵¹² Bernstein 1993, pp. 140, 144; Tudor 1988, pp. 16, 36; Tudor 1993, pp. xxi, xxx-xxxii.

⁵¹³ Bernstein 1993, pp. 142, 144; Howard and King 1989, p. 85; Tudor 1988, pp. 16, 35; Tudor 1993, p. xxi; Day and Gaido 2012, p. 47.

⁵¹⁴ Bernstein 1993, pp. 140, 143; Tudor 1993, p. xxi.

⁵¹⁵ Bernstein 1988f, p. 290; Bernstein 1993, p. 142; Tudor 1988, p. 10.

⁵¹⁶ Howard and King 1989, p. 75; Looker 1972, p. 15; Nettl 1966, p. 205; Cliff 1959, pp. 18-9.

⁵¹⁷ Bernstein 1988d, p. 217; Bernstein 1993, pp. 193-94; Howard and King 1989, p. 75.

⁵¹⁸ Bernstein 1993, pp. 136-37.

⁵¹⁹ Bernstein 1993, pp. 138-39.

the social output, without destabilizing the capitalists system itself or risking its immediate collapse.

Many of the factors that worked to mitigate the possibility of economic collapse and revolution, also facilitated the more gradual socialist transformation of society.⁵²⁰ The progressive cartelization taking place in some industries meant that there, a greater degree of socialization of production had already been achieved.⁵²¹ This served as a stepping-stone to a state in which workers fully control production. At the same time, the extension of the model of the joint-stock company model implied an ever-greater separation between the ownership of production and its management. This development would make it clear to the workers that the role of the owners of capital in production was superfluous and that they would be perfectly capable of managing production themselves.⁵²² The socialist principle of worker ownership over the means of production was already embodied in the producers' co-operative.⁵²³ The growth in this type of production showed that socialist elements could develop gradually within a capitalist economy.⁵²⁴

It was because economic collapse and socialist revolution were now uncertain prospects and maybe even unlikely ones, and because empirical developments had now made the reformist path to socialism more viable than ever

⁵²⁰ Tudor 1993, p. xxxii.

⁵²¹ Bernstein 1993, p. 99.

⁵²² Frölich 1972, p. 55.

⁵²³ Bernstein 1993, p. 87.

⁵²⁴ Bernstein 1993, p. 119.

before, that Bernstein advocated for the SPD to abandon revolution as its official political strategy and to replace it with the endorsement of reformist politics.⁵²⁵

Luxemburg against Revisionism

Luxemburg completed her doctoral dissertation at the University of Zurich in 1897.⁵²⁶ The following year, she relocated to Germany,⁵²⁷ where she joined the ranks of the fast-growing SPD.⁵²⁸ She arrived just in time to take part in the debate over revisionism that had started to occur within the party. In fact, Luxemburg became the foremost protagonist in the theoretical struggle against the revisionist tendency.⁵²⁹

Luxemburg was an adherent to the orthodox Marxist theory of social change and considered Bernstein's theory to be a lamentable departure from it. I have already described how for Marx, social change was rooted in the material conditions of society and the dialectical evolution of the contradictions present in each mode of production. The fact that social change was therefore necessary and predictable and the result of such concrete, observable phenomena meant that Marx's theory of socialism was one that was considered 'scientific' by its adherents. But Bernstein's theory contained different implications. For Bernstein, social change no longer took place necessarily on the basis of concrete material conditions, but was rather the

⁵²⁵ Bernstein 1988b, p. 169; Bernstein 1988d, p. 222; Bernstein 1988f, p. 290; Bernstein 1993, p. 186; Tudor 1988, pp. 10, 19; Waters 1970, p. 33; Nettl 1966, p. 205.

⁵²⁶ Waters 1970, p. 4.

⁵²⁷ Howard and King 1989, p. 78; Looker 1972, p. 9.

⁵²⁸ Waters 1970, p. 4.

⁵²⁹ Howard and King 1989, pp. 78, 106; Waters 1970, p. 4; Looker 1972, p. 9; Nettl 1966, p. 223.

uncertain product of the will and morality of the would-be reformers.⁵³⁰ For Luxemburg, this served to make the theory both unscientific⁵³¹ as well as un-Marxist.⁵³²

However, it was not only that Bernstein's theory painted a picture in which socialism had an uncertain future; for Luxemburg, Bernstein's abandonment of historical materialism meant that his theory of social change was one in which socialism was actually an impossibility.⁵³³ The reason for this was that Luxemburg did not consider the idealism and morality of the reformers to be a suitable basis for the transformation of society.⁵³⁴ This was because, contrary to Marx's vision, in which the driving force of change is a trans-historical one, – the increase in the forces of production which seems to run through and to transcend every historical mode of production – morality is the product of the mode of production with which it coincides.⁵³⁵ The material base of society itself gives rise to the superstructure of morality, and thus it would be very difficult for causality to run in the opposite direction and for morality to be capable of modifying the material base.⁵³⁶ Moreover, the resolve of the reformers and their 'choice' to change or fix the system independently of the underlying material realities can never be a sufficient driver to

⁵³⁰ Bernstein 1988d, pp. 221, 223; Bernstein 1988f, p. 291; Bernstein 1988g, p. 308; Bernstein 1993, pp. 200-01; Howard and King 1989, p. 73; Tudor 1993, p. xxxiv; Cliff 1959, p. 21.

⁵³¹ Luxemburg 1970, pp. 39-40, 83, 85; Tudor 1988, p. 25; Tudor 1993, p. xxxii; Looker 1972, p. 16; Frölich 1972, p. 55.

⁵³² Luxemburg 1970, pp. 84, 87; Luxemburg 1972a, p. 75-6; Mattick 1978, p. 32; Worth 2012, p. 140.

⁵³³ Luxemburg 1970, pp. 39-40, 83, 86; Luxemburg 1972a, p. 76; Luxemburg 1951, p. 325; Looker 1972, p. 16; Frölich 1972, p. 152.

⁵³⁴ Luxemburg 1970, pp. 72-3, 85, 88; Luxemburg 1972a, p. 76; Looker 1972, p. 16; Cliff 1959, pp. 21-2; Mattick 1978, p. 32; Trincado 2004, p. 248.

⁵³⁵ Luxemburg 1970, p. 85; Frölich 1972, p. 49.

⁵³⁶ Marx 1972, pp. 154-55, 164-65; Marx 1975, p. 425.

bring about socialism.⁵³⁷ What workers require to wage the socialist revolution is the certainty that such a revolution is a historical necessity and that its eventual victory is assured.⁵³⁸ It is for these very same reasons that, for Luxemburg as well as for others, the pre-Marxian theorists who called for the advent of socialism through such mechanisms were referred to as 'utopian' socialists.⁵³⁹ Here, emphasis is placed on the literal meaning of 'utopia' as 'no place'.

But if revisionism presents a vision of social change in which the transition to socialism appears impossible, for Luxemburg, the theory itself also *makes* the attainment of socialism impossible, as a result of the new strategic orientation whose adoption it implies.⁵⁴⁰ This is because Luxemburg is doubtful that the reformist tactics which Bernstein proposes for the socialist movement, including parliamentarism, trade-unionism, and co-operativism, will ever be capable of actually producing the socialist reorganization of society.

Luxemburg disagreed with Bernstein on the power of democratization in effecting social change. The reason is that she had a very different idea of the basic relationship which existed between the classes. While Bernstein believed that class co-operation was possible and even inevitable, Luxemburg did not.⁵⁴¹ For her, the basis class relation was one of antagonism and conflict.⁵⁴² The capitalist class would never cede any of its power willingly and would go to almost any length to defend

⁵³⁷ Luxemburg 1970, pp. 41, 72-3; Luxemburg 1972a, p. 76; Frölich 1972, p. 69; Cliff 1959, pp. 21-2; Mattick 1978, p. 32.

⁵³⁸ Luxemburg 1970, pp. 66, 86; Luxemburg 1972a, p. 76; Nettl 1966, p. 229; Frölich 1972, p. 55.

⁵³⁹ Luxemburg 1970, pp. 41, 60, 85; Looker 1972, p. 16; Frölich 1972, p. 55; Cliff 1959, p. 21.

⁵⁴⁰ Luxemburg 1970, p. 58; Nettl 1966, pp. 242-43; Frölich 1972, p. 53.

⁵⁴¹ Luxemburg 1970, p. 83; Tudor 1988, p. 25.

⁵⁴² Luxemburg 1970, pp. 80, 84; Luxemburg 1972b, p. 263; Tudor 1993, p. xxx.

its privilege.⁵⁴³ This meant that while democracy did indeed provide a modest opening for the participation of the working class in the governing process,⁵⁴⁴ they would never be permitted to employ it to remake society in any significant way.⁵⁴⁵ The capitalist class would employ any measure of machinations to prevent the working class from taking substantial power through the political system.⁵⁴⁶ They would either do so while maintaining a nominally democratic framework,⁵⁴⁷ or, if the threat from the working class became too intractable, they would simply suppress democracy itself and move society to a different political system.⁵⁴⁸ Because of this view of the class relation as inherently conflictual, and due to the firm grip of the capitalist class on the state,⁵⁴⁹ Luxemburg believed that attempts by the socialist movement at effecting substantial change through the parliamentary means were bound to fail.⁵⁵⁰

For Luxemburg, the impossibility of attaining socialism through reformist means is also manifested through the failure of trade unionism to effect any substantial change in the distribution of income. While Luxemburg does believe that the work of trade unions is able to increase wage levels and improve working conditions, she insists that these successes only ever serve to ensure that the

⁵⁴³ Luxemburg 1972b, pp. 263, 279-80.

⁵⁴⁴ Luxemburg 1972b, p. 110.

⁵⁴⁵ Luxemburg 1970, pp. 51, 56; Frölich 1972, pp. 64-5.

⁵⁴⁶ Luxemburg 1972b, pp. 263, 279-80.

⁵⁴⁷ Luxemburg 1972b, p. 109.

⁵⁴⁸ Luxemburg 1970, pp. 56, 74-5.

⁵⁴⁹ Luxemburg 1970, pp. 51, 53; Luxemburg 1972b, p. 263; Looker 1972, p. 17; Frölich 1972, p. 64; Cliff 1959, p. 23.

⁵⁵⁰ Luxemburg 1970, pp. 56-7, 102; Luxemburg 1972b, p. 263-264; Nettl 1966, p. 209; Frölich 1972, p. 62, 65

working class is able to receive the value of its labour power at any given time.⁵⁵¹ This is because trade unions have no control over the deeper forces which determine the necessary distribution of income between the capitalist and working classes, such as the growth in the reserve army as a result of population growth and technological unemployment, and changes in the level of productivity resulting from technological change.⁵⁵² As such, trade unionism is fighting a defensive action.⁵⁵³ It is never able to increase the share of workers' incomes beyond a historically determined quantity.⁵⁵⁴ For this reason, Luxemburg refers to the work of trade unions as 'the labour of Sisyphus'.⁵⁵⁵ No matter how valiantly trade unions struggle, they can only ever make gains within the confines of the current wage system and can never make any substantial changes to that system.⁵⁵⁶ Moreover, Luxemburg believes that the more trade unions succeed in making even modest gains for workers, the more the militancy of the latter in fighting for additional gains is minimized.⁵⁵⁷

Finally, the attempt to achieve a progressive reorganization of society along socialist lines through the growth of co-operatives is also bound to fail.⁵⁵⁸

Luxemburg argues that the reason for this is that while co-ops may on the surface replicate a socialistic organization of production, because they operate within the

⁵⁵¹ Luxemburg 1970, pp. 48, 71; Nettl 1966, pp. 210-11; Frölich 1972, pp. 58-9; Cliff 1959, pp. 22-3; Schmidt 2013, p. 23.

⁵⁵² Luxemburg 1970, pp. 48-9, 71; Nettl 1966, pp. 210-11; Frölich 1972, p. 59; Cliff 1959, p. 22; Schmidt 2013, p. 23.

⁵⁵³ Luxemburg 1970, p. 71; Frölich 1972, p. 58; Cliff 1959, p. 22.

⁵⁵⁴ Luxemburg 1970, p. 49; Nettl 1966, pp. 210-11.

⁵⁵⁵ Luxemburg 1970, p. 71; Looker 1972, p. 17; Nettl 1966, p. 211; Frölich 1972, p. 59; Cliff 1959, p. 22; Schmidt 2013, p. 23.

⁵⁵⁶ Luxemburg 1970, pp. 49, 72; Looker 1972, p. 17; Frölich 1972, p. 58; Cliff 1959, p. 22.

⁵⁵⁷ Schmidt 2013, p. 24.

⁵⁵⁸ Luxemburg 1970, p. 69; Nettl 1966, p. 210.

framework of a larger capitalist economy, producers' co-operatives will be forced by competition to adopt ever more capitalistic strategies to increase their productivity and discipline their workers.⁵⁵⁹ Producers' co-ops will be forced to, in essence, self-exploit. Luxemburg believes that some producers' co-operatives, which are linked with consumers' co-ops as their primary market, may be able to avoid this pitfall.⁵⁶⁰ However, such a business model is rather limited in scope. Such linkages are only possible when it comes to small, local markets and to the production of immediate consumption goods. Luxemburg does not believe that serious production of capital goods can ever be undertaken in this way.⁵⁶¹ Finally, while consumers' co-operatives should be able to survive and grow in a capitalist economy in many industries, their spread would not serve to affect the real core of the capitalist system, which is found in the antagonistic class relations which exist in production.⁵⁶² Thus changing the way in which consumption is organized is akin to simply pruning "a relatively minor branch of the main tree of capitalism."⁵⁶³ As a result of this, for Luxemburg, the growth in co-operatives does not represent a viable means to the progressive socialization of the capitalist economy.

For these reasons, Luxemburg does not consider that reformist means constitute a viable strategy for the attainment of socialism. For her, only revolutionary action makes such a social transformation possible.⁵⁶⁴ This can be seen in the historical record, which shows that substantial social change only ever

⁵⁵⁹ Luxemburg 1970, p. 69.

⁵⁶⁰ Luxemburg 1970, p. 70.

⁵⁶¹ Ibid.

⁵⁶² Luxemburg 1970, p. 70-1; Nettl 1966, p. 210.

⁵⁶³ Luxemburg 1970, p. 71; Nettl 1966, p. 210.

⁵⁶⁴ Luxemburg 1970, p. 57; Luxemburg 1972b, pp. 263-64; Nettl 1966, pp. 209-10; Frölich 1972, pp. 52, 67; Cliff 1959, p. 25.

takes place as a result of revolutions.⁵⁶⁵ Moreover, the hypothesis that only more drastic, violent types of actions can ever have any real impact on society in the types of measure to which the current ruling class gives legal sanction over and against those types which it proscribes. For Luxemburg, the bourgeoisie is in full control of the apparatus of the state and is able to determine which types of actions by its citizens are permissible and which are not, with a view to protecting its own power as a class.⁵⁶⁶ As a result of this, the reformist measures mentioned above are the legally sanctioned channels through which dissent from capitalist class rule may be expressed. Luxemburg believes that this indicates that these measures do not represent any substantial threat to the power of this class.⁵⁶⁷ By the same token, the fact that more violent measures by the working class are outlawed, even as they are perfectly permissible when deployed by the capitalist class as a whole, would seem to point to the power of these measures to affect the balance of the class struggle.⁵⁶⁸

It is Luxemburg's belief that revisionist theory produces a conception of social change and a political strategy which make the attainment of socialism impossible. This is what leads her to seek to refute Bernstein's theory and to reaffirm the viability of the classical Marxist view of social change through the revolutionary political strategy. Bernstein had argued against the revolutionary strategy in the first place by refuting the necessity of economic collapse, presenting a series of factors which he claimed mitigated capitalism's crisis tendencies. In order to refute revisionist theory therefore, and argue for the necessity of socialist

⁵⁶⁵ Luxemburg 1970, p. 77.

⁵⁶⁶ Frölich 1972, p. 69; Cliff 1959, p. 25.

⁵⁶⁷ Frölich 1972, p. 69; Cliff 1959, p. 25-6.

⁵⁶⁸ Frölich 1972, pp. 68-9; Cliff 1959, p. 25.

revolution as a result of the necessity of economic collapse, Luxemburg reaffirms the reality of capitalism's crisis tendencies.⁵⁶⁹ She does this in part by refuting Bernstein's claim that the factors he presents actually mitigate crisis, arguing instead that such factors, like cartelization and the credit system, actually increase crisis tendencies.⁵⁷⁰ At the same time, Luxemburg denies that the political contradictions in society are decreasing, making the opposite case instead.⁵⁷¹

Luxemburg concedes that progressive cartelization of the economy may be serving to help the firms in question master the anarchy of production and raise their rates of profit in particular industries or on the domestic market.⁵⁷² This does not signify however, that such are the net effects of cartelization in the overall economy. In fact, on the world market, cartelization may be having the opposite effect.⁵⁷³ The reason why monopolies are able to maintain elevated rates of profit at home is that they are restraining the quantity of products that they are placing on this market. The only way in which these firms are able to do this while at the same time keeping their unit costs of production low, is by producing a large quantity and dumping the remainder of the products which they do not sell on the home market onto the world market, where they are offered up at very low prices.⁵⁷⁴ Thus, while the contradiction between the forces of production and the capacity for realization is held in check by cartelization domestically, abroad such a contradiction is only

⁵⁶⁹ Looker 1972, p. 16; Nettl 1966, p. 208.

⁵⁷⁰ Luxemburg 1970, pp. 45, 61; Howard and King 1989, p. 79; Tudor 1988, p. 25; Looker 1972, p. 16; Frölich 1972, pp. 55-6; Cliff 1959, p. 19.

⁵⁷¹ Frölich 1972, p. 58.

⁵⁷² Luxemburg 1970, pp. 43-4; Frölich 1972, p. 56; Howard and King 1989, p. 79.

⁵⁷³ Luxemburg 1970, p. 43; Frölich 1972, p. 56; Cliff 1959, p. 19.

⁵⁷⁴ Luxemburg 1970, p. 44; Schmidt 2013, p. 4.

increasing.⁵⁷⁵ There, greater cartelization is leading to greater competition and anarchy of production, as well as falling prices and profits.⁵⁷⁶ Moreover, monopoly firms are also able to preserve their rates of profit and to manage the contradiction between production and the market by restraining their investment and/or their production levels.⁵⁷⁷ While this argument had been used by some to demonstrate that cartels can have the effect of mitigating crisis tendencies, Luxemburg makes the case that such restraint in investment and production is actually no different from the effects that a crisis itself would have.⁵⁷⁸ In both cases, capital lies dormant, incapable of being valorized.

Another factor that Bernstein cites in the mitigation of capitalism's crisis tendencies is the extension of the credit system. The effect of credit, says Bernstein, is to help smooth over the contradiction between the forces of production and the capacity for realization by providing additional buying power to those individuals and organizations that seek to purchase more, but had previously lacked the means to do so. For Luxemburg, credit has the opposite effect: it does not resolve the contradiction between the powers of production and realization, but in fact serves to exacerbate it.⁵⁷⁹ This is because credit gives the impression that the market is larger than it actually is. By doing this, it causes the producers to invest in the even greater expansion of their production.⁵⁸⁰ But this illusion of greater demand is just that: when debtors must pay back the borrowed sums, they do so through a

⁵⁷⁵ Luxemburg 1970, p. 45; Cliff 1959, p. 19.

⁵⁷⁶ Luxemburg 1970, p. 44-5; Howard and King 1989, p. 79; Schmidt 2013, p. 4.

⁵⁷⁷ Luxemburg 1970, p. 44; Frölich 1972, p. 56; Schmidt 2013, p. 4.

⁵⁷⁸ Luxemburg 1970, p. 44; Frölich 1972, p. 56; Schmidt 2013, p. 4.

⁵⁷⁹ Luxemburg 1970, pp. 42-3; Howard and King 1989, p. 79; Nettl 1966, p. 208; Frölich 1972, p. 55; Cliff 1959, p. 20.

⁵⁸⁰ Luxemburg 1970, pp. 42-3; Frölich 1972, p. 55; Cliff 1959, p. 20; Howard and King 1989, p. 79.

reduction in their current or future consumption. This causes the now even-greater disparity between production and consumption to be revealed once more.

Moreover, as soon as this takes place and the economy suffers a crisis, credit is immediately withdrawn precisely when the addition that it can make to buying power is most needed. This means that the crisis is made more sudden and serious than it would have been otherwise.⁵⁸¹

Far from mitigating the crisis tendencies, therefore, for Luxemburg, cartelization and the extension of the credit system serve to exacerbate them. But besides seeking to demonstrate that the factors which Bernstein claimed were abating crisis tendencies were actually having the opposite effect, Luxemburg also sought to refute revisionist theory by denying that society's political contradictions were decreasing. This was another line of argumentation that Luxemburg used to support her claim that socialist revolution was more plausible than Bernstein had believed.

Cartelization was serving to increase class antagonisms. Luxemburg believed that Bernstein was wrong to think that cartelization was not increasing in the economy as a whole. While it was true that the absorption and destruction of some small capitals at the hands of some larger firms was usually accompanied by the creation of new small firms elsewhere, overall, the number of small firms was diminishing.⁵⁸² This was bound to cause an increase in the political contradictions.⁵⁸³ Not only were there fewer capitalists and more workers as a

⁵⁸¹ Luxemburg 1970, p. 42; Howard and King 1989, p. 79; Frölich 1972, p. 55; Cliff 1959, p. 20.

⁵⁸² Luxemburg 1970, p. 47.

⁵⁸³ Luxemburg 1970, p. 45; Frölich 1972, p. 55; Cliff 1959, p. 19.

result of cartelization:⁵⁸⁴ larger firms with their increased productivity also implied a greater level of control over workers, as well as their greater exploitation.⁵⁸⁵

Another factor that Bernstein had adduced against the increase in class antagonism was the increase of share holding which permitted the existing capitals to be owned by more people, including workers. Luxemburg does not deny that an increase in stock holding is occurring; however, she rejects the argument that this could serve to defuse the political contradictions that exist between capitalists and workers. For Luxemburg the real site of class antagonism is the realm of production. Workers owning a small portion of a firm and thus nominally becoming part of the capitalist class does not change their status as workers in the labour process and their subjugation to and exploitation by capital in the workplace.⁵⁸⁶

In order to reaffirm, therefore, the classical Marxist conception of social change which underpinned the socialist movement's revolutionary strategy, Luxemburg fought hard to discredit revisionist theory in its repudiation of the necessity of economic collapse. She staked out this claim first in her book *Social Reform or Revolution?* and then in a number of subsequent articles and addresses to party congresses. Then, in 1913, in *The Accumulation of Capital*, Luxemburg again presented an argument for the inevitability of economic collapse and the necessity of socialist revolution. This time, she argued that collapse took place because while capitalism required external markets to function, it would unavoidably run out of these at some point in the future. Though this work came somewhat after the first

⁵⁸⁴ Luxemburg 1970, p. 43.

⁵⁸⁵ Luxemburg 1970, p. 45; Cliff 1959, p. 19.

⁵⁸⁶ Luxemburg 1970, p. 65.

round of the revisionist debate described above, which can be said to have all but ended by 1904,⁵⁸⁷ it was not surprising that Luxemburg's perspective on this matter should have remained the same. Luxemburg had not renounced her commitment to the revolutionary strategy in the intervening years.⁵⁸⁸ If anything, she had grown more militant in this respect. She would therefore have had interest in continuing to propound the theory of inevitable collapse on which the necessity of revolution rested. In addition, though the battle against revisionism within the SPD had officially been won, reformist tendencies persisted within the party.⁵⁸⁹ As a result, a reiteration of the argument against the revisionist theory which supported this political strategy would not have been out of place.

Luxemburg against Revisionism: Round Two

In the first round of the battle against revisionism, Luxemburg prevailed, at least ostensibly.⁵⁹⁰ Attempts to modify the official Marxian orthodoxy of the party were consistently in the minority.⁵⁹¹ At the party congresses of 1901 and 1903, the SPD officially condemned revisionism and reaffirmed its commitment to the orthodox Marxist view of social change and to the revolutionary strategy.⁵⁹² However, as mentioned, despite this official rejection of the doctrine by the party, the revisionist tendency nevertheless persisted within the SPD.⁵⁹³

⁵⁸⁷ Nettl 1966, p. 203.

⁵⁸⁸ Waters 1970, p. 10; Looker 1972, pp. 10-11.

⁵⁸⁹ Howard and King 1989, p. 86; Tudor 1988, pp. 31-2; Waters 1970, p. 35; Looker 1972, p. 36; Nettl 1966, pp. 203, 245.

⁵⁹⁰ Looker 1972, p. 20; Nettl 1966, p. 196.

⁵⁹¹ Howard and King 1989, p. 85; Tudor 1988, p. 31; Tudor 1993, p. xxxv; Nettl 1966, pp. 185, 228.

⁵⁹² Waters 1970, p. 35; Tudor 1993, p. xxxv; Nettl 1966, pp. 185, 196, 245.

⁵⁹³ Howard and King 1989, p. 86; Nettl 1966, p. 245; Waters 1970, p. 35; Looker 1972, p. 32; Mattick 2009, p. 92; Sweezy 1967, p. 480.

But a change in historical circumstances began to put pressure on SPD reformism from about 1907.⁵⁹⁴ This was the crescendo of capitalist imperialism and the beginning of the run-up to the imperialistic world war which could already have been glimpsed from an early date.⁵⁹⁵ These developments created a difficult dilemma for the party's reformers. In a period in which both government policy and public opinion were becoming increasingly nationalistic and imperialistic,⁵⁹⁶ the reform-minded within the SPD faced the choice to either go along with this new rightward turn, or to condemn it and risk jeopardizing the success of the reformist strategy.⁵⁹⁷

The debate over the question of how to respond to the growing phenomenon of imperialism actually caused the fracture of the SPD into three camps by 1911.⁵⁹⁸ On the right wing were the reformers who also favoured imperialism and supported the government in its march to war.⁵⁹⁹ On the left of the party were Luxemburg and those who not only opposed imperialism and war, but who also called for the immediate revolutionary overthrow of capitalism as a response to these developments.⁶⁰⁰ The middle ground between these two wings was occupied by Kautsky and others who, while they rejected imperialism and war, nevertheless

⁵⁹⁴ Howard and King 1989, pp. 103, 106; Day and Gaido 2012, pp. 23, 32-3; Nettl 1966, p. 377.

⁵⁹⁵ Waters 1970, p. 250.

⁵⁹⁶ Howard and King 1989, p. 103; Day and Gaido 2012, pp. 23-4, 44-5; Nettl 1966, p. 377; Frölich 1972, p. 173; Looker 1972, p. 39; Waters 1970, p. 250.

⁵⁹⁷ Frölich 1972, p. 173; Looker 1972, pp. 33-4; Waters 1970, p. 250.

⁵⁹⁸ Day and Gaido 2012, p. 62; Frölich 1972, p. 173; Cliff 1959, p. 15.

⁵⁹⁹ Howard and King 1989, pp. 92, 269; Day and Gaido 2012, pp. 24, 33; Frölich 1972, pp. 166, 173; Cliff 1959, p. 15; Goode 1983, p. 74.

⁶⁰⁰ Howard and King 1989, pp. 103, 106; Day and Gaido 2012, p. 66; Frölich 1972, pp. 169, 173; Cliff 1959, pp. 15, 33-4; Goode 1983, p. 74.

attempted to do so without abandoning their reformist political strategy.⁶⁰¹ In order to make such a position tenable, individuals in this group argued that imperialism and war were not only ancillary and non-essential to capitalism's basic functioning, but also had become actually inimical to it.⁶⁰² As such, it should be possible to eliminate these features of capitalism without affecting the fundamental economic structure and to do so by convincing the capitalist class that such a change was in their best interest.⁶⁰³ I will now examine this argument, as it was advanced by Kautsky, in greater detail.

For Kautsky, there is no doubt that capitalism requires some form of expansion.⁶⁰⁴ This is basic to its nature. The reason for this resides in the differential levels of productivity which exist between manufacturing and agriculture. Productivity in the former develops far faster than in the latter.⁶⁰⁵ As a result of this, there is a natural tendency in closed economies for the development of a shortage of raw materials and a surplus of manufactured goods.⁶⁰⁶ A capitalist unit therefore always requires new territories into which to expand.⁶⁰⁷ These territories are what supply it with the additional raw materials that it requires, while absorbing the

⁶⁰¹ Howard and King 1989, pp. 106, 122; Day and Gaido 2012, pp. 62, 213, 792; Frölich 1972, p. 165, 173; Cliff 1959, pp. 15, 34; Looker 1972, p. 10; Goode 1983, p. 74.

⁶⁰² Kautsky 2012b, p. 772; Luxemburg 2012e, p. 854; Howard and King 1989, p. 102; Day and Gaido 2012, pp. 16, 65-6, 755; Cliff 1959, p. 34; Frölich 1972, p. 165; Looker 1972, p. 32; Goode 1983, p. 74.

⁶⁰³ Kautsky 2012b, pp. 772-73; Luxemburg 2012e, pp. 855-56; Howard and King 1989, pp. 102, 122; Day and Gaido 2012, pp. 64-6, 792; Cliff 1959, p. 34; Frölich 1972, p. 165.

⁶⁰⁴ Kautsky 2012b, pp. 768, 771; Kautsky 2012c, pp. 810-11; Luxemburg 2012e, p. 853; Howard and King 1989, pp. 92, 103, 123; Day and Gaido 2012, p. 755.

⁶⁰⁵ Kautsky 2012b, pp. 762, 768; Day and Gaido 2012, p. 754.

⁶⁰⁶ Kautsky 2012b, p. 768; Howard and King 1989, p. 122.

⁶⁰⁷ Kautsky 2012b, pp. 758, 768, 771; Howard and King 1989, pp. 102, 122; Day and Gaido 2012, pp. 39, 754-55.

surplus of manufactured goods which it produces relative to its own internal market.⁶⁰⁸

Despite this natural need for capitalism to expand, nothing requires this expansion take the form of imperialism.⁶⁰⁹ For Kautsky, imperialism is a very specific historical phenomenon that emerges at a given stage in capitalism's development.⁶¹⁰ Prior to this most recent history, however, capitalism for a long time used other means to meet its expansionary needs. When England was the foremost industrial power, it gained access to raw material and to markets for its own products through free trade with other nations.⁶¹¹ This led over time to the development of colonialism in order for it to be better able to control these markets.⁶¹² But colonialism and the export of finished goods and means of production to the colonies also naturally fomented the economic development of these, which began to seek to produce their own finished goods and required their own additional raw material inputs.⁶¹³ It is at this point that imperialism begins to be used by the colonizing country, as a way of delaying the development of the colonies and the advent of their competition with the older industrialized nation.⁶¹⁴ At the same time, other industrial powers the world over had been developing. These began searching out their own agricultural territories to expand into.⁶¹⁵ Imperialism was therefore a means for the older developed nations to exclude the

⁶⁰⁸ Kautsky 2012b, p. 769; Howard and King 1989, pp. 92-3, 123; Day and Gaido 2012, pp. 39, 754-55.

⁶⁰⁹ Kautsky 2012b, p. 768; Kautsky 2012c, p. 810-11; Luxemburg 2012e, pp. 853-54; Howard and King 1989, pp. 103, 123; Day and Gaido 2012, pp. 66, 754-55; Frölich 1972, p. 165.

⁶¹⁰ Kautsky 1983, p. 90; Kautsky 2012b, pp. 757-58, 769.

⁶¹¹ Kautsky 2012b, p. 769.

⁶¹² Kautsky 2012b, p. 770; Day and Gaido 2012, pp. 754, 791-92.

⁶¹³ Kautsky 1983, p. 76; Kautsky 2012b, pp. 769, 771; Howard and King 1989, pp. 94, 102, 122-23.

⁶¹⁴ Kautsky 1975, p. 24; Kautsky 2012b, p. 771; Howard and King 1989, pp. 122-23.

⁶¹⁵ Kautsky 2012b, pp. 769-70.

upstarts from their own territorial possessions.⁶¹⁶ It is at this point that war becomes a possible outgrowth of imperialism, as each developed nation scrambles to secure its own undeveloped territories and clashes with the interests of other developed nations in the process.⁶¹⁷

For Kautsky, the existence of this historical process is a demonstration of the fact that capitalism is quite capable of surviving without imperialism in its current form, by channelling its need for expansion into a number of other possible outlets.⁶¹⁸ But if contemporary imperialism was to be replaced, what was the nature of the new form of expansion which could take its place? At one point, Kautsky suggests a return to a regime of global free trade.⁶¹⁹ Later, he advances another suggestion, which consists of a new type of imperialism.⁶²⁰ This form of imperialism, however, differs from the current one in having been divested of its most bellicose aspects.⁶²¹ This is Kautsky's concept of 'ultra-imperialism'.⁶²² It is based on Hilferding's notion of the 'general cartel'.⁶²³ It consists essentially of an agreement between the European powers, not to give up on imperialism, but to abandon their rivalries over territories and instead to cooperate in the joint exploitation of the

⁶¹⁶ Kautsky 2012b, pp. 769-70; Day and Gaido 2012, p. 39.

⁶¹⁷ Kautsky 2012b, pp. 771-72; Howard and King 1989, p. 94; Day and Gaido 2012, p. 39.

⁶¹⁸ Kautsky 2012b, p. 773; Kautsky 2012c, p. 811; Luxemburg 2012e, pp. 853-54; Day and Gaido 2012, p. 754.

⁶¹⁹ Kautsky 2012c, pp. 842-43; Luxemburg 2012e, pp. 856-57; Howard and King 1989, pp. 93-4; Day and Gaido 2012, pp. 16, 18, 792; Frölich 1972, p. 165.

⁶²⁰ Day and Gaido 2012, p. 66.

⁶²¹ Kautsky 2012b, p. 773; Howard and King 1989, p. 123; Day and Gaido 2012, p. 66.

⁶²² Kautsky 2012b, p. 774; Howard and King 1989, p. 123; Day and Gaido 2012, pp. 58, 754; Schmidt 2012a, p. 340.

⁶²³ Day and Gaido 2012, pp. 58, 66, 754; Schmidt 2012a, p. 340.

world's remaining underdeveloped areas.⁶²⁴ Such an agreement would forever put an end to the prospect of wars between the main European nations.⁶²⁵

Kautsky believed that not only could such a shift to a different mode of imperialism be effectuated without disturbing the workings of the capitalist system in any substantial way, but also that is one that the capitalist class could be made to undertake willingly. The reason for this is that, in the final analysis, the current regime of imperialism and the wars that it entails are not in the best interest of the majority of the capitalist class. Granted, a small number of individual capitalists do indeed benefit from these phenomena. These are primarily arms manufacturers and the financiers who back them, in addition to a small number of government functionaries and state pensioners.⁶²⁶ Taken as a whole however, the capitalist class is hurt rather than helped by imperialistic and militaristic policies.⁶²⁷ This is the result of the taxes which are levied on them to finance these policies.⁶²⁸ Moreover, imperialism and war tend to provoke opposition on the part of the working class, something which risks undermining the state of national class compromise.⁶²⁹ Kautsky believed that the capitalist class can be made to realize this reality and that as a consequence, imperialism in its current form could be done away with, and the

⁶²⁴ Kautsky 2012b, p. 773; Howard and King 1989, p. 124; Day and Gaido 2012, pp. 58, 66, 754-55; Albo 2016, p. 30.

⁶²⁵ Day and Gaido 2012, pp. 58, 64, 442.

⁶²⁶ Kautsky 1983, p. 65; Kautsky 2012a, p. 475; Kautsky 2012b, p. 772; Howard and King 1989, pp. 93-4, 123; Day and Gaido 2012, pp. 18, 40, 65; Frölich 1972, p. 165; Cliff 1959, p. 34.

⁶²⁷ Kautsky 2012a, p. 475; Kautsky 2012b, p. 772; Howard and King 1989, pp. 93, 123; Day and Gaido 2012, pp. 40, 65; Frölich 1972, p. 165; Cliff 1959, p. 34; Goode 1983, p. 74.

⁶²⁸ Kautsky 1983, pp. 65, 79; Kautsky 2012a, p. 475; Kautsky 2012b, p. 772; Howard and King 1989, p. 123; Day and Gaido 2012, pp. 40, 65, 67; Frölich 1972, p. 165; Cliff 1959, p. 34.

⁶²⁹ Kautsky 1983, p. 65; Kautsky 2012a, p. 475; Kautsky 2012b, p. 772; Howard and King 1989, p. 123.

threatening world war avoided, through voluntary legislative means such as the signing of arms control and peace and cooperation agreements.⁶³⁰

Luxemburg opposed both streams of revisionism within the SPD.⁶³¹

However, it is primarily as a response to Kautsky's brand of anti-imperialist reformism that her argument for the necessity of imperialism for capitalism emerges.⁶³² If Luxemburg were able to make the case that imperialism and its inevitable wars are not ancillary to capitalism, but essential elements which the capitalist system relies on for its very survival,⁶³³ she would then be able to argue for the impossibility of eliminating these phenomena within the existing capitalist framework.⁶³⁴ Kautsky's strategy for reforming away imperialism and war would therefore fall to the ground.⁶³⁵ Capitalists could never be convinced to renounce imperialism voluntarily. This is because the latter is in their best interest and they know it.⁶³⁶ Instead, the only way to eliminate imperialism and to avoid the world war would be to do away with the capitalist system itself, which gave rise to these phenomena in the first place, and to replace it with socialism.⁶³⁷ Moreover, the egregious nature of current imperialism and the immanent nature of the world war would preclude the more cautious, gradual transformation of the system advocated

⁶³⁰ Luxemburg 2012e, p. 856; Howard and King 1989, pp. 102-03, 122-24; Day and Gaido 2012, pp. 16, 61-2, 64, 792; Frölich 1972, p. 165; Cliff 1959, p. 34.

⁶³¹ Waters 1970, p. 250; Looker 1972, p. 10.

⁶³² Luxemburg 1972a, p. 148; Howard and King 1989, pp. 106-07, 114; Day and Gaido 2012, pp. 64-5; Cliff 1959, pp. 34-5.

⁶³³ Luxemburg 1970, p. 324; Luxemburg 2012c, p. 470; Howard and King 1989, pp. 107, 110; Day and Gaido 2012, pp. 21, 65; Nettl 1966, pp. 528, 536; Frölich 1972, p. 167.

⁶³⁴ Luxemburg 1970, pp. 324, 328-29; Howard and King 1989, p. 107; Frölich 1972, p. 167; Cliff 1959, p. 35.

⁶³⁵ Luxemburg 1970, pp. 324, 329; Luxemburg 1972b, pp. 267-68; Howard and King 1989, pp. 106-07, 114; Day and Gaido 2012, pp. 64-5; Nettl 1966, p. 528; Frölich 1972, p. 167.

⁶³⁶ Luxemburg 2012a, p. 451; Luxemburg 2012d, p. 482.

⁶³⁷ Luxemburg 1970, pp. 269, 323, 328; Luxemburg 1972b, pp. 268-69; Howard and King 1989, pp. 106-07; Nettl 1966, p. 400; Frölich 1972, pp. 167, 211, 230; Cliff 1959, pp. 34, 37.

by the reformers.⁶³⁸ What would be required instead would be the immediate replacement of capitalism by socialism through revolutionary action. In this way, the argument for the necessity of imperialism for capitalism provides Luxemburg with a powerful rhetorical tool for, on the one hand, channelling the opposition to imperialism and war, both within the SPD and outside of it, into opposition to the capitalist system, while, on the other, making sure that anti-capitalist sentiment is expressed as support for the revolutionary strategy.⁶³⁹

This argument for the necessity of revolutionary action in order to eliminate imperialism and avoid war, as a result of the necessity of imperialism for capitalism, is one that Luxemburg makes over and over again in political writings such as the *Junius Pamphlet*. In *The Accumulation of Capital*, she gives herself the task of developing a more rigorous theoretical justification of this position by proving in greater detail the necessity of imperialism for capitalism.⁶⁴⁰

While, as I mentioned, Luxemburg was able to triumph in the first round of the battle against revisionism, in this second round, which took place over the question of imperialism and war, she was not so fortunate.⁶⁴¹ It is true that at an early date, at the Stuttgart Congress of 1907, the SPD voted to oppose war with a strategy of revolutionary action.⁶⁴² However, as time wore on and the forces of war gathered, such opposition grew more tepid.⁶⁴³ Finally, by the time of the arrival of the start of the war in 1914, the SPD not only ceased to endorse a strategy of

⁶³⁸ Fetscher 1972, p. 308.

⁶³⁹ Luxemburg 2012a, pp. 445-47, 451-52; Luxemburg 2012b, p. 463; Luxemburg 2012c, p. 470; Nettl 1966, pp. 397, 536; Fetscher 1972, p. 308.

⁶⁴⁰ Howard and King 1989, pp. 106-07, 110, 114; Nettl 1966, p. 531; Hudis 2014, p. 1.

⁶⁴¹ Looker 1972, pp. 10, 33.

⁶⁴² Day and Gaido 2012, p. 32; Cliff 1959, pp. 33-4; Nettl 1966, p. 401; Cliff 1959, p. 34.

⁶⁴³ Day and Gaido 2012, pp. 62, 67, 77; Frölich 1972, p. 173; Looker 1972, pp. 33-4; Waters 1970, p. 250.

revolutionary opposition, but in fact voted in the Reichstag with near unanimity (minus one delegate) to support Germany's war effort.⁶⁴⁴ The SPD had fallen completely into the hands of the imperialist reformists and, in the view of Luxemburg and her allies, had committed moral suicide thereby.⁶⁴⁵ Nothing was left but for Luxemburg, along with Liebknecht, that one dissenting delegate, to found the Spartakus League to fight for revolutionary socialism against the war and imperialism.⁶⁴⁶ But these two individuals were by this point nothing but voices in the wilderness, who, a short time thereafter, would both become martyrs for their political commitments.⁶⁴⁷

2. The Historical Context of Kalecki's Theory

I now move on to an attempt to explain the development of Kalecki's theory, and its divergence from that of Luxemburg, with reference to the historical context out of which it emerged. At the outset, once again, it is useful to specify to which particular elements within Kalecki's theory we are seeking an explanation in this way. Clearly, since my end goal is to better understand why Kalecki's theory diverged from that of Luxemburg, the elements of the theory which I choose to focus on must be taken from among those which break with Luxemburg's thought. To briefly recap, these are: investment in a SCCE is not impossible; because of this, SCCR is not impossible; even if investment and therefore reproduction does not take place to an optimal levels, the economy will still not collapse, but will instead

⁶⁴⁴ Day and Gaido 2012, p. 76; Cliff 1959, pp. 16, 33; Waters 1970, pp. 257-58; Trincado 2004, p. 259.

⁶⁴⁵ Luxemburg 1970, pp. 328, 331; Frölich 1972, p. 205; Looker 1972, pp. 11, 34, 40; Waters 1970, pp. 35, 257.

⁶⁴⁶ Luxemburg 1972b, pp. 269-70; Howard and King 1989, p. 269; Frölich 1972, pp. 205, 207; Cliff 1959, p. 16; Looker 1972, p. 10; Waters 1970, p. 258; Trincado 2004, p. 259.

⁶⁴⁷ Howard and King 1989, p. 269; Cliff 1959, pp. 17-18; Looker 1972, pp. 10-11; Trincado 2004, p. 260.

stagnate; and finally, 'exogenous factors', including imperialism, are not essential for the capitalist system to be able to function at all.

Of these arguments, in what follows, I will concentrate on finding an explanation in the historical context to Kalecki's repudiation of the necessity of capitalist collapse. The reason for this is that this argument not only constitutes a departure from Luxemburg's thought but also forms part of a larger cluster of ideas which as a whole serve to signal Kalecki's departure from the classical Marxian paradigm and his greater rapprochement with neoclassical and, to a greater extent, Keynesian thought. As a result of this, if I am able to uncover, in the historical context, the reasons which would have served to position Kalecki somewhere between the classical Marxist and neoclassical and Keynesian systems in this way, I would also have been able to determine some of the reasons why Kalecki's theory diverged from that of Luxemburg in at least this respect.

Based on the previous section, it should already be clear why Kalecki's repudiation of the necessity of collapse should constitute a departure from classical Marxian thought. There, I described how faith in the inevitability of capitalist collapse was an essential element in the orthodox Marxian view of social change and of the transition to socialism. I mentioned how adherents to the dialectical-materialist view believed that social change from one mode of production could only take place when a given mode of production was rendered unworkable any longer by the building up of its own internal contradictions. Only at this point would a new, more advanced, mode of production be able to emerge. This is also what would lead to the transition from capitalism to socialism. Moreover, it was the certainty that

such a collapse would occur for in the case of capitalism which would give the workers the impetus to wage the socialist revolution when the time was right. As a result of this view therefore, any argument against the necessity of capitalist collapse would constitute an argument for the impossibility of socialism, something which would cut completely against the grain of classical Marxian orthodoxy.

At the same time as it represents a departure from classical Marxian thought, Kalecki's repudiation of the necessity of economic collapse also represents his approximation to both neoclassical and Keynesian thought. First, neoclassical contemporaries of Kalecki subscribed to Say's law,⁶⁴⁸ which states that any level of production is capable of generating its own equivalent demand⁶⁴⁹ since commodities, once sold, are immediately and automatically converted into a quantity of sales of an equivalent value.⁶⁵⁰ As a result, any shortfall in demand or employment is but a temporary aberration caused by an artificial imperfection in the market.⁶⁵¹ If these can be properly remedied then the market should be able to act in its natural, self-clearing way, using flexible prices and wages to bring supply and demand into line with each other.⁶⁵² For economists of this persuasion, therefore, capitalism usually produced, on its own, optimal outcomes.⁶⁵³ Left to itself, a capitalist economy tended towards an equilibrium at which demand, output, employment and incomes were all as high as they could be.⁶⁵⁴ This description of

⁶⁴⁸ Feiwel 1975, p. 30; Kriesler 2016, pp. 83, 95.

⁶⁴⁹ Feiwel 1975, p. 29; Feiwel 1972, p. 9.

⁶⁵⁰ Feiwel 1975, p. 10; Robinson 1980, pp. 184-85; Kriesler 2016, p. 83.

⁶⁵¹ Feiwel 1975, p. 29; Feiwel 1972, p. 9; Robinson 1980, p. 184; Kriesler 2016, p. 95.

⁶⁵² Feiwel 1975, pp. 29-30; Feiwel 1972, p. 9; Robinson 1980, p. 184; Kriesler 2016, p. 83; King 2002, p. 46.

⁶⁵³ Feiwel 1975, p. 29; Feiwel 1972, p. 9; Toporowski 2004, p. 215; King 2002, p. 46.

⁶⁵⁴ Feiwel 1975, p. 30; Feiwel 1972, p. 9.

the neoclassical worldview will be useful in what follows. For now, we can simply take from it that neoclassical would have no reason to believe that capitalism would be prone to collapse, let alone that this was, as the Marxists believed, a necessary outcome. For their part, Keynesians challenged this vision of the capitalist economy offered by the neoclassical thinkers.⁶⁵⁵ But though they did not believe that the natural tendency of capitalism was towards optimal functioning, they still did not believe that collapse would be the consequence of an unmanaged capitalist economy. Rather, this would be a state of stagnation, where employment, incomes and output were all lower than they could be.⁶⁵⁶

This 'cluster' of ideas which, as I have mentioned, positions Kalecki's theory at some distance from classical Marxian thought and approximates it to the neoclassical and Keynesian perspectives, contains additional elements besides the repudiation of the necessity of capitalist collapse. Kalecki has often been criticized by Marxists on similar grounds as Keynes has, for arguing that capitalism can be made to function in something resembling optimal fashion.⁶⁵⁷ It is debatable whether Kalecki actually advanced such a conclusion. Indeed, much space is taken up in Kalecki's writings in expounding the various barriers which could prevent the optimal functioning of the capitalist economy, as represented by full employment, from ever being reached in any sustained way.⁶⁵⁸ Despite Kalecki's reservation

⁶⁵⁵ Robinson 1966, pp. 335-37; Kriesler 2016, pp. 81, 83-4, 95; Howard and King 1992, pp. 95, 101; Kowalik 1966a, pp. 3-4.

⁶⁵⁶ Feiwel 1975, p. 32; Sawyer 1985, pp. 199-200; Robinson 1980, p. 185; Kriesler 2016, pp. 81, 89, 94; Kowalik 1966a, pp. 3-4.

⁶⁵⁷ Feiwel 1975, p. 52; King 2002, pp. 224-25; Howard and King 1992, p. 91; Lopez and Assous 2010, pp. 199-200.

⁶⁵⁸ See the appendix to this work for my discussion of Kalecki's position on the possibility of attaining full employment.

concerning the attainment of capitalism's optimal functioning, there is no doubt that Kalecki believed that capitalism could be made, through various policy interventions, to improve its functioning. This has already been mentioned in the previous chapter, in my treatment of Kalecki's conception of the 'exogenous' factors. Moreover, for reasons that I shall explain shortly, Kalecki also argued that such improvement in capitalism's function is something which policy-makers ought to target.⁶⁵⁹

As their criticism of him on such grounds suggests, these elements in Kalecki's thought are ones which Marxists find objectionable, just as Luxemburg would have in her day. Marxists believe that capitalism is so riven through with contradictions (which, because they are latent in its most basic architecture, can never be removed from the economic system), that capitalism can never be made to function in anything approaching optimal fashion.⁶⁶⁰ As a result, instead of trying to reform the capitalist system, the time and energy spent on this endeavour could be better employed in trying to overthrow capitalism and replace it with an entirely new mode of economic organization.⁶⁶¹

These arguments made by Kalecki, that capitalism can be made to improve its functioning, and maybe even to function optimally, and that such an outcome is one that should be targeted by policy-makers, is one that is more akin to the position taken by the neoclassical economists, although admittedly the correspondence with these is far from exact. As mentioned above, neoclassical

⁶⁵⁹ Kalecki 1990, p. 356; Foster 2013, pp. 8-9; Henley 1999, p. 520; Feiwel 1975, p. 230.

⁶⁶⁰ Feiwel 1975, pp. 50, 52; King 2002, p. 224; Howard and King 1992, pp. 91, 102; Lopez and Assous 2010, p. 200; Kowalik 2004, p. 43; Halevi 2016a, p. 139.

⁶⁶¹ Feiwel 1975, p. 50; Toporowski 2004, p. 215.

thinkers believed that capitalism is capable of producing optimal outcomes.

However, these also believed that this would be best achieved, not by policy-makers intervening in the economy, but rather by rolling back all elements of economic policy management in order to let the market operate unhindered.⁶⁶²

The position taken by Kalecki as a result of the above arguments most closely resembles that of the Keynesians. These do indeed believe that capitalism can be made to improve its outcomes, and possibly even to function optimally.⁶⁶³ Keynes spent a good deal of his career explaining how this could be done.⁶⁶⁴ He also advocated, like Kalecki, that this is something which policy-makers ought to attempt.⁶⁶⁵ In this regard, Keynes was motivated by the desire to quell the discontent with the capitalist system on the part of the masses and to pre-empt dissent and political action intending to replace capitalism with socialism.⁶⁶⁶

The elements among those in Kalecki's theory which diverge from Luxemburg's thought and to which I shall attempt to find an explanation with reference to the historical context out of which they emerged are therefore also those elements which serve to distance Kalecki not only from Luxemburg, but also from classical Marxism, and to position him in greater proximity to the neoclassical and Keynesian systems. These elements include Kalecki's arguments against the necessity of capitalist collapse, for the possibility of improving capitalism's functioning through policy interventions, perhaps even to the point of making it

⁶⁶² Feiwel 1975, p. 29; Robinson 1980, p. 184.

⁶⁶³ Feiwel 1975, pp. 49-50; Feiwel 1972, pp. 11-2; Sawyer 1985, p. 202; Robinson 1980, p. 185; Kriesler 2016, p. 81; Toporowski 1999, p. 355.

⁶⁶⁴ Robinson 1966, p. 340.

⁶⁶⁵ Feiwel 1975, pp. 28, 33, 49-50; Feiwel 1972, p. 11-2; Sawyer 1985, p. 200, 202; Kowalik 1966a, p. 4.

⁶⁶⁶ Feiwel 1975, pp. 49-50; Sawyer 1985, p. 200; Howard and King 1992, p. 101; King 2002, p. 52.

function optimally, and for the desirability of having policy-makers target such a goal.

I will now examine the factors within the historical context in which Kalecki operated which would have given rise to such arguments. In this, my treatment of the background to the development of Kalecki's theory in this section differs from my treatment of the background to Luxemburg's theory in the previous section. While in the latter, I investigated only the political background to the development of Luxemburg's theory, here, in addition, I also examine empirical, personal, as well as political factors which likely would have given rise to these particular elements in Kalecki's theory. I treat these in their corresponding subsections below.

Empirical Factors

As far as the larger empirical context in which Kalecki lived, the Great Depression of the 1930s was the seminal event shaping Kalecki's outlook on the economy, just as it would have been for all of his contemporaries.⁶⁶⁷ For Kalecki, as well as for Keynes, the Depression would have imparted the lesson that the perfect equilibrium described by the neoclassical economists was not the way in which capitalist economies tended to function.⁶⁶⁸ Instead, the Depression would have revealed the deep level of crisis into which the capitalist economy was prone to falling, and out of which it could not easily extricate itself.⁶⁶⁹

⁶⁶⁷ Feiwel 1975, pp. viii, 62; Sawyer 1985, p. 189; Robinson 1980, p. 184; Kriesler and McFarlane 2016, p. 109.

⁶⁶⁸ Robinson 1980, p. 184.

⁶⁶⁹ Feiwel 1975, p. 62; Sawyer 1985, p. 189; Robinson 1980, pp. 184-85; Halevi 2016a, p. 134.

Living in Poland at the time, Kalecki would have felt the effects of the Great Depression more acutely than many of his Western European contemporaries. This is because the Depression hit harder in Poland than in many places.⁶⁷⁰ The country relied in large part for its economic wellbeing on exports to the US market. When this demand dried up as a result of the crisis, Poland's economy was deeply affected.⁶⁷¹ Thus, Kalecki had a personal experience of the Great Depression and its effects.⁶⁷²

But if the Great Depression was a point of profound crisis for the capitalist system, during which time it may have seemed as if the capitalist economy was on the verge of collapsing, this did not ultimately happen.⁶⁷³ Instead of breaking down, Western capitalism became trapped in state wherein high levels of unemployment and unused productive capacity existed side by side with a level of output and incomes that were lower than they were ultimately capable of being.⁶⁷⁴ In short, the crisis showed, especially in retrospect, that ongoing stagnation was the default state to which unmanaged capitalism tended, not collapse. It is therefore perhaps partially as result of the empirical evidence of the Great Depression that Kalecki concluded that Luxemburg's predictions concerning the inevitability of capitalist collapse as a result of the decline of imperialism have not been borne out by the events of the 20th century.⁶⁷⁵

⁶⁷⁰ Feiwel 1975, p. viii; Toporowski 2013a, pp. 26, 43.

⁶⁷¹ Toporowski 2013a, p. 26.

⁶⁷² Feiwel 1975, p. 47; Lopez and Assous 2010, p. 192.

⁶⁷³ Feiwel 1975, p. 232.

⁶⁷⁴ Sawyer 1985, p. 189; Robinson 1980, pp. 184-85; Halevi 2016a, p. 134; Kriesler and McFarlane 2016, p. 109.

⁶⁷⁵ Kalecki and Kowalik 1991, p. 471.

If the Great Depression showed that capitalism is prone to stagnation, the historical period which followed it would have served to demonstrate to Kalecki and to others that, through various types of policy interventions, capitalism's functioning could be improved, even to the point of achieving optimal functioning symbolized by the attainment of full employment.⁶⁷⁶ The phases in Western economic history which followed on the heels of the Depression, the Second World War and the post-war period, were ones in which extraordinary growth was enjoyed. What made such growth possible was government spending, much of it deficit-funded,⁶⁷⁷ as well as private spending on technological innovation.⁶⁷⁸ Although Kalecki was clear that full employment was never actually achieved in these periods,⁶⁷⁹ this was only the result of the levels of government intervention never having been large enough⁶⁸⁰ and having been too intermittent.⁶⁸¹ But the pattern of the interventions and their economic effects conformed to Kalecki's predictions. When spending levels were higher, high levels of growth in employment, output and incomes were the consequence.⁶⁸² And when the spending fell off, so did these economic indicators.⁶⁸³ It is primarily as a result of the historical record of the US in the post-war period, especially the in 1960s, that Kalecki concludes, right at the very end of his career, that indeed capitalism can be made to

⁶⁷⁶ Feiwel 1975, p. 195; Sawyer 1985, p. 202; Lopez and Assous 2010, p. 204.

⁶⁷⁷ Kalecki 1991, p. 396; Halevi 2016a, p. 139.

⁶⁷⁸ Kalecki 1972b, p. 86; Kalecki 1991, pp. 371, 391.

⁶⁷⁹ Kalecki 1991, pp. 387, 397, 400.

⁶⁸⁰ Kalecki 1991, p. 393.

⁶⁸¹ Kalecki's entire analysis of US business cycles in his essay "The Economic Situation in the USA, 1956-1961" (Kalecki 1991, pp. 386-401) seem to suggest this.

⁶⁸² Kalecki 1991, pp. 366-68, 391, 393, 395.

⁶⁸³ Kalecki 1991, pp. 362, 370, 393.

achieve something approaching optimal functioning as manifested in full employment.⁶⁸⁴

Personal Factors

Under the rubric of the personal factors which would have led to the development of those elements in Kalecki's theory which diverged from Luxemburg and classical Marxism and approximated the neoclassical and Keynesian perspectives, I include the nature of Kalecki's early influences in economics, his personal traits and attributes, Kalecki's early professional experiences, as well as Kalecki's later professional and intellectual environments.

At the beginning of his formation, Kalecki ignored the mainstream branch of economics altogether.⁶⁸⁵ His introduction to economic theory came from reading Marx and Luxemburg.⁶⁸⁶ This should have worked to predispose him to a sympathy to the classical Marxist position with regards to questions of the necessity of economic collapse and the possibility and desirability of improving capitalism's functioning. However, Marx's corpus is a vast one, and it is possible to concentrate more or less on different aspects of it. It seems that Kalecki focussed primarily upon Volume 2 of *Capital*, the Reproduction Schemas contained in this text, and the discussion of these by Luxemburg and Tugan-Baranovski,⁶⁸⁷ rather than, say, the other two Volumes of Marx's great work. Now, it is easy to misunderstand the

⁶⁸⁴ Kalecki 1972b, p. 100; Kalecki and Kowalik 1991, pp. 467, 472-73; Kowalik 2004, pp. 42-43, 45-6; Dymski 2015, p. 162; Lopez and Assous 2010, p. 200.

⁶⁸⁵ Feiwel 1975, pp. 14, 21, 48, 53; Sawyer 1985, p. 3; Robinson 1966, p. 338; Kriesler 2016, p. 95.

⁶⁸⁶ Feiwel 1975, p. 48; Feiwel 1972, pp. 12-3; Sawyer 1985, pp. 3-4, 144; Kriesler 2016, p. 95; King 2002, p. 36; Lopez and Assous 2010, pp. 1, 192.

⁶⁸⁷ Feiwel 1975, pp. 22, 48, 59; Toporowski 2013a, pp. 19-20, 46; Toporowski 2004, p. 216; King 2002, p. 36; Kowalik 1966a, pp. 1-2; Committee of Economic Sciences 1990, pp. 1-2.

purpose of the RS and the role which Marx assigns to them within his larger argument. Luxemburg, for one, did not seem to interpret their meaning properly. I discussed this in the first chapter of this work. In the RS, Marx abstracts away from some of the deeper and longer-term contradictions of capitalism in order to establish the basic conditions for capitalist reproduction to take place in the short and medium terms. In the RS, these have to do primarily with the maintenance of proportional exchanges of values between the two departments of production in the economy. But because the deeper elements of crisis have been bracketed, when the RS are taken on their own, it can seem as if Marx's is saying that if the basic conditions of proportionality are maintained, that the capitalist economy can go on perfectly well for an indefinite period of time. This is the argument which Luxemburg believed that Marx was making with the RS and to which she vociferously objected. If Kalecki's main touchstone in Marxian economics for the study of capitalism was the RS, therefore, it may have conditioned him to develop a vision of the capitalist economy in which the latter, when functioning properly as far as the maintenance of proportions are concerned,⁶⁸⁸ will not be prone to collapse, but can instead be made to function optimally in perpetuity.

As the above suggests, if a prevailing focus on the RS is to lead to a view that capitalism is able to go on indefinitely without running into terminal crises, it must be accompanied by the exclusion of some of those deeper and longer-term sites of contradiction and crisis described by Marx. It seems as though Kalecki evinces such a tendency as well. It is well known that Kalecki derided Marx's Labour Theory of

⁶⁸⁸ And this would involve, primarily, for Kalecki, the maintenance of that aspect of proportional relations having to do with sufficient levels of investment taking place.

Value as overly ‘metaphysical’,⁶⁸⁹ that he rejected the Falling Rate of Profit theory as a progressive and systemic tendency that would bring capitalism to an ultimate impasse,⁶⁹⁰ and that he did not pay much heed to the larger historical-materialist framework into which Marx embedded his analysis of capitalism.⁶⁹¹ Instead, Kalecki seems to have preferred to focus his attention on what Marxists refer to as the more ‘superficial’ aspects of the workings of the capitalist economy,⁶⁹² those ‘surface appearances’ such as movements of prices and profits rather than value and surplus value.⁶⁹³ He also preferred to work in the short to medium term rather than in the longer historical timeframe.⁶⁹⁴ As a result of this tendency, and of the eclectic way in which Kalecki absorbed certain elements from Marx, while rejecting others, especially those aspects of Marx’s analysis having to do with the deeper and longer-term mechanism operating within capitalism, Kalecki would have been able to discount many of the fundamental drivers of capitalist crisis and collapse worked out by Marx. He could then develop a position more closely aligned with neoclassical and Keynesian economists who denied that capitalism should ever necessarily be subject to breakdown and who believed instead that the economic system could be made to function in optimal fashion.

Kalecki’s tendency to focus on the here and now, as well as on what could be called the more superficial aspects of capitalist reproduction was, in some measure, a function of his personality. Kalecki’s pragmatism, as well as his realism, has often

⁶⁸⁹ Toporowski 2004, pp. 216-17; Sawyer 1985, pp. 148, 157, 162; King 2002, p. 49; Sebastiani 1994, p. 118.

⁶⁹⁰ Sawyer 1985, pp. 162-64; Lopez and Assous 2010, p. 201.

⁶⁹¹ Toporowski 2004, p. 217; Sawyer 1985, pp. 145-46; King 2002, p. 49.

⁶⁹² Sawyer 1985, p. 146-47.

⁶⁹³ Sawyer 1985, pp. 147-48, 158, 161-62; Sebastiani 1994, p. 108; Halevi and Kriesler 2016, p. 183.

⁶⁹⁴ Sawyer 1985, p. 146; Sardoni 2011, p. 148; Halevi and Kriesler 2016, p. 182.

been noted.⁶⁹⁵ His early professional experiences would also have sharpened his focus on the immediate and empirically observable manifestations of capitalist economies.⁶⁹⁶ Following his withdrawal from the University, Kalecki became an analyst of the creditworthiness of firms.⁶⁹⁷ Later, he worked as an economic journalist.⁶⁹⁸ In 1929, Kalecki began working at the Research Institute of Business Cycles and Prices as a consultant on cartels.⁶⁹⁹

Other aspects of Kalecki's personality which would have led to his development of a theory which denies the necessity of economic collapse and argues for the possibility and desirability of improving capitalism's functioning include his technocratic sensibilities.⁷⁰⁰ Kalecki was someone who wanted not just to theorize about economics, but who wanted to have a hand in determining how economies were managed.⁷⁰¹ These traits were no doubt reinforced by his training as an engineer,⁷⁰² and later, his professional experiences in the realm of policy-making and analysis.

Although in the first instance, Kalecki learned his economic theory from Marx and Luxemburg, as his career progressed he became more and more integrated into, first a mainstream neoclassical, then later a Keynesian milieu. In the early days of the development of Kalecki's theory, before the advent of what could be called the

⁶⁹⁵ Feiwel 1975, pp. 8-10, 48, 230; King 1999, p. 253; Sardoni 2011, p. 148; Sebastiani 1994, p. 108.

⁶⁹⁶ Feiwel 1975, pp. 22, 48; Toporowski 2013a, pp. 18-9, 21-4; Sawyer 1985, pp. 3-4, 146; Kowalik 1966a, p. 1.

⁶⁹⁷ Feiwel 1975, p. 22; Toporowski 2013a, p. 18; Sawyer 1985, p. 4; Lopez and Assous 2010, p. 1.

⁶⁹⁸ Feiwel 1975, p. 22; Toporowski 2013a, pp. 20-1; Sawyer 1985, p. 4; King 2002, p. 35; Lopez and Assous 2010, p. 2.

⁶⁹⁹ Feiwel 1975, p. 22; Feiwel 1972, p. 51; Toporowski 2013a, p. 32; Sawyer 1985, p. 4; Lopez and Assous 2010, p. 2.

⁷⁰⁰ Feiwel 1975, p. 7.

⁷⁰¹ Feiwel 1975, pp. 8-9, 14, 51; Feiwel 1972, p. 8; Committee of Economic Sciences 1990, p. 3; Kriesler 2016, p. 95.

⁷⁰² Feiwel 1975, p. 21; Feiwel 1972, p. 51; Sawyer 1985, p. 3; King 2002, p. 35.

'third way' of Keynesian theory, all there were, as far as economic theorists were concerned, were Marxists and orthodox thinkers.⁷⁰³ Even at this stage, the economics profession was already dominated by the latter.⁷⁰⁴ When Kalecki still lived in Poland and worked at the Institute for the Study of Business Cycles and Prices, when he presented papers at conferences, his work addressed primarily economists of orthodox persuasion.⁷⁰⁵ When Kalecki left Poland in 1935 on a Rockefeller Foundation fellowship, he first travelled to Sweden, where he had contact with economists who had been raised primarily on the neoclassical texts.⁷⁰⁶ Kalecki wished to be understood by these people and for his ideas to have an impact on the economics profession as a whole.⁷⁰⁷ He therefore needed to speak a language that would be familiar to them and even to start from some of the same premises. This was made easier by Kalecki's high level of fluency in mathematics, acquired as an engineering student,⁷⁰⁸ which the economics profession was already starting to rely on heavily.⁷⁰⁹ But it would have also made sense that Kalecki should have integrated many key neoclassical assumptions and concepts into his analysis.⁷¹⁰

Later, Kalecki travelled to Cambridge and integrated himself into the Keynesian milieu. Here, a similar synergy likely occurred. We know that, despite having a high level of self-confidence when it came to his own capacities and

⁷⁰³ Toporowski 2004, p. 215.

⁷⁰⁴ Feiwel 1975, pp. 28-9, 53; Feiwel 1972, p. 9.

⁷⁰⁵ Feiwel 1975, pp. 24, 49; Toporowski 2013a, pp. 66, 69.

⁷⁰⁶ Feiwel 1975, p. 24, 28; Toporowski 2013a, p. 74-6; Sebastiani 1994, p. 11; Sawyer 1985, p. 4; King 2002, p. 39; Lopez and Assous 2010, p. 5.

⁷⁰⁷ Feiwel 1975, p. 16; King 2002, p. 41.

⁷⁰⁸ Feiwel 1975, p. 48; Sawyer 1985, p. 3; Committee of Economic Sciences 1990, p. 9.

⁷⁰⁹ Feiwel 1975, pp. 79-80; King 2002, p. 55.

⁷¹⁰ Feiwel 1975, p. 14; King 2002, p. 41.

theories, Kalecki craved recognition from Keynes.⁷¹¹ He therefore would have sought, at least to some extent, to make his ideas intelligible and acceptable to the Master. But the claim that Kalecki's intellectual milieu would have influenced the development of his theory is even more plausible in the context of the Keynesians due to another factor: Kalecki's professional dependence on individuals within the Keynesian school. When Kalecki's Rockefeller funding was due to run out, first in 1936 and then in the following year, Kalecki had to receive help from his Cambridge friends, especially Joan Robinson, who did their best to try to secure for him a more permanent academic position anywhere in Western Europe and even as far afield as Mexico.⁷¹² Kalecki's dependence on the Keynesians could have served to cause him to assimilate his own ideas to theirs in the interests of his own professional self-preservation. Now, it is true that Kalecki possessed a high degree of personal integrity,⁷¹³ which would have worked against such purposeful modification of his theory motivated by factors others than the search for truth.⁷¹⁴ Still, it is not completely implausible that, faced with professional insecurity, with only members of the Keynesian school being able to provide a way out, a desire to make his theories conform with theirs to a greater extent could have begun to operate on Kalecki's thinking, even if only at a subconscious level.

Political Factors

⁷¹¹ Toporowski 2013a, p. 141.

⁷¹² Toporowski 2013a, pp. 89-91, 103-15; Sawyer 1985, p. 6; Robinson 1980, p. 187; King 2002, p. 49.

⁷¹³ Feiwel 1975, p. 3; Feiwel 1972, p. 49; Toporowski 2013a, p. 88.

⁷¹⁴ Feiwel 1975, p. 3; Committee of Economic Sciences 1990, p. 9.

I will now examine the political factors underpinning the development of those aspects of Kalecki's theory which diverge from that of Luxemburg and classical Marxism and approximate the neoclassical and Keynesian paradigms.

Kalecki's politics were socialist, and remained so for the entirety of his life.⁷¹⁵ It could be assumed that this fact alone would serve to secure Kalecki's adherence to the classical Marxian arguments that capitalism could never be made to function optimally, that it should be instead be replaced with socialism, and that the mechanism for doing this was through a revolution triggered by the collapse of the economic system. However, as the previous section of this chapter has demonstrated, starting from the end of the 19th century, there came to be more than one set of beliefs among socialists concerning the mechanism of socialistic social change. As a case in point, as I discussed, the Revisionists believed that the best and surest mode of moving from capitalism to socialism was not through revolution but through gradual reform which went hand in hand with the improved functioning of the capitalism economy. This was Kalecki's position as well. He believed that the optimal path to socialism involved making capitalism work better through the targeting of full employment by policy-makers.

There are many reasons why Kalecki believed that managed full employment could constitute a bridge to socialism. First, the deployment by government of policies aimed at attaining and maintaining full employment, since these are technically capable of succeeding, will demonstrate to society the way in which

⁷¹⁵ Feiwel 1975, pp. 6-7; Toporowski 2013a, pp. 43, 45; Toporowski 2004, p. 216; Sawyer 1985, pp. 4, 186; Lopez and Assous 2010, pp. 1, 192; Kriesler and McFarlane 2016, p. 108.

government is capable of exerting control over the economy.⁷¹⁶ This would serve to take power away from the capitalist class because it would upend the popular belief that only the decisions of the private sector can influence the course of economic growth.⁷¹⁷ Under a system of *laissez-faire*, everything depends on the investment level of capitalists. High levels of investment mean high levels of demand, output, employment and incomes. Thus everything is done to preserve and develop so-called 'business confidence'.⁷¹⁸ In the process, policy-making is geared towards maximizing the potential profits and benefits accruing to the capitalist class.⁷¹⁹ Recognition that government is capable of undertaking the task of economic management in the place of the private sector would mean that more emphasis could be placed on planning economic policy through direct government action rather than on placating the business interests.⁷²⁰

Besides getting people used to the idea of the state taking a lead role in the management of the economy, the targeting of full employment by policy-makers would foster the development of socialism as a result of the nature of the destinations of government spending. As government increases its spending over time in order to stimulate the level of economic output, incomes and employment, it will soon begin to run out of socially useful areas to invest in.⁷²¹ Only so many hospitals, schools and roads are ever needed at a given time. Three other types of targets for spending will then remain open to it. Government could begin to spend

⁷¹⁶ Feiwel 1999, p. 535.

⁷¹⁷ Kalecki 1972b, p. 76-7; Henley 1999, p. 518; Feiwel 1999, pp. 534-35; Sebastiani 1994, p. 28; Arestis and Skuse 2004, p. 12; Halevi 2016b, p. 198.

⁷¹⁸ Kalecki 1972, pp. 76-7; Feiwel 1999, p. 535; Halevi 2016b, pp. 197-98.

⁷¹⁹ Feiwel 1999, p. 535; Halevi 2016b, p. 198.

⁷²⁰ Feiwel 1999, p. 535; Sebastiani 1994, p. 28; Arestis and Skuse 2004, p. 12.

⁷²¹ Kalecki 1972b, p. 77; Kalecki 1990, p. 383; Feiwel 1999, p. 539; Sebastiani 1994, p. 24.

money on ventures which are completely useless from the social point of view,⁷²² simply in order to increase employment, output and profits. It may begin to redistribute the money in order to subsidize the wage and raise the living standards of workers.⁷²³ Finally, it may begin to invest in the production of goods and services that are already produced capitalistically.⁷²⁴ The latter two options could be steps towards socialism as workers would begin to have access to a bigger share of the social output and the government would start to control a bigger portion of total production.⁷²⁵

Finally, Kalecki believed that managed full employment could work as a stepping stone for the attainment of socialism as a result of the effect which such a state of affairs would have on workers. Capitalists have always used the fear of unemployment on the part of the workers as a way to guarantee labour discipline and pliability of the workforce. If measures are taken which raise the level of employment to exceptional levels, then the potency of this lever is neutralized.⁷²⁶ If workers no longer fear “the sack”, then they will be far more difficult to control and exploit within the workplace.⁷²⁷ Moreover, should the redistribution of aggregate income from profits to wages take place, either through a rise in wages due to higher levels of employment or as a result of other mechanisms of redistribution mediated by the state, this would work to undermine another important ideological

⁷²² Arms spending, for example.

⁷²³ Kalecki 1972b, p. 77; Kalecki 1990, p. 383; Feiwel 1999, p. 539; Arestis and Skuse 2004, pp. 11, 13.

⁷²⁴ Kalecki 1972b, p. 77; Kalecki 1991, p. 399; Henley 1999, p. 518; Feiwel 1999, p. 538; Sebastiani 1994, p. 24; Arestis and Skuse 2004, p. 11.

⁷²⁵ Kalecki 1991, p. 399; Henley 1999, p. 518; Sebastiani 1994, p. 24; Arestis and Skuse 2004, p. 11

⁷²⁶ Foster 2013, pp. 9-10; Feiwel 1999, p. 540; Arestis and Skuse 2004, pp. 12-3.

⁷²⁷ Kalecki 1972b, p. 78; Foster 2013, pp. 1-2; Henley 1999, p. 518; Feiwel 1999, p. 540; Arestis and Skuse 2004, p. 12; Kowalik 2004, p. 45.

tool at the disposal of the capitalists: the capitalist work ethic which states that “you shall earn your bread in sweat”.⁷²⁸ Such a belief assures a certain positive, or at least resigned, attitude towards work on the part of the worker. As a result of higher levels of employment and incomes, therefore, workers will experience the economic security and the greater self-confidence needed to advocate for better working conditions and for control over an even larger share of the social product.⁷²⁹ In addition, Kalecki believed that as the social power of the working class increases in this way, that society will be forced to develop new infrastructures and institutions which better reflect and codify such a situation.⁷³⁰

It is as a result of these effects of full employment on society’s progress towards socialism that Kalecki believed that, should full employment be capable of succeeding, a fundamental reform of society along socialist lines would already have been accomplished.⁷³¹ This is, in fact, the meaning of Kalecki’s concept of the ‘crucial reform’, which he believed must accompany full employment.⁷³² Kalecki argued that full employment is the “Trojan Horse of Socialism”.⁷³³ It is also the reason for which, he believed, capitalists will present such virulent opposition to any measures by the state which have full employment as their outcome.⁷³⁴

⁷²⁸ Kalecki 1972b, p. 78; Henley 1999, p. 518; Feiwel 1999, p. 539; Sebastiani 1994, p. 25; Arestis and Skuse 2004, pp. 11, 13.

⁷²⁹ Kalecki 1972b, p. 78; Foster 2013, p. 9; Henley 1999, p. 518; Feiwel 1999, p. 540; Sebastiani 1994, p. 28.

⁷³⁰ Kalecki 1990, p. 356; Foster 2013, p. 9; Feiwel 1975, pp. 230-31; Sebastiani 1994, p. 29; Arestis and Skuse 2004, p. 13; Kowalik 2004, p. 45.

⁷³¹ Kalecki 1990, p. 356; Sebastiani 1994, p. 29; Kowalik 2004, p. 45; Arestis and Skuse 2004, p. 13.

⁷³² Kalecki and Kowalik 1991, p. 467; Kowalik 2004, p. 49; Dymski 2015, p. 158.

⁷³³ Kalecki 1991, p. 399; Sebastiani 1994, p. 24.

⁷³⁴ Kalecki 1991, p. 399; Foster 2013, pp. 8-9, 11; Sebastiani 1994, p. 28.

Despite the way in which full employment can serve to help society along on its road to socialism however, Kalecki did not believe that full employment was completely synonymous with socialism either.⁷³⁵ Even after the above reforms, there would still be a way to go for full socialism to be reached. Nor was socialism a guaranteed outcome of full employment.⁷³⁶ Workers would still have to fight to push society in an even more progressive direction.⁷³⁷ And there was even the chance that full employment could retard or ultimately prevent the transition to socialism as workers, satisfied with higher wages and greater social power, became complacent in their struggle against capital, and even sought to defend the capitalist order.⁷³⁸

These potential obstacles to socialism through full employment notwithstanding, it does seem as though, for Kalecki, full employment constitutes the best hope for bringing about the socialist transformation of society.⁷³⁹ This position can be glimpsed in the closing remarks of Kalecki's 1943 "Political Aspects of Full Employment". There, Kalecki says that it may ultimately be proven to be the case that society is incapable of the fundamental reforms necessary to secure full employment; however, it is only at this point that more drastic steps to 'scrap' the capitalist system once and for all ought to be contemplated.⁷⁴⁰

With this, it seems that though Kalecki is evincing his preference for attempting to undertake the socialist transformation of society through the gradual

⁷³⁵ Foster 2013, pp. 8-9, 11.

⁷³⁶ Kalecki and Kowalik 1991, p. 467.

⁷³⁷ Foster 2013, pp. 8-9, 11.

⁷³⁸ Kalecki and Kowalik 1991, pp. 472-73; Dymski 2015, p. 162; Halevi 2016a, p. 139.

⁷³⁹ Foster 2013, p. 8-9.

⁷⁴⁰ Kalecki 1990, p. 356.

reforms which are made possible by the improved functioning of the capitalist economy, rather than through the revolutionary option. Given this particular aspect of Kalecki's socialism therefore, which resembles that of the Revisionists more than that of Luxemburg and the classical Marxists, it is no paradox for Kalecki to be both an ardent socialist while denying the necessity of capitalist collapse and arguing that capitalism can be made to improve its functioning – maybe to the point of attaining optimal functioning – and that this is precisely what the state and its socialist supporters ought to attempt through policy interventions. It is simply that this is the path which Kalecki believed to be the best and surest for the attainment of socialism.

Conclusion

An examination of the historical backgrounds out of which the economic theories of Luxemburg and Kalecki emerged, as undertaken in the previous chapter, provides an explanation for the differences in these theories, which were noted in chapters 1 and 2. In fact, once their historical contexts have been taken account of in this way, it is difficult to imagine that theories could have done anything but diverge from each other in the ways presented. In the first place, although in the interest of space I have not dealt with the influence of the empirical factors on Luxemburg's thought, Luxemburg was developing her economic theory at a time in the history of Western capitalism where it really did seem as if the entire economic and social order could come crashing down as a result of the rivalries and wars engendered by the clash of competing national imperialisms. On the other hand, Kalecki had lived through a profound nadir in capitalism's history, the Great Depression, which, for all the pain and misery that it caused, still did not result in the collapse of the economy. Thereafter, in the post-war period, Kalecki was able to witness the way in which government intervention in the economy resulted in the improvement of capitalism's functioning for a time.

In addition to such empirical factors, though Kalecki received his early formation in economics from Marx and Luxemburg, as his career progressed he came increasingly into the intellectual orbit of neoclassical and especially Keynesian economists. Such a development would have worked to favour Kalecki's adoption of a whole cluster of arguments which were part of the Keynesian worldview even as

they were remote to that of Marxists. Such arguments included those against the necessity of economic collapse and for the possibility and desirability of improving capitalism's functioning through policy intervention.

But it is perhaps the political position of the respective theorists which was most decisive in determining the contours of their economic theories. I described Luxemburg's political context above in some detail and the way in which her arguments for the necessity of imperialism for capitalism and for the inevitability of capitalist collapse arose from the need to repudiate Revisionism and its advocacy of reform rather than revolution as the political strategy for the socialist movement. I have also described how, by contrast, Kalecki felt that it was gradual reform, not revolution, that was the best and surest path to a socialist reorganization of society and how this would have influenced his development of a theory in which the necessity of economic collapse is denied and in which capitalist can be made to function, if not optimally, at least in an improved fashion. Unlike Keynes, it was not in order to quell the possibility of the socialist transformation of society that Kalecki advanced such a theory, but rather because for him, this was the only path through which the attainment of socialism was possible.

The comparison of the historical background to the development of the respective theories also serves to underscore just how problematic is the attempt to equate the economics of Luxemburg and Kalecki. In the first place, because the historical contexts which produced them differed so greatly, the theories themselves can never fail to diverge from each other in intractable ways. Even more significantly however, the comparison of Luxemburg and Kalecki's political contexts

reveal that not only do the politics of Kalecki differ from that of Luxemburg; they also bear a striking resemblance to those of the Revisionists against which Luxemburg had fought so hard just a few decades prior. Like them, Kalecki believed that the surest path to socialism was through reform, not revolution. Moreover, Kalecki, like the Revisionists, believed that this reform could be facilitated by the improved functioning of the capitalist system. This realization, that it is a kind of latter-day Revisionism which animated the development of Kalecki's economic theory, means that the attempt to view the relationship between the economic theories of Luxemburg and Kalecki as one of continuity runs completely against the grain of the whole of Luxemburg's life and work. Far from doing Luxemburg and her legacy a good turn, the argument that her theory resembles that of Kalecki in certain key respects would likely have appalled Luxemburg because of the way in which the latter could be used to justify the reform of the capitalist system, rather than its outright overthrow.

I have now completed my comparison of the economic theories of Luxemburg and Kalecki, and of the historical contexts which produced them, and arrived at the conclusion that due to the fundamental differences in the historical backgrounds out of which they emerged, these two theories can never, and should never, be fully equated the one with the other. Instead of their continuity, it is the rupture between them which ought to be emphasized. I can now propose some larger reflections on the implications which such a comparison and its conclusion could have for contemporary theorizing in the Marxist tradition.

The first such implication is that we should be wary of attributing to Luxemburg certain elements present in contemporary Marxian economics. This is because nearly all of the traces of Luxemburg's thought which are still capable of being detected in current theorizing can be seen to have endured a modification by Kalecki before being picked up by contemporary theorists. We can see numerous examples of this phenomenon. Baran and Sweezy deny the impossibility of SCCR.⁷⁴¹ Though they believe that investment in SCCEs is likely to fall short of the optimal level,⁷⁴² this will not lead to economic collapse⁷⁴³ but rather to stagnation manifested in a surplus of capital.⁷⁴⁴ This situation can be partially remedied through a variety measures not limited to foreign trade and having especially to do with government spending on arms production⁷⁴⁵ and corporate spending on 'unproductive' expenditures such as advertising and sales promotion.⁷⁴⁶ David Harvey follows a similar line of thought, refuting Luxemburg's notion that SCCR is impossible because sufficient investment in a SCCE can never take place.⁷⁴⁷ Nonetheless, capitalist reproduction is by no means problem-free. Like Baran and Sweezy before him, Harvey argues that contemporary capitalism is plagued by capital surpluses, which can manifest either in money form, or in a surplus of unused productive capacity.⁷⁴⁸ Capitalism can be partially helped along out of its stagnation through various measures which work to absorb the surplus capital, such

⁷⁴¹ Sweezy 1942, pp. 204-05.

⁷⁴² Sweezy 1942, pp. 176-77, 183; Baran and Sweezy 1966, p. 82.

⁷⁴³ Sweezy 1942, pp. 214-15.

⁷⁴⁴ Sweezy 1942, pp. 176-77, 180, 183; Baran and Sweezy 1966, pp. 79, 82, 143.

⁷⁴⁵ Sweezy 1942, p. 234; Baran and Sweezy 1966, pp. 142-43, 153.

⁷⁴⁶ Sweezy 1942, pp. 230-31; Baran and Sweezy 1966, pp. 114-15, 141.

⁷⁴⁷ Harvey 2010, pp. 110-13.

⁷⁴⁸ Harvey 2006, pp. 192-93, 195-96.

as the destruction of large quantities of capital in general or partial crises;⁷⁴⁹ investment in new infrastructural or geographic configurations,⁷⁵⁰ and the eventual destruction of the capital invested therein;⁷⁵¹ as well as the increase in investment occasioned by the increase in profitability brought about by ‘accumulation by dispossession’ in the global South.⁷⁵² Aside from these thinkers, even those writers who purport to apply the insights of Luxemburg directly to contemporary economic history, seem to do so following a modification of her analysis similar to the kind undertaken by Kalecki, Baran and Sweezy, and David Harvey. Thus Ingo Schmidt, for example, argues that the foremost problem facing Western capitalism in recent economic history has been stagnation and surplus capital⁷⁵³ and that this has been partially and temporarily remedied by factors such as investment in new industries and technologies,⁷⁵⁴ government spending on arms and social programs,⁷⁵⁵ the greater colonization and commodification of ‘lifeworlds’ which accompanied the entrance of women into the workforce,⁷⁵⁶ and the various strategies associated with ‘accumulation by dispossession’ in the developing world.⁷⁵⁷ As a result of this situation in contemporary Marxian theorizing, if indeed it is the case, as I have suggested, that the relationship between the economic theories of Luxemburg and Kalecki is best characterized as one of rupture rather than continuity, then the

⁷⁴⁹ Harvey 2006, pp. 200, 202, 426.

⁷⁵⁰ Harvey 2006, pp. 236, 402, 427, 429, 435.

⁷⁵¹ Harvey 2006, pp. 428, 436, 438.

⁷⁵² Harvey 2010, pp. 244-47.

⁷⁵³ Schmidt 2010, pp. 94, 108, 111.

⁷⁵⁴ Schmidt 2012a, p. 353; Schmidt 2010, p. 95.

⁷⁵⁵ Schmidt 2012a, p. 350; Schmidt 2010, pp. 99, 107.

⁷⁵⁶ Schmidt 2012a, pp. 349-50; Schmidt 2010, p. 94.

⁷⁵⁷ Schmidt 2012a, pp. 354-55; Schmidt 2010, p. 94.

genesis of the above concepts is best traced back to Kalecki, and not all the way back to Luxemburg.

The second implication of my analysis and its conclusion is the emergence of a larger question concerning the relationship between classical and contemporary Marxian theory. The comparison of the economic theories of Luxemburg and Kalecki and their historical backgrounds showed the incommensurability of these theories precisely as a result of the fundamental differences in their respective historical contexts, particularly their political contexts. If this was the case with respect to Luxemburg and Kalecki, does this mean that the theories of Luxemburg, and also of other classical revolutionary Marxists such as Lenin, no longer have any applicability to contemporary theorizing in the Marxist tradition, if our historical circumstances have changed, and particularly if contemporary thinkers have largely set aside the revolutionary strategy in favour of a predominantly reformist one?

The answer to this question is, I believe, that if little in Luxemburg's economic analysis remains wholly pertinent to our present situation (without passing through modifications of the Kaleckian kind), we are nevertheless in dire need of her moral and political guidance in our current historical conjuncture. It is precisely because it now seems as if revolution is no longer an immediate historical possibility, that we must use Luxemburg's writings to prevent us from falling into two traps: the Keynesian trap of believing that capitalism can be made to function optimally and that this reformed capitalism is capable of taking the place of the socialist transformation of society; and the Kaleckian and Revisionist trap of believing that socialism can be attained through progressive reform rather than

revolution. Against these pitfalls, Luxemburg offers her deep empathy for all of society's members, her uncompromising vision of social justice and equality, and her dedication and perseverance in pursuing the cause of revolutionary socialism, even to the point of martyrdom. In a historical context in which it seems that revolution is no longer on the immediate agenda therefore, Luxemburg entreats us not to give up on revolution as a political strategy. Instead, her writings provide an analysis of the possibilities for using reform measures, not as an end in themselves, but as a means for making the political and social conditions favourable to revolution once again.⁷⁵⁸ Moreover, in a context in which revolution no longer seems to be an immediate possibility in the developed world, Luxemburg's work teaches us to pay attention to the developing world as a site with greater revolutionary potential.⁷⁵⁹ There, on the periphery, where capitalism's depredations are at their most egregious, Marxists in the developed world should stand with those resisting the colonization of their lifeworlds, the destructions of their traditional modes of life, and the rapacious and predatory nature of ongoing primitive accumulation and 'accumulation by dispossession'.⁷⁶⁰ Clearly therefore, even if her economic thought may not have proven as enduring, despite our changed historical and political circumstances, and perhaps because of these, Luxemburg's moral and political insights remain profoundly resonant in the present moment.

⁷⁵⁸ Luxemburg 1970, pp. 36, 57-8, 81, 102-03; Frölich 1972, p. 53; Cliff 1959, p. 27; Mattick 1978, p. 22.

⁷⁵⁹ Luxemburg 1951, pp. 466-67; Luxemburg 1972a, pp. 60, 147; Luxemburg 2012b, p. 463.

⁷⁶⁰ Luxemburg 1970, p. 330; Luxemburg 2012b, p. 463; Luxemburg 2012c, p. 470; Day and Gaido 2012, pp. 21-2; Frölich 1972, pp. 219, 222-23; Cliff 1959, pp. 33-4.

Appendix: Kalecki on the Possibility of Attaining Full Employment

In trying to determine the precise nature of the divergence of Kalecki's theory from that of Luxemburg and the classical Marxists and its approximation to those of the neoclassical and Keynesian economists, I have already established Kalecki's repudiation of the necessity of capitalist collapse, as well as his argument for the possibility and desirability of making capitalism, through various policy interventions, improve its functioning. What remains to be discussed however, is whether or not he believed that capitalism could ever be made to function *optimally*, as symbolized by the attainment and maintenance of full employment. This question is significant because if, as I showed in chapter 3, Kalecki argued that the path to socialism runs through the attainment of full employment, then the question of whether or not it is possible to reach full employment is tantamount to asking whether or not Kalecki believes that socialism itself is possible.

Despite its importance, the answer to this question is a rather difficult one to ascertain. While much of Kalecki's writings are dedicated to laying bare the mechanisms and policy interventions required for the attainment of full employment, much space is also taken up in describing the numerous barriers which policy-makers are likely to face in the course of such attempts. In this appendix, therefore, I attempt to determine whether the attainment and maintenance of full employment is something which Kalecki believed was possible. I do this by describing the barriers which each of the various policy approaches to targeting full employment are likely to encounter according to Kalecki, and whether

and how Kalecki believes these can be overcome. I have grouped these barriers into technical and political ones.

The Technical Barriers to Full Employment

The various technical difficulties to the attainment and maintenance of full employment advanced by Kalecki are associated with the numerous mechanisms which government can employ to target full employment outcomes. These are as follows.

Stimulating Private Investment

The first strategy used to attempt to attain full employment, and which must be discarded, is the method through which government attempts to increase demand by stimulating additional private investment, through either a reduction in the rate of interest or of taxes on profits.⁷⁶¹ These policies may serve to increase the rate of profit and therefore make investment more attractive.⁷⁶² However, the problems which this approach engenders are of the same types as have already been discussed in Chapter 2, in the section dealing with the inevitability of stagnation in a SCCE in the long term. There, I said that, according to Kalecki, there is an inherent tendency for the level of investment required to attain full employment (I_f) to be greater than the level of investment required to secure the level of productive capacity adequate to produce the necessary output for the desired level of employment (I_c).⁷⁶³ I explained that if a level of investment required to produce full employment was pursued, a progressive accumulation of unused

⁷⁶¹ Kalecki 1990, p. 377.

⁷⁶² Kalecki 1990, p. 366.

⁷⁶³ Kalecki 1990, pp. 369, 378-79.

productive capacity and a fall in the rate of profit per unit of investment would follow.⁷⁶⁴ This would cause, sooner or later, a renewed decline in investment.⁷⁶⁵

This same model also predicts the likely outcome of an attempt by government to increase the level of demand to the full employment level by stimulating private investment. Kalecki believed that in order to combat the inevitable decline in investment which would occur as a result of this dynamic, government would be forced to go far beyond its initial stimulus and instead to apply this in a continuous, cumulative fashion. Thus, government could not simply lower interest rates or taxes on capitalist income once, but would have to do so continuously, with each round of production being accompanied by greater declines in these variables.⁷⁶⁶ This would be the only way to offset the decline in the rate of profit on each unit of investment which the model predicts.⁷⁶⁷ Even lower rates of interest or of taxation would again increase the prospective profit and make further investment attractive. The problem with this strategy however is that interest rates and taxation have definitive floors.⁷⁶⁸ Negative rates would rapidly become necessary to combat the fall in the profit rate.⁷⁶⁹ It would then become impossible to put this particular lever any further.⁷⁷⁰

This is why Kalecki did not believe that it was possible to attain full employment by stimulating private investment⁷⁷¹ and that instead, it was spending

⁷⁶⁴ Kalecki 1990, p. 381; Kalecki 1954, p. 151.

⁷⁶⁵ Kalecki 1990, p. 369.

⁷⁶⁶ Kalecki 1972b, p. 81; Kalecki 1990, pp. 369, 377, 381.

⁷⁶⁷ Kalecki 1990, p. 382.

⁷⁶⁸ Kalecki 1990, p. 370; Arestis and Skuse 2004, p. 13.

⁷⁶⁹ Kalecki 1972b, p. 81.

⁷⁷⁰ Kalecki 1990, p. 366.

⁷⁷¹ Kalecki 1972b, p. 81; Kalecki 1990, p. 372.

by government itself which had to be employed. In this way, productive investment could be held only to the level required to produce the output necessary for the projected level of employment (I_c) and no surplus capacity would be accumulated.⁷⁷² The shortage of demand which remained following investment to the level of I_c , which is equivalent to the difference between I_c and I_f , could be supplied by government spending.⁷⁷³ The latter would be of the pure consumption type, increasing effective demand and employment without adding to the level of social productivity.

Government Spending through Taxation

Stimulating private investment must therefore be discarded. And government spending proves to be a much more promising prospect as far as managed full employment is concerned. Even here, however, numerous caveats apply. Many of these – primarily those dealing with the sources of financing for this spending – have already been discussed in Chapter 2, in the section on the exogenous factors. There we saw that financing for government spending, if it were to contribute to raising the level of effective demand, and therefore output, employment and incomes, could not come from taxes on workers. In this case, the new demand generated by the new government spending would simply be offset by a decline in the consumption of the workers as a result of the taxes levied on them to pay for the spending.⁷⁷⁴ Aggregate demand would have remained at the same levels as a result. The tax money for additional spending therefore has to be drawn

⁷⁷² Kalecki 1990, p. 382.

⁷⁷³ Kalecki 1990, pp. 369, 382.

⁷⁷⁴ Kalecki 1991, p. 352.

from a tax on capitalist incomes. In this case, it also has to be assured that capitalists would not simply respond to this new tax by raising prices and therefore transferring the tax burden once more to the working class.

If prices following the increase in taxation could somehow be held constant, say through price controls, then government spending financed by a tax on capitalists would serve to increase demand, and therefore output and employment. The new tax would fall entirely on the capitalists. Because decisions regarding consumption and investment are taken at some point in the past, however, capitalists would not alter their levels of these expenditures.⁷⁷⁵ As a result, their levels of net profits before and after the new tax would remain the same,⁷⁷⁶ as per Kalecki's profits equation. But because the new spending by government would have increased demand, the gross profits of capitalists would rise by an amount equivalent to the new tax and spending.⁷⁷⁷ This amount would then be taxed away again in a new round of taxation and spending.⁷⁷⁸ As a result, the new tax leaves the profits of capitalists unaltered but increases total demand and therefore output.⁷⁷⁹ Because higher levels of output are required, capitalists would be likely to increase their investment and the number of workers they employ.⁷⁸⁰ This would in turn increase demand and therefore profits and subsequent investment in an ascending trend.

⁷⁷⁵ Kalecki 1990, p. 322; Kalecki 1991, p. 352.

⁷⁷⁶ Kalecki 1991, p. 355.

⁷⁷⁷ Kalecki 1990, pp. 322-23, 355.

⁷⁷⁸ Kalecki 1991, pp. 353-54, 355.

⁷⁷⁹ Kalecki 1990, p. 323; Kalecki 1991, p. 353.

⁷⁸⁰ Kalecki 1990, p. 323; Kalecki 1991, p. 354.

Increases in government spending financed by a tax on the incomes of capitalists therefore appear to be a way of reaching a level of full employment through policy management. However, Kalecki identifies a serious problem with this approach that is bound to arise in the long run. Aside from the small upward turn of the economy which result from the need for higher levels of output, the level of capitalists' profits has not been appreciably altered by the new taxation and spending.⁷⁸¹ A higher level of output with a stable level of profit⁷⁸² can only serve to reduce the rate of profit on each unit of production. In addition, since the profit level remains stable, so does, by and large, the level of investment. But the latter will still be such as to increase the productivity of the economy faster than effective demand, causing the pile-up of surplus capacity and the fall in the rate of profit.⁷⁸³ Both effects therefore serve to disincentivize subsequent investment and cause crisis tendencies to reappear.⁷⁸⁴ Unless something further is done, the new tax and spending by government cannot generate sustained levels of growth in the level of output, employment and incomes.⁷⁸⁵

Kalecki does propose one possible solution to this problem, which would give the attempt to reach full employment through taxation and government spending a better chance of succeeding. Instead of taxing capitalist incomes, this strategy involves taxing capital itself, including productive capital and capital in money form.⁷⁸⁶ Such a measure would mean that capitalists' profits on each unit of

⁷⁸¹ Kalecki 1990, p. 325; Kalecki 1991, p. 356.

⁷⁸² Kalecki 1991, p. 357.

⁷⁸³ Kalecki 1991, p. 356; Kalecki 1991, pp. 369-70.

⁷⁸⁴ Kalecki 1991, p. 356; Kalecki 1991, pp. 369-70.

⁷⁸⁵ Kalecki 1990, p. 160; Kalecki 1991, p. 356.

⁷⁸⁶ Kalecki 1990, pp. 324, 363.

output and of investment would not be negatively affected by the tax. Instead, these would only increase as a result of the additional effective demand generated by the new spending, something which would incentivize subsequent investment.⁷⁸⁷ The acquisition of new productive equipment would not be discouraged because means of production bought on credit would not be taxed.⁷⁸⁸ Moreover, this measure would have the effect of encouraging capitalists to place idle assets into production since these would be taxed whether they were active or not.⁷⁸⁹

Deficit Spending

In Chapter 2, in addition to taxation as a source of financing for government spending, I also discussed what Kalecki considered to be a far more effective way of stimulating the economy: deficit-financed government spending. I described the way in which this spending takes place in practice, how government borrows the money for the spending from banks, spends this money in a way which increases the profits of capitalists by an equivalent amount, and then how capitalists deposit this extra amount in the banks, thereby financing the original loan.⁷⁹⁰ The advantage of this approach in stimulating the economy is that contrary to tax-financed spending, it actually serves to increase the level of capitalist profits by an amount equivalent to the new spending,⁷⁹¹ thereby providing a real spur for an increase in investment,

⁷⁸⁷ Kalecki 1990, pp. 324-25, 363.

⁷⁸⁸ Kalecki 1990, pp. 324, 363.

⁷⁸⁹ Kalecki 1990, pp. 324, 363.

⁷⁹⁰ Kalecki 1990, pp. 156-57, 193.

⁷⁹¹ Kalecki 1990, pp. 156, 360; Kalecki 1991, p. 357.

employment and incomes.⁷⁹² But is deficit spending a way in which, for Kalecki, full employment can be attained and maintained through policy intervention?

One potential problem with deficit spending presents itself right away, namely: how is the resulting debt paid for? In a few places, Kalecki suggests that this could be done by taxing capital or capitalist profits in the ways I have just suggested.⁷⁹³ But this merely brings us back to the challenges associated with these scenarios. Is it possible for the debt resulting from ongoing budgetary deficits to be managed in a way that does not undermine the positive effects which deficit spending can have for economic reproduction? At one point, Kalecki suggests that management of a growing debt through service payment funded by regular tax revenue may not prove to be such a problem as is sometimes thought.⁷⁹⁴ The reason for this is that while the debt continues to grow in absolute terms year after year, so does an economy that is stimulated by the deficit-funded government spending. As a result, the revenues derived from a stable level of taxation also grow apace.⁷⁹⁵ In modern parlance, this means that the debt-to-GDP ratio remains stable. Thus the burden of servicing the growing level of interest on the debt may never become unmanageable. Kalecki provides a numerical illustration of this.⁷⁹⁶ The other factor that serves to contain the problem of the debt is that economic growth causes price levels to rise. Debts contracted in a stronger currency may now be paid back in devalued money. The real cost of the debt is therefore reduced.⁷⁹⁷

⁷⁹² Kalecki 1990, pp. 156, 168, 193; Kalecki 1991, p. 357.

⁷⁹³ Kalecki 1990, p. 363.

⁷⁹⁴ Kalecki 1991, p. 359.

⁷⁹⁵ Kalecki 1990, pp. 183, 358, 363.

⁷⁹⁶ Kalecki 1991, p. 359.

⁷⁹⁷ Kalecki 1991, pp. 359-60.

This last point suggests another potential problem associated with deficit spending. A large increase in government spending funded by deficits is equivalent to the creation of new purchasing power on a large scale.⁷⁹⁸ It is often argued that this new demand is likely to cause the prices of existing goods to rise⁷⁹⁹ and, concomitantly, the value of the national currency to fall to such an extent as to present serious difficulties for the economy and for continued deficit spending.⁸⁰⁰ Kalecki however, while conceding that a certain level of inflation is bound to appear in a booming economy sooner or later,⁸⁰¹ denies that this inflation is ever likely to reach a level which makes it a serious problem or threat to economic growth.⁸⁰² Prices rise when demand increases faster than output.⁸⁰³ Kalecki argues that inflation could become a problem in an economy already functioning at full capacity.⁸⁰⁴ In this context, no new production would be immediately forthcoming to meet the increased demand and the prices of existing goods would rise.⁸⁰⁵ But Kalecki assumes that modern capitalist economies always operate with a surplus of unused productive capacity. As a result, should demand increase substantially as a result of government deficit spending, firms could simply increase their output and capacity-utilization,⁸⁰⁶ meeting the new demand and keeping prices relatively stable.⁸⁰⁷ In the worst case, should prices begin to rise substantially as a result of a shortfall in production compared to demand, government could use a portion of its

⁷⁹⁸ Kalecki 1990, pp. 182, 348.

⁷⁹⁹ Kalecki 1990, p. 361.

⁸⁰⁰ Kalecki 1991, p. 358.

⁸⁰¹ Kalecki 1990, pp. 157-58, 183, 195.

⁸⁰² Kalecki 1990, p. 348; Kalecki 1991, p. 359.

⁸⁰³ Kalecki 1990, pp. 361- 62; Kalecki 1991, p. 359.

⁸⁰⁴ Kalecki 1990, pp. 348, 361; Kalecki 1991, p. 359.

⁸⁰⁵ Kalecki 1990, pp. 348, 361.

⁸⁰⁶ Kalecki 1990, p. 348; Kalecki 1991, p. 351.

⁸⁰⁷ Kalecki 1991, p. 359.

deficit spending to invest in additional productive capacity through the creation of state enterprises in strategic industries.⁸⁰⁸

The fall in the value of the currency accompanying the economic growth, even if modest, has the potential to contribute to another possible difficulty associated with an economic boom fostered by deficit spending: the difficulty in obtain the necessary inputs to production through importation. In Chapter 2, in the section dealing with Kalecki's description of the exogenous factors, I mentioned Kalecki's belief that economic growth necessarily creates a greater demand for inputs and that many of these are imported.⁸⁰⁹ Booming economies therefore increase their consumption of imports. As imports grow, they start to outstrip the level of national exports, upsetting the trade balance and creating a trade deficit.⁸¹⁰ This causes the value of currency, already in decline because of the growth in domestic demand, to fall even further.⁸¹¹ High levels of imports compared to exports means the presence of more of the national currency used to pay for these imports on the world stage, and a decline in its value. The fall in the value of the currency makes it more costly to obtain the necessary inputs to production through importation,⁸¹² something that has the potential to impede the growth process.

Even this difficulty in obtaining imports in the boom, however, is one that Kalecki believed could be solved. In fact, it is one that he saw as, in some ways, self-correcting.⁸¹³ If domestic economic growth causes prices to rise and makes it more

⁸⁰⁸ Kalecki 1990, pp. 367, 385.

⁸⁰⁹ Kalecki 1990, pp. 157, 183, 195.

⁸¹⁰ Kalecki 1990, pp. 169-70, 183, 195.

⁸¹¹ Kalecki 1990, pp. 157, 184, 197.

⁸¹² Kalecki 1990, pp. 197-98.

⁸¹³ Kalecki 1990, p. 195.

difficult to obtain the necessary imports, this same factor, and the higher profitability of domestic firms which results from it, serves to attract foreign investment.⁸¹⁴ This influx of foreign money serves to neutralize some of the effects of the trade imbalance.⁸¹⁵ It means that there is demand for some of the domestic currency traded abroad in exchange for the surplus in imports. This serves to counteract the fall in the value of the currency, making it easier to obtain the imported inputs to production. Moreover, as the trade imbalance causes the value of the domestic currency to fall, this serves on the one hand, to limit imports by making them more expensive,⁸¹⁶ as well as to make exports more competitive on the world market,⁸¹⁷ since these are now available in exchange for a currency which is less expensive to obtain. The result is that the trade imbalance will be at least partially redressed, and the fall in the value of the currency will be contained. Finally, if none of these mechanisms have the desired effect, government may take more proactive measures to assure that the demand for inputs necessary for economic growth can be met by an increase in the domestic supply of these.⁸¹⁸ This involves policies aimed at a progressive autarkization of the economy,⁸¹⁹ including the establishment of production directly by government in some industries.

The last potential problem associated with deficit-funded government spending which Kalecki addresses is the argument that greater government borrowing will cause an increase in the rate of interest as the demand for loanable

⁸¹⁴ Kalecki 1990, pp. 171, 173, 195.

⁸¹⁵ Kalecki 1990, pp. 173.

⁸¹⁶ Kalecki 1990, pp. 171-72, 197-98.

⁸¹⁷ Kalecki 1990, pp. 171, 197-18.

⁸¹⁸ Kalecki 1990, pp. 183, 200.

⁸¹⁹ Kalecki 1990, pp. 161, 183, 200.

funds increases.⁸²⁰ This is the so-called 'crowding out' effect. If true, this indeed would be a serious problem, since the higher rates would make it more difficult for firms to borrow money in order to invest. Thus, it is likely that at least a portion of the additional demand created by the new government spending would be offset by a decline in the investments of the private sector.⁸²¹ Kalecki however, denied that this was likely to take place. He believed that the interest rate could be kept at a reasonable level, even in the context of high levels of government borrowing, through proper monetary policies undertaken by central banks.⁸²² To support this claim, Kalecki cites the case of the US during the Second World War, when the rate of interest remained stable despite large government deficits.⁸²³

While it appears that Kalecki believed that all of the various problems associated with deficit funded government spending as a way of attaining and maintaining full employment in the economy could be overcome, he did present one serious difficulty with this approach to which viable answers could be less readily offered. The biggest problem with deficit-funded government spending is actually one that is similar to that which arises in the case of tax-funded government spending and which makes the latter approach to full employment management ineffectual.⁸²⁴ I explained that the problem in that case was that while the government spending served to increase aggregate demand, it did not actually raise the profit level, since all of the increases in gross profits were taxed away again to pay for the spending. A stable profit level meant that investment did not increase

⁸²⁰ Kalecki 1990, pp. 194, 360.

⁸²¹ Kalecki 1990, pp. 194, 360.

⁸²² Kalecki 1990, pp. 348, 360-61.

⁸²³ Kalecki 1990, p. 348.

⁸²⁴ Kalecki 1991, p. 357.

substantially either. After a time, the forces causing investment decline – the increase in productivity and in unused capacity – would make their appearance once more. In the case of deficit-funded government spending, there is an initial increase in profits that is equal to the increase in demand. This sets off a boom caused by higher levels of investment, which raise the level of output, employment and incomes. A new equilibrium is reached. But what happens in the next round of accumulation? Government is forced to maintain at least the same level of deficit spending.⁸²⁵ This is a given; or else there would be a decline in demand, profits and investment initiating a new downturn. However, it seems that it is not sufficient for government merely to keep spending levels stable.⁸²⁶ Stable levels of government spending will mean that levels of profits and investment will also remain stable. However, when the fact that investment increases productive capacity more than demand is taken account of, it can be seen that a stable level of profits will over time tend to yield a falling level of investment and a return of the tendency to stagnation.⁸²⁷ Instead of keeping the level of deficit spending stable therefore, government is forced to continually increase it in a cumulative fashion if continuous levels of growth are to be assured and stagnation averted.⁸²⁸

It is possible that this insight, that government spending has not only to remain stable but to grow year after year, could pose serious problems on a technical level for the maintenance of full employment. It is unclear from Kalecki's writings whether the solutions to the various problems to deficit spending offered

⁸²⁵ Kalecki 1991, p. 369.

⁸²⁶ Kalecki 1991, pp. 357-58.

⁸²⁷ Kalecki 1991, pp. 369-70.

⁸²⁸ Kalecki 1991, p. 358; Henley 1999, p. 517.

above are ones that also work for cumulative increases in spending or merely constant deficits. In any case, however, the problems that are likely to arise as a result of constant increases in government spending are even more substantial when the political sphere is taken account of.⁸²⁹ I have already discussed, in the previous chapter, the ways in which the spending by government, which the achievement of full employment necessarily entails, constitutes a stepping stone on the road to socialism, and the way in which, for this reason, it is likely to encounter opposition from the capitalist class. This would be even more manifestly the case should this spending take the form of cumulative deficit spending. As spending by government increases with each cycle, government would start control an ever-larger share of economic output and to play an ever-bigger role in the economy. Moreover, as the fields to which government spending can be directed begin to shrink, businesses would begin to fear that either government would start to invest in areas in which the private sector is already producing, creating competition for firms there,⁸³⁰ or else that government spending would begin to be used to increase the incomes and standards of living of the working class.⁸³¹ All of these potential effects would be likely therefore to engender a virulent backlash from the capitalist class.⁸³²

Income Redistribution

⁸²⁹ Kalecki 1991, pp. 360ff., 373; Feiwel 1975, p. 218.

⁸³⁰ Kalecki 1972b, p. 77; Henley 1999, p. 518; Feiwel 1999, pp. 538-39; Sebastiani 1994, p. 24; Arestis and Skuse 2004, pp. 11-3.

⁸³¹ Kalecki 1990, pp. 358, 368, 371, 383; Kalecki 1972b, p. 77-8; Feiwel 1999, pp. 538-39; Henley 1999, pp. 518, 542; Arestis and Skuse 2004, pp. 11, 13.

⁸³² Kalecki 1990, p. 373; Kalecki 1972b, p. 76-8; Feiwel 1999, pp. 539, 543; Henley 1999, p. 518.

The suggestion that a cumulative increase in government deficit spending would likely lead to the subsidizing of consumption suggests the final mechanism which could be employed to achieve and maintain full employment: income redistribution. Kalecki notes that this can be achieved by supporting trade unions in their fight for higher wages,⁸³³ or by taxing capitalist income in order for government to undertake social spending,⁸³⁴ consumption subsidies,⁸³⁵ or straight transfer payments.⁸³⁶ An idea of the effects of such measure can already be gleaned from the discussion in Chapter 2 of the effects of a rise in the degree of monopoly. Now the task that concerns me is to make explicit the effects of a movement of the wage share in the opposite direction.

What would happen therefore if a rise in the wage at the expense of profits causes a reduction in the degree of monopoly? Similar to what happens in the opposite case, a positive change in the wage share does not cause an immediate change in the investment or consumption of capitalists, decisions which are taken in the past.⁸³⁷ As per Kalecki's profits equation, because the levels of investment and consumption by capitalists do not change immediately following an increase in the wage share, the level of profits does not decline either. Initially, a rise in wages causes a fall in profits.⁸³⁸ However, a rise in wages also brings about a rise in demand levels.⁸³⁹ This can have one of two outcomes, depending on whether prices are flexible, as in the case of competitive capitalism, or fixed, as is more commonly

⁸³³ Kalecki 1990, pp. 375-76; Kalecki 1991, p. 102.

⁸³⁴ Kalecki 1990, p. 376; Henley 1999, p. 518.

⁸³⁵ Kalecki 1990, pp. 373, 376, 382; Kalecki 1991, p. 102; Henley 1999, p. 518.

⁸³⁶ Kalecki 1990, p. 382; Henley 1999, p. 518.

⁸³⁷ Kalecki 1991, p. 96.

⁸³⁸ Kalecki 1990, p. 375; Kalecki 1991, pp. 96-7.

⁸³⁹ Kalecki 1991, p. 97.

associated with the monopoly situation. If prices are fluid, then the increase in demand causes prices to rise. Profits are restored to their original levels through this mechanism.⁸⁴⁰ But if a rise in prices is the only consequence of a rise in the wage share, then there is little change in the levels of the other variables. Neither output, nor employment, nor incomes increase.⁸⁴¹ The rise in prices completely offsets the rise in the nominal wage and real wage levels remain stable.⁸⁴²

Thus, for wage increases to have an effect on the level of economic reproduction, some measures must be taken to prevent an equivalent rise in prices.⁸⁴³ Ironically, the presence of monopolization in the economy actually works against a rise in prices to ensure that a rise in the wage share has a positive effect on the level of employment. The reasons for this are as follows. Under competitive capitalism, prices are generally set on the basis of marginal costs. Thus, should these rise as a result of a rise in the wage, a rise in prices will generally be the result. Firms under monopoly systems, on the other hand, set their prices on the basis of criteria other than costs. The mark up of prices over costs also tends to be higher. Firms in the monopoly context, therefore, have a greater amount of 'room' in their pricing structure to absorb a rise in the wage without converting it into a rise in prices.⁸⁴⁴ A rise in prices beyond a certain point, moreover, would begin to make the products of the industry in question less competitive with respect to those of other industries⁸⁴⁵ (not to mention the products of foreign producers). This could mean the loss of sales

⁸⁴⁰ Ibid.

⁸⁴¹ Kalecki 1991, p. 98.

⁸⁴² Ibid.

⁸⁴³ Kalecki 1990, p. 376.

⁸⁴⁴ Kalecki 1991, p. 100.

⁸⁴⁵ Kalecki 1991, p. 100; Foster 2013, p. 7.

for the industry in question. The prevalence of higher prices in one industry could also serve to attract new entrants into that field who would compete with the established firms.⁸⁴⁶ Finally, since competitive firms are already assumed to be operating at near full capacity, a rise in demand cannot be immediately met by an increase in output. The higher demand will be met by a constant level of production and this will cause prices to rise.⁸⁴⁷ Monopoly firms on the other hand have a surplus of unused productive capacity. This makes it easy for them to meet the new demand with increased output.⁸⁴⁸ Thus prices need not rise.

A rise in wages which was not accompanied by a rise in prices would have a different impact on the other economic indicators as well. In the first place, the initial level of profits would be restored through an increase in output and sales rather than a rise in prices. Because prices had remained stable, the increase in the nominal wage would not be offset. Real wages would have increased, which would mean, together with the restoration of profits, that total aggregate income would now be higher.⁸⁴⁹ The increase in profits through the increase in output would also signal an increase in employment and in the capacity-utilization level.⁸⁵⁰ The higher level of demand through higher real wages, together with a reduction in surplus capacity would encourage increased investment, profits, employment and demand in the subsequent period, causing an upswing in the economy.⁸⁵¹

⁸⁴⁶ Foster 2013, p. 7.

⁸⁴⁷ Kalecki 1991, p. 103.

⁸⁴⁸ Kalecki 1991, p. 359.

⁸⁴⁹ Kalecki 1991, p. 101; Chilosi 2004, p. 75.

⁸⁵⁰ Kalecki 1991, pp. 101-02; Foster 2013, p. 7; Sawyer 1985, p. 117; Chilosi 2004, p. 75.

⁸⁵¹ Foster 2013, p. 7.

Technically speaking, income redistribution as presently described functions in the same fashion as does government spending funded by taxation of capitalist income.⁸⁵² This means that after the initial round of redistribution and the modest upturn in the economic cycle which this would engender as a result of higher demand, a similar problem as that discussed in relation to tax funded spending would present itself. Since the level of profits would not have risen while the level of output would have, the rate of profit on each unit of output would fall. In addition, a static level of profits would not engender any substantial increases in investment. Investment at the current level would cause the build-up of unused productive capacity and the fall in the rate of profit, further discouraging subsequent investment. In order to have a significant impact in raising the level of reproduction towards full employment therefore, income redistribution could not be a one-off occurrence but would have to take place on an ongoing basis.

Ultimately, Kalecki saw in income redistribution a method that was technically viable for the attainment and maintenance of full employment.⁸⁵³ Kalecki believed, moreover, that it was one that would have to be present as a part of any policy initiative seeking to increase the level of economic reproduction, even those seeking to do so by other means (such as through deficit spending, for example). The reason for this is that since the degree of monopoly has a tendency to increase progressively, any policy mechanism aimed at delivering full employment outcomes will become less effective over time as the wage share in the economy declines.⁸⁵⁴

⁸⁵² Kalecki 1991, p. 102-03.

⁸⁵³ Kalecki 1990, p. 376; Foster 2013, p. 7; Henley 1999, p. 517; Sebastiani 1994, p. 21.

⁸⁵⁴ Kalecki 1990, p. 385; Henley 1999, p. 517.

There will thus always exist a need to counteract this tendency by pushing the wage share in the opposite direction through redistributive measures.⁸⁵⁵

But if Kalecki considered that income redistribution, in addition to, possibly, deficit funded government spending,⁸⁵⁶ offered the technical possibility of attaining full employment through policy management,⁸⁵⁷ it was still an open question whether such an objective was an attainable one in the final analysis. And the reason for the persistence of this doubt on Kalecki's part was the resistance in the political sphere which such attempts were likely to engender.⁸⁵⁸ The specific reasons why capitalists are likely to resist measures targeting income redistribution are threefold. First, income redistribution, if it is funded by taxation, is likely to be interpreted by the capitalists as an infringement on their rights of private property and an erosion of their class power.⁸⁵⁹ Second, as we have seen, higher worker incomes and greater financial security works to erode workplace discipline and undermines the ideological link between work and material sustenance. And finally, as I also described in chapter 3, redistribution of the social product in favour of the working class gives the latter the greater security, confidence and impetus to push for ever greater economic, social and political gains in such a way that, for Kalecki, has the potential to lead to the advent of socialism in society. As a result of these factors, income redistribution, probably even more so than an increase in

⁸⁵⁵ Kalecki 1990, p. 385; Henley 1999, p. 517.

⁸⁵⁶ Kalecki 1991, p. 360; Foster 2013, p. 7.

⁸⁵⁷ Kalecki 1990, pp. 383, 385; Sebastiani 1994, p. 21; Feiwel 1975, p. 218; Arestis and Skuse 2004, p. 10.

⁸⁵⁸ Foster 2013, p. 8; Henley 1999, p. 517; Feiwel 1975, p. 218; Arestis and Skuse 2004, p. 11.

⁸⁵⁹ Foster 2013, pp. 1-2; Henley 1999, p. 518.

government spending, is sure to generate very strong opposition from the capitalist class.⁸⁶⁰

The Political Barriers to Full Employment

I have already discussed, in the previous section as well as the previous chapter, the nature of the political barriers which attempts at securing full employment are likely to encounter, and which consist of the capitalist class's resistance to such measures primarily on the grounds of the possibility that full employment may lead to socialism. On this basis, therefore, the attainment and maintenance of full employment would seem impossible. However, Kalecki also proposes a number of mechanisms through which full employment could conceivably be reached while circumventing the political opposition which the latter would otherwise usually elicit. In this section, I discuss these alternative paths to full employment as Kalecki describes them and whether Kalecki believed that full employment would ultimately be capable of being reached through them.

The first mechanism through which Kalecki believed full employment could be reached without engendering the political resistance of the capitalist class was through Fascism.⁸⁶¹ The latter addresses many of the aspects of full employment which the capitalist class is likely to find objectionable. Under Fascism, despite a greater control over the economy by the state, business interests do not have to fear losing their place of prominence in the process of economic decision-making. Though the capitalist class ceases to exert control through the lever of "business confidence", this is not to be regretted since business now completely integrates

⁸⁶⁰ Kalecki 1990, p. 373; Kalecki 1972b, p. 78; Foster 2013, p. 8; Feiwel 1999, pp. 539, 541-42.

⁸⁶¹ Kalecki 1972b, p. 79.

itself with the state and can continue to shape policy in its own interest in this way.⁸⁶² Something similar happens under Fascism as business no longer fears that rising employment and wages could erode labour discipline and the work ethic. This is because while capitalists have given up the control that they used to exert over workers through economic means – low wages and the fear of unemployment – the former now wield direct political power over the latter. Political repression and extra-economic discipline now provide the incentive for workers to stay in line.⁸⁶³ Finally, under Fascism, much of the new government spending which is used to stimulate full employment is directed, not towards public investment, redistribution, or production in industries previously dominated by private firms, but to spending on armaments and the military.⁸⁶⁴ Thus capitalist firms can enjoy an increase in demand and profits without fear that the new spending which creates this demand will end up being a source of competition or will have the effect of redistributing incomes towards the wage or raising the standard of living of workers.⁸⁶⁵ For Kalecki, the obvious example for the way in which the political turn to Fascism could make high levels of employment as a result of high levels of government spending palatable to the ruling class was of course Nazi Germany in the prewar period.⁸⁶⁶

The usually high levels of arms spending under Fascism, and the way which this can serve to neutralize some of the objections which the capitalist class can have to government spending targeting full employment, suggest a way in which

⁸⁶² Kalecki 1972b, p. 79; Feiwel 1999, p. 545.

⁸⁶³ Kalecki 1972b, p. 79; Feiwel 1999, p. 545; Sebastiani 1994, p. 28.

⁸⁶⁴ Kalecki 1972b, p. 79; Feiwel 1999, p. 545.

⁸⁶⁵ Kalecki 1972b, p. 79; Feiwel 1999, p. 545.

⁸⁶⁶ Kalecki 1990, p. 182; Feiwel 1999, p. 532.

government spending could get around the political opposition to full employment on the part of the capitalist class even in a more democratic context. Kalecki suggests that the capitalist class will be far more amenable to government spending if arms are the destination. Just as in a Fascistic context, arms spending by democratic states nevertheless allays the fears of private firms that government spending could take place in ways which would create competition for them. Moreover, arms spending serves to take the place of other, less desirable types of spending, such as would raise the wage.⁸⁶⁷ Kalecki suggests, in addition, that arms spending may serve to blunt class conflict and to attenuate the militancy of workers despite the decline in unemployment, which tends to have the opposite effect. The reason for this is that increased levels of arms spending are often accompanied by the development of a jingoistic national public discourse⁸⁶⁸ in which an external other is demonized and held up as a common threat. The class antagonism and resentment of the working class towards the capitalists is therefore repurposed⁸⁶⁹ and directed outwards; thereafter, capitalists and workers are united under a common flag. The historical example of the way in which arms spending can be used to increase levels of employment, incomes and output in a non-Fascist context is that of the United States in the postwar period, which experienced high growth primarily as a result of government spending associated with the conflicts in Korea, Vietnam⁸⁷⁰ and the Cold War.⁸⁷¹

⁸⁶⁷ Kalecki 1972b, p. 79; Henley 1999, pp. 524-25.

⁸⁶⁸ Foster 2013, p. 11.

⁸⁶⁹ Ibid.

⁸⁷⁰ Kalecki 1972b, p. 86, 88, 96, 109-10; Feiwel 1999, p. 532; Halevi 2016a, p. 139.

⁸⁷¹ King 1999, p. 252.

Despite offering the possibility of circumventing some of the political opposition to full employment measures in the short and possibly medium terms, Kalecki did not believe that either of these were complete solutions which permitted the attainment and maintenance of full employment in the long term. Kalecki identified two reasons for Fascism's ultimate failure at creating full employment, both rooted in the historical case of Nazi Germany. First, the creation of full employment through spending on military ends would also drive the build-up of arms by national adversaries. This would sooner or later lead to the outbreak of war.⁸⁷² Kalecki also highlighted the way in which economic progress was blocked in the German case by high levels of importation leading to balance of trade difficulties and, eventually, to the impossibility of acquiring sufficient inputs to production.⁸⁷³

As to the case of government spending on armaments in a more democratic context, Kalecki concluded that even such a target of spending would eventually generate a degree of opposition from the capitalist class which would make the maintenance of full employment through such a mechanism impossible in the long run.⁸⁷⁴ Capitalists are never fully able to act as a class and thus to support government spending on arms completely.⁸⁷⁵ Kalecki argues that certain fractions within the capitalist class will always benefit from arms spending, while others will not.⁸⁷⁶ The latter will be reluctant to allow the government to take on ever-greater levels of debt in exchange for the carrying out of spending which has no positive

⁸⁷² Kalecki 1972b, p. 100; Kalecki 1990, pp. 163, 186; Kalecki and Kowalik 1991, p. 471.

⁸⁷³ Kalecki 1990, pp. 161-62, 183.

⁸⁷⁴ Kalecki 1991, pp. 361-62.

⁸⁷⁵ Kalecki 1991, p. 360.

⁸⁷⁶ Kalecki 1991, pp. 361-62; Feiwel 1999, p. 548.

effect for them.⁸⁷⁷ These capitalists will therefore oppose even arms spending.⁸⁷⁸

Kalecki finds empirical evidence for this in the history of the United States in the postwar period, wherein, during the Eisenhower administration, the capitalist class, through their representatives in the Republican Party, began pushing for the drastic curtailment of military spending.⁸⁷⁹

As a result of this dynamic, Kalecki believed that even in the long run, arms spending would be unable to overcome the politically motivated opposition of capitalists to policies that target full employment through government intervention.⁸⁸⁰ Instead what will take place is the emergence of a “political business cycle”.⁸⁸¹ The capitalist class will agree to let government use deficit spending to raise the level of economic reproduction out of prolonged slumps.⁸⁸² However, capitalists will not allow this to go on for very long. Fearing the structural impacts which a prolonged period of high employment could have on society, they will quickly become “boom tired”.⁸⁸³ They will insist that government cut back on its spending, letting the economy revert to its default position of stagnation, but preserving their own social power in the process.⁸⁸⁴

⁸⁷⁷ Kalecki 1991, p. 369.

⁸⁷⁸ Kalecki 1991, p. 361.

⁸⁷⁹ Kalecki 1991, pp. 361-62, 369.

⁸⁸⁰ Kalecki 1991, pp. 361-62.

⁸⁸¹ Kalecki 1972b, p. 83; Foster 2013, p. 2; Henley 1999, p. 519; Feiwel 1999, p. 530; Arestis and Skuse 2004, p. 12.

⁸⁸² Kalecki 1972b, pp. 80, 82; Kalecki 1991, pp. 361-62, 373; Henley 1999, pp. 518-19; Feiwel 1999, pp. 530, 542, 544; Arestis and Skuse 2004, p. 12.

⁸⁸³ Kalecki 1972b, p. 82; Henley 1999, p. 519; Feiwel 1999, pp. 530, 544; Lopez and Assous 2010, p. 198-99.

⁸⁸⁴ Kalecki 1972b, p. 83; Foster 2013, pp. 2, 10; Henley 1999, p. 519; Feiwel 1999, pp. 530, 540, 544; Sebastiani 1994, p. 29; Lopez and Assous 2010, p. 199.

This was the position on the possibility of attaining full employment through government intervention which Kalecki held for the majority his career.⁸⁸⁵ He believed that while such an outcome was technically achievable, political limitations made it a practical impossibility.⁸⁸⁶ Near the end of his life however, Kalecki seems to have had a change of heart. In his 1971 article “Observations on the ‘Crucial Reform’”, which he co-authored with Tadeusz Kowalik, Kalecki looked back on the economic situation of the US in the post-war period, especially in the 1960s, and concluded that thanks primarily to measures such as large-scale arms spending as well as some measure of redistribution, something like permanent full employment had actually been achieved.⁸⁸⁷ Through intense social pressure, the political opposition of the capitalist class had been overcome and it had become possible to implement policies which made the economic system function at a level much closer to the optimal level.⁸⁸⁸

On this basis, it can only be concluded that although Kalecki seems to have had great reservations about the possibility of attaining full employment, and while he subjected this possibility to myriad technical and political limitations, he ultimately did make the case that full employment was attainable in a capitalist economy and that therefore the optimal functioning of such an economy was also possible. Such an argument constitutes an additional point of departure from the theories of Luxemburg and of classical Marxists and a greater approximation to the neoclassical and Keynesian perspectives, even as it bodes well for Kalecki’s

⁸⁸⁵ Kowalik 2004, p. 43; Lopez and Assous 2010, p. 199.

⁸⁸⁶ Kalecki 1991, pp. 362, 371, 373; Henley 1999, pp. 517, 519; Sebastiani 1994, pp. 29-30.

⁸⁸⁷ Kalecki and Kowalik 1991, pp. 472-73; Kowalik 2004, pp. 42-3, 45-6; Dymski 2015, p. 162; Lopez and Assous 2010, p. 200.

⁸⁸⁸ Kalecki and Kowalik 1991, pp. 467, 472; Kowalik 2004, pp. 43, 46; Dymski 2015, p. 157.

objective of instituting a socialist transformation of society by means of a strategy of gradual reform.

Bibliography

- Albo, Greg 2016, 'Rosa Luxemburg and Contemporary Capitalism', in *Rosa Luxemburg: A Permanent Challenge for Political Economy: On the History and Present of Luxemburg's 'Accumulation of Capital'*, edited by Judith Dellheim and Frieder Otto Wolf, New York: Palgrave MacMillan.
- Arestis, Philip and Frank Skuse 2004, 'The Relevance of Kalecki's "Political Aspects of Full Employment" to the Twenty-First Century', in *Kalecki's Economics Today*, edited by Zdzislaw L. Sadowski and Adam Szeworski, London: Routledge.
- Asimakopulos, A. 1999 [1989], 'Kalecki and Robinson: an "Outsider's" Influence', in *The Legacy of Michal Kalecki, Volume 1*, edited by Malcolm Sawyer, Cheltenham, U.K.: Edward Elgar.
- Baran, Paul A, and Paul M. Sweezy 1966, *Monopoly Capital: An Essay on the American Economic and Social Order*, New York: Monthly Review Press.
- Bauer, Otto 2012 [1913], 'The Accumulation of Capital', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Bellofiore, Riccardo 2004, "'Like a Candle Burning at Both Ends": Rosa Luxemburg and the Critique of Political Economy', in *Neoliberalism in Crisis, Accumulation, and Rosa Luxemburg's Legacy*, edited by Paul Zarembka and Susanne Soederberg, Bingley: Emerald Group.
- Bellofiore, Riccardo 2009a, 'General Introduction: Rosa Luxemburg on Capitalist Dynamics, Distribution and Effective Demand Crises', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Bellofiore, Riccardo 2009b, 'The Monetary Circuit of Capital in the *Anti-Critique*', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Bellofiore, Riccardo 2014, 'Luxemburg and Kalecki: the Actuality of Tadeusz Kowalik's Reading of *The Accumulation of Capital*', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.

- Bellofiore, Riccardo, Ewa Karwowski and Jan Toporowski 2014, 'Introduction: Tadeusz Kowalik and the Political Economy of the 20th Century', in *Economic Crisis and Political Economy: Volume 2 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Bellofiore, Riccardo and Marco Passarella 2009, 'Finance and the Realization Problem in Rosa Luxemburg: A "Circuitist" Reappraisal', in *The Political Economy of Monetary Circuits: Tradition and Change in Post-Keynesian Economics*, edited by Jean-François Ponsot and Sergio Rossi, New York: Palgrave MacMillan.
- Bernstein, Eduard 1988a [1897], 'The Social and Political Significance of Space and Number', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988b [1898], 'The Theory of Collapse and Colonial Policy', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988c [1898], 'A Statement', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988d [1898], 'Critical Interlude', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988e [1898], 'The Realistic and Ideological Moments in Socialism', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988f [1898], 'The Party Conference at Stuttgart', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988g [1898], 'The Conquest of Political Power', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 1988h [1898], 'Bernstein to Bebel', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.

- Bernstein, Eduard 1993 [1899], *The Preconditions of Socialism*, edited and translated by Henry Tudor, Cambridge NY: Cambridge University Press.
- Bernstein, Eduard 2012 [1900], 'Social Democracy and Imperialism', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden, Brill.
- Bieler, Andreas, Sumercan Bozkurt, Max Crook, Peter S. Cruttenden, Ertan Erol, Adam David Morton, Cemal Burak Tansel and Elif Uzgoren 2016, 'The Enduring Relevance of Rosa Luxemburg's *The Accumulation of Capital*', *Journal of International Relations and Development*, 19: 420-47.
- Blackwater, Bill 2015, 'Rediscovering Rosa Luxemburg', *Renewal*, 23, 3: 71-85.
- Bleaney, M. F. 1976, *Underconsumption Theories: A History and Critical Analysis*, London: Lawrence and Wishart.
- Brie, Michael 2016, 'A Critical Reception of *Accumulation of Capital*', in *Rosa Luxemburg: A Permanent Challenge for Political Economy: On the History and Present of Luxemburg's 'Accumulation of Capital'*, edited by Judith Dellheim and Frieder Otto Wolf, New York: Palgrave MacMillan.
- Bronner, S. E. (ed.) 1978, *The Letters of Rosa Luxemburg*, Boulder: Westview Press.
- Bronner, S. E. (ed.) 1993, *The Letters of Rosa Luxemburg*, new edition, Atlantic Highlands: Humanities Press.
- Bukharin, Nikolai I. 1972 [1924], *Imperialism and the Accumulation of Capital*, edited by Kenneth J. Tarbuck, translated by Rudolph Wichmann, New York: Monthly Review Press.
- Chilosi, Alberto 2004, 'Kalecki's Theory of Income Determination and Modern Macroeconomics: A Reconstruction and an Assessment', in *Kalecki's Economics Today*, edited by Zdzislaw L. Sadowski and Adam Szeworski, London: Routledge.
- Cliff, Tony 1959, *Rosa Luxemburg*, London: International Socialism.
- Cogoy, Mario 1987, 'Neo-Marxist Theory, Marx, and the Accumulation of Capital', *International Journal of Political Economy*, 17, 2: 11-37.
- Committee of Economic Sciences, Polish Academy of Sciences 1990, 'Introduction', in *Collected Works of Michal Kalecki, Volume 1: Capitalism, Business Cycles and Full Employment*, edited by Jerzy Osiatynski, translated by Chester Adam Kisiel, Oxford: Clarendon Press.

- Day, Richard B. and Daniel Gaido 2012, *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Dellheim, Judith, Frieder Otto Wolf and Lutz Brangsch 2016, 'Forward', in *Rosa Luxemburg: A Permanent Challenge for Political Economy: On the History and Present of Luxemburg's 'Accumulation of Capital'*, edited by Judith Dellheim and Frieder Otto Wolf, New York: Palgrave MacMillan.
- Desai, Meghnad and Roberto Veneziani 2009, 'Rosa Luxemburg's Critique of Marx's Schemes of Reproduction: A Re-Evaluation and a Possible Generalization', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Feiwel, George R. 1972, 'Introduction: Notes on the Life and Work of Michal Kalecki', in *The Last Phase in the Transformation of Capitalism*, New York: Monthly Review Press.
- Feiwel, George R. 1975, *The Intellectual Capital of Michal Kalecki: A Study in Economy Theory and Policy*, Knoxville: University of Tennessee Press.
- Feiwel, George R. 1999 [1974], 'Reflections on Kalecki's Theory of Political Business Cycle', in *The Legacy of Michal Kalecki, Volume 1*, edited by Malcolm Sawyer, Cheltenham, U.K.: Edward Elgar.
- Fetscher, Iring 1972, 'Postscript', in *Rosa Luxemburg: Her Life and Work*, translated by Johanna Hoornweg, New York: Monthly Review Press.
- Foster, John Bellamy 2013, 'Marx, Kalecki and Socialist Strategy', *Monthly Review*, April: 1-14.
- Foster, John Bellamy 2014, 'Polish Marxian Political Economy and US Monopoly Capital Theory: the Influence of Luxemburg, Kalecki and Lange on Baran and Sweezy and *Monthly Review*', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Frölich, Paul 1972 [1939], *Rosa Luxemburg: Her Life and Work*, translated by Johanna Hoornweg, New York: Monthly Review Press.
- Goode, Patrick 1983, *Karl Kautsky: Selected Political Writings*, edited and translated by Patrick Goode, London: MacMillan Press.
- Groenewegen, Peter 2013, 'Rosa Luxemburg's *The Accumulation of Capital*', *History of Economics Review*, 58: 71-82.

- Halevi, Joseph 2016a, 'Kalecki and Modern Capitalism', in *Post-Keynesian Essays from Down Under, Volume I: Essays on Keynes, Harrod and Kalecki*, edited by Joseph Halevi, G. C. Harcourt, Peter Kriesler and J. W. Nevile, London: Palgrave MacMillan.
- Halevi, Joseph 2016b, 'Kalecki's Conception of the Economic Cycle and State Intervention', in *Post-Keynesian Essays from Down Under, Volume I: Essays on Keynes, Harrod and Kalecki*, edited by Joseph Halevi, G. C. Harcourt, Peter Kriesler and J. W. Nevile, London: Palgrave MacMillan.
- Halevi, Joseph and Peter Kriesler 2016, 'Kalecki, Classical Economics and the Surplus Approach', in *Post-Keynesian Essays from Down Under, Volume I: Essays on Keynes, Harrod and Kalecki*, edited by Joseph Halevi, G. C. Harcourt, Peter Kriesler and J. W. Nevile, London: Palgrave MacMillan.
- Harcourt, G. C. and Peter Kriesler 2014, 'Michal Kalecki and Rosa Luxemburg on Marx's Schemes of Reproduction: Two Incisive Interpreters of Capitalism', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Harvey, David 2006 [1982], *The Limits to Capital*, London: Verso.
- Harvey, David 2010, *The Enigma of Capital*, New York: Oxford University Press.
- Harvey, David 2013, *A Companion to Marx's 'Capital', Volume 2*, London: Verso.
- Henley, Andrew 1999 [1988], 'Political Aspects of Full Employment: A Reassessment of Kalecki', in *The Legacy of Michal Kalecki, Volume 1*, edited by Malcolm Sawyer, Cheltenham, U.K.: Edward Elgar.
- Howard, M. C. and J. E. King 1989, *A History of Marxian Economics, Volume 1, 1883-1929*, London: MacMillan.
- Howard, M. C. and J. E. King 1992, *A History of Marxian Economics, Volume 2, 1929-1990*, Princeton: Princeton University Press.
- Hudis, Peter 2012, 'New Perspectives on Rosa Luxemburg's Critique of Global Capitalism', *Perspectives on Global Development and Technology*, 11: 27-37.
- Hudis, Peter 2014, 'The Dialectic of the Spatial Determination of Capital: Rosa Luxemburg's *Accumulation of Capital Reconsidered*', available at: <http://kapacc.blog.rosalux.de/files/2014/03/Hudis-on-Accumulation-of-Capital.-1-6-14.pdf>

- Kalecki, Michal 1940, 'The Supply Curve of an Industry under Imperfect Competition', *The Review of Economic Studies*, 7, 2: 91-112.
- Kalecki, Michal 1941, 'A Theorem on Technical Progress', *The Review of Economic Studies*, 8, 3: 178-184.
- Kalecki, Michal 1954, *The Theory of Economic Dynamics: An Essay on Cyclical and Long-Run Changes in Capitalist Economy*, London: Allen and Unwin.
- Kalecki, Michal 1962, 'Observations on the Theory of Growth', *The Economic Journal*, 72, 285: 134-53.
- Kalecki, Michal 1968, 'The Marxian Equations of Reproduction and Modern Economics', *Social Science Information*, 7, 6: 73-9.
- Kalecki, Michal 1971, *Selected Essays on the Dynamics of the Capitalist Economy 1933-1970*, Cambridge: Cambridge University Press.
- Kalecki, Michal 1972a [1939], *Essays in the Theory of Economic Fluctuations*, New York: Russell and Russell.
- Kalecki, Michal 1972b, *The Last Phase in the Transformation of Capitalism*, New York: Monthly Review Press.
- Kalecki, Michal 1976, *Essays on Developing Economies*, Hassocks: Harvester Press.
- Kalecki, Michal 1990, *Collected Works of Michal Kalecki, Volume 1: Capitalism, Business Cycles and Full Employment*, edited by Jerzy Osiatynski, translated by Chester Adam Kisiel, Oxford: Clarendon Press.
- Kalecki, Michal 1991, *Collected Works of Michal Kalecki, Volume 2: Economic Dynamics*, edited by Jerzy Osiatynski, translated by Chester Adam Kisiel, Oxford: Clarendon Press.
- Kautsky, Karl 1975 [1907], *Socialism and Colonial Policy: An Analysis*, translated by Angela Clifford, Belfast: Athol Books.
- Kautsky, Karl 1983, *Karl Kautsky: Selected Political Writings*, edited and translated by Patrick Goode, London: MacMillan Press.
- Kautsky, Karl 2012a [1911], 'World Politics, World War and Social Democracy!', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.

- Kautsky, Karl 2012b [1914], 'Imperialism', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Kautsky, Karl 2012c [1915], 'National State, Imperialist State and Confederation', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Kerr, Prue 1997, 'Marx and Kalecki', *Contributions to Political Economy*, 16: 23-47.
- King, J. E. 2002, *A History of Post Keynesian Economics since 1936*, Cheltenham, U.K.: Edward Elgar.
- Kowalik, Tadeusz 1966a, 'Biography of Michal Kalecki', in *Problems of Economic Dynamics and Planning: Essays in Honour of Michal Kalecki*, Oxford: Pergamon Press.
- Kowalik, Tadeusz 1966b, 'R. Luxemburg's Theory of Accumulation and Imperialism: an Attempted Interpretation', in *Problems of Economic Dynamics and Planning: Essays in Honour of Michal Kalecki*, Oxford: Pergamon Press.
- Kowalik, Tadeusz 2003, 'Introduction to the Routledge Classics Edition', in *The Accumulation of Capital*, translated by Agnes Schwarzschild, New York: Routledge.
- Kowalik, Tadeusz 2004, 'Kaleckian Crucial Reform of Capitalism and After', in *Kalecki's Economics Today*, edited by Zdzislaw L. Sadowski and Adam Szeworski, London: Routledge.
- Kowalik, Tadeusz 2009, 'Luxemburg's and Kalecki's Theories and Visions of Capitalist Dynamics', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Kowalik, Tadeusz 2014 [1971], *Rosa Luxemburg: Theory of Accumulation and Imperialism*, edited and translated by Jan Toporowski and Hanna Szymborska, New York: Palgrave MacMillan.
- Krätke, Michael R. 2014, 'Rosa Luxemburg: Her Analysis of Imperialism, Her Contribution to the Critique of Political Economy', available at: http://www2.chuo-u.ac.jp/houbun/sympo/rosa_confe2007/pdf/papers/Kratke.pdf
- Krätke, Michael R. 2016, 'On the Beginnings of Marxian Macroeconomics', in *Rosa Luxemburg: A Permanent Challenge for Political Economy: On the History and Present of Luxemburg's 'Accumulation of Capital'*, edited by Judith Dellheim and Frieder Otto Wolf, New York: Palgrave MacMillan.

- Kriesler, Peter 2016, 'Keynes, Kalecki, and the *General Theory*', in *Post-Keynesian Essays from Down Under, Volume I: Essays on Keynes, Harrod and Kalecki*, edited by Joseph Halevi, G. C. Harcourt, Peter Kriesler and J. W. Neville, London: Palgrave MacMillan.
- Kriesler, Peter and Bruce McFarlane 2016, 'Michal Kalecki on Capitalism', in *Post-Keynesian Essays from Down Under, Volume I: Essays on Keynes, Harrod and Kalecki*, edited by Joseph Halevi, G. C. Harcourt, Peter Kriesler and J. W. Neville, London: Palgrave MacMillan.
- Le Blanc, Paul 2010, 'Rosa Luxemburg and the Global Violence of Capitalism', *Socialist Studies*, 6, 2: 160-72.
- Levy-Orlik, Noemi 2014, 'The Realisation Problem: A Reappraisal of the Kalecki and Luxemburg Discussion on the Schemes of Reproduction', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Looker, Robert 1972, 'Introduction', in *Rosa Luxemburg: Selected Political Writings*, edited by Robert Looker, translated by William D. Graf, London: Jonathan Cape.
- Lopez, Julio and Michael Assous 2010, *Michal Kalecki*, London: Palgrave MacMillan.
- Lopez, Julio and Tracy Mott 1999, 'Kalecki Versus Keynes on the Determinants of Investment', *Review of Political Economy*, 11, 3: 291-301.
- Luxemburg, Rosa 1951 [1913], *The Accumulation of Capital*, translated by Agnes Schwarzschild, London: Routledge.
- Luxemburg, Rosa 1970, *Rosa Luxemburg Speaks*, edited by Mary-Alice Waters, New York: Pathfinder Press.
- Luxemburg, Rosa 1972a [1921], *The Accumulation of Capital – An Anti-Critique or What the Epigones have made of Marx's Theory*, edited by Kenneth J. Tarbuck, translated by Rudolph Wichmann, New York: Monthly Review Press.
- Luxemburg, Rosa 1972b, *Rosa Luxemburg: Selected Political Writings*, edited by Robert Looker, translated by William D. Graf, London Jonathan Cape.
- Luxemburg, Rosa 1988 [1898], 'The Party Conference at Stuttgart', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.

- Luxemburg, Rosa 2012a [1911], 'Peace Utopias', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Luxemburg, Rosa 2012b [1911], 'Morocco', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Luxemburg, Rosa 2012c [1911], 'Petty-Bourgeois or Proletarian World Policy?', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Luxemburg, Rosa 2012d [1911], 'Our Broadsheet on Morocco', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Luxemburg, Rosa 2012e [1915], 'Perspectives and Projects', in *Discovering Imperialism: Social Democracy to World War I*, edited and translated by Richard B. Day and Daniel Gaido, Leiden: Brill.
- Mandel, Ernest 1978, 'Introduction', in *Capital: A Critique of Political Economy, Volume II*, translated by David Fernbach, London: Penguin Books.
- Mamica, Lukasz 2015, 'The Impact of Innovations on Investments and Economic Growth in the Thought of Kalecki', in *Michal Kalecki in the 21st Century*, edited by Jan Toporowski and Lukasz Mamica, London: Palgrave MacMillan.
- Marx, Karl, 1969 [1951], *Theories of Surplus Value*, translated by Emile Burns, London: Lawrence and Wishart.
- Marx, Karl 1972, *The Marx-Engels Reader*, 2nd edition, edited by Robert C. Tucker, New York: Norton and Company.
- Marx, Karl 1973 [1939], *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, translated by Martin Nicolaus, London: Penguin Books.
- Marx, Karl 1975, *Early Writings*, translated by Rodney Livingstone and Gregor Benton, London: Penguin Books.
- Marx, Karl 1976 [1867], *Capital: A Critique of Political Economy, Volume 1*, translated by Ben Fowkes, London: Penguin Books.
- Marx, Karl 1978 [1885], *Capital: A Critique of Political Economy, Volume 2*, translated by David Fernbach, London: Penguin Books.

- Marx, Karl 1981 [1894], *Capital: A Critique of Political Economy, Volume 3*, translated by David Fernbach, London: Penguin Books.
- Mattick, Paul 1978, *Anti-Bolshevik Communism*, London: Merlin Press.
- Mattick, Paul 2009, 'Economics, Politics and Crisis Theory: Luxemburg, Bukharin and Grossmann on the Limits of Capital', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Nettl, J. P. 1966, *Rosa Luxemburg*, London: Oxford University Press.
- Nuti, Mario D. 2004, 'Kalecki and Keynes Revisited: Two Original Approaches to Demand-Determined Income – and Much More Besides', in *Kalecki's Economics Today*, edited by Zdzislaw L. Sadowski and Adam Szeworski, London: Routledge.
- Paladini, Ruggero 1989, 'Kalecki and Fiscal Policy', in *Kalecki's Relevance Today*, edited by Mario Sebastiani, London: Palgrave MacMillan.
- Pastrello, Gabriele 2014, 'Luxemburg as an Economist: the Unique Challenge to Marx among Marxists', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Reuten, Geert 1998, 'The Status of Marx's Reproduction Schemes: Conventional or Dialectical Logic', in *The Circulation of Capital: Essays on Volume Two of Marx's 'Capital'*, edited by Christopher J. Arthur and Geert Reuten, London: MacMillan Press.
- Robinson, Joan 1951, 'Introduction', in *The Accumulation of Capital*, translated by Agnes Schwarzschild, London: Routledge.
- Robinson, Joan 1966, 'Kalecki and Keynes', in *Problems of Economic Dynamics and Planning: Essays in Honour of Michal Kalecki*, Oxford: Pergamon Press.
- Robinson, Joan 1968, 'Marx and Keynes', in *Marx and Modern Economics*, edited by David Horowitz, London: MacGibbon and Kee.
- Robinson, Joan 1980, 'Michal Kalecki', in *Collected Economic Papers, Volume 5*, Cambridge, MA: MIT Press.
- Rousseas, Stephen 1979, 'Rosa Luxemburg and the Origins of Capitalist Catastrophe Theory', *Journal of Post Keynesian Economics*, 1, 4: 3-23.

- Sardoni, Claudio 1989, 'Some Aspects of Kalecki's Theory of Profits: its Relationship to Marx's Schemes of Reproduction', in *Kalecki's Relevance Today*, edited by Mario Sebastiani, London: Palgrave MacMillan.
- Sardoni, Claudio 2011, *Unemployment, Recession and Effective Demand: the Contributions of Marx, Keynes and Kalecki*, Cheltenham, U.K.: Edward Elgar.
- Sawyer, Malcolm 1985, *The Economics of Michal Kalecki*, London: MacMillan.
- Sawyer, Malcolm 1988, 'Theories of Monopoly Capitalism', *Journal of Economic Surveys*, 2, 1: 47-76.
- Sawyer, Malcolm 1989, 'Kalecki's Economics and Explanations of the Economic Crisis', in *Kalecki's Relevance Today*, edited by Mario Sebastiani, London: Palgrave MacMillan.
- Schmidt, Ingo 2010, 'Rosa Luxemburg's *Accumulation of Capital*: New Perspectives on Capitalist Development and American Hegemony', *Socialist Studies*, 6, 2: 92-117.
- Schmidt, Ingo 2012a, 'Rosa Luxemburg's Accumulation of Capital: A Centennial Update with Additions from Long Wave Theory and Karl Polanyi's Great Transformation', *Critique: Journal of Socialist Theory*, 40, 3: 337-56.
- Schmidt, Ingo 2012b, 'Review: *Rosa Luxemburg and the Critique of Political Economy*', *Historical Materialism*, 20, 1: 253-66.
- Schmidt, Ingo 2013, 'Updating Rosa Luxemburg: Internationalism and the 20th Century Detour of Statist Socialism', available at: <http://kapacc.blog.rosalux.de/files/2014/02/1475750937.0.pdf>
- Schmidt, Ingo 2014a, 'Rosa Luxemburg: Economics for a New Socialist Project', in *New Politics*, 15,1, available at: <http://newpol.org/content/rosa-luxemburg-economics-%E2%80%A8for-new-socialist-project>
- Schmidt, Ingo 2014b, 'Capital Accumulation and Class Struggles for the "Long 19th Century" to the Present – a Luxemburgian Interpretation', *International Critical Thought*, 4, 4: 457-73.
- Sebastiani, Mario 1989, 'Kalecki and Marx on Effective Demand', *Atlantic Economic Journal*, 17, 4: 22-8.
- Sebastiani, Mario 1991, 'Observations on Marx's and Kalecki's Approaches to the Theory of Effective Demand', in *Marx and Modern Economic Analysis: the Future of Capitalism and the History of Economic Thought, Volume 2*, edited by Giovanni Caravale, Hants: Edward Elgar.

- Sebastiani, Mario 1994, *Kalecki and Unemployment Equilibrium*, London: MacMillan.
- Sordi, Serena and Alessandro Vercelli 2010, 'Genesis and Foundation of the Multiplier: Marx, Kalecki and Keynes', Working Paper, Department of Economic Policy, Finance and Development, University of Siena.
- Sweezy, Paul M. 1942, *The Theory of Capitalist Development: Principles of Marxian Political Economy*, New York: Oxford University Press.
- Sweezy, Paul M. 1967, 'Rosa Luxemburg's *The Accumulation of Capital*', *Science and Society*, 31, 4: 474-85.
- Tarback, Kenneth J. 1972, 'Editor's Introduction', in *The Accumulation of Capital – An Anti-Critique or What the Epigones have made of Marx's Theory*, edited by Kenneth J. Tarback, translated by Rudolph Wichmann, New York: Monthly Review Press.
- Thomas, Alex M. 2014, 'Classical Economics and the Question of Effective Demand', 27th History of Economic Thought Society of Australia (HETSA) Conference, Auckland, New Zealand.
- Ticktin, Hillel 2012, 'Rosa Luxemburg's Concept of Crisis in a Contemporary Theoretical Context', *Critique: Journal of Socialist Theory*, 40, 3: 309-21.
- Toporowski, Jan 1999, 'Kalecki and the Declining Rate of Profit', *Review of Political Economy*, 11, 3: 355-71.
- Toporowski, Jan 2004, 'Kalecki's Arguments for Socialism', in *Kalecki's Economics Today*, edited by Zdzislaw L. Sadowski and Adam Szeworski, London: Routledge.
- Toporowski, Jan 2013a, *Michal Kalecki: An Intellectual Biography, Volume 1: Rendezvous in Cambridge, 1899-1939*, New York: Palgrave MacMillan.
- Toporowski, Jan 2013b, 'Tadeusz Kowalik and the Accumulation of Capital', *Monthly Review*, January: 33-44.
- Toporowski, Jan 2014, 'Preface', in *Rosa Luxemburg: Theory of Accumulation and Imperialism*, translated and edited by Jan Toporowski and Hanna Szyborska, New York: Palgrave MacMillan.
- Toporowski, Jan 2016, 'Tadeusz Kowalik's Interpretation of Accumulation', in *Rosa Luxemburg: A Permanent Challenge for Political Economy: On the History and Present of Luxemburg's 'Accumulation of Capital'*, edited by Judith Dellheim and Frieder Otto Wolf, New York: Palgrave MacMillan.

- Trigg, Andrew B. 1994, 'On the Relationship between Kalecki and the Kaleckians', *Journal of Post-Keynesian Economics*, 17, 1: 91-109.
- Trigg, Andrew B. 2002, 'Surplus Value and the Kalecki Principle in Marx's Reproduction Schema', *History of Economics Review*, 35, 1: 104-14.
- Trigg, Andrew B. 2006, *Marxian Reproduction Schema: Money and Aggregate Demand in a Capitalist Economy*, London: Routledge.
- Trigg, Andrew B. 2009, 'Where does the Money and Demand come from? Rosa Luxemburg and the Marxian Reproduction Schema', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Trigg, Andrew B. 2014, 'Financial Fragility and the Kalecki Principle under Expanded Reproduction', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.
- Trincado, Estrella 2010, 'The Current Relevance of Rosa Luxemburg's Thought', *Socialist Studies*, 6, 2: 141-59.
- Trincado, Estrella 2004, 'The Coherence of Luxemburg's Theories and Life', in *Neoliberalism in Crisis, Accumulation, and Rosa Luxemburg's Legacy*, edited by Paul Zarembka and Susanne Soederberg, Bingley: Emerald Group.
- Tudor, Henry 1988, 'Introduction', in *Marxism and Social Democracy: The Revisionist Debate 1896-1898*, edited and translated by Henry Tudor and J. M. Tudor, Cambridge NY: Cambridge University Press.
- Tudor, Henry 1993, 'Introduction', in *The Preconditions of Socialism*, edited and translated by Henry Tudor, Cambridge NY: Cambridge University Press.
- Versieren, Jelle 2010, 'Rosa Luxemburg: Accumulation of Capital and the Perennial Crisis', *Critique*, 38, 4: 675-85.
- Waters, Mary-Alice 1970, *Rosa Luxemburg Speaks*, edited by Mary-Alice Waters, New York: Pathfinder Press.
- Worswick, David 1999, 'Armaments and Full Employment', *Review of Political Economy*, 11, 3: 283-90.
- Worth, Owen 2012, 'Accumulating the Critical Spirit: Rosa Luxemburg and Critical IPE', *International Politics*, 49, 2: 136-53.

- Zarembka, Paul 2000, 'Accumulation of Capital, its Definition: A Century after Luxemburg and Lenin', in *Value, Capitalist Dynamics and Money*, edited by Paul Zarembka, Bingley: Emerald Group.
- Zarembka, Paul 2002, 'Rosa Luxemburg's *Accumulation of Capital*: Critics try to Bury the Message', in *Bringing Capitalism back for Critique by Social Theory*, edited by Jennifer M. Lehman, Bingley: Emerald Group.
- Zarembka, Paul 2009, 'Late Marx and Luxemburg: Opening a Development within Political Economy', in *Rosa Luxemburg and the Critique of Political Economy*, edited by Riccardo Bellofiore, London: Routledge.
- Zarembka, Paul 2014, 'Marxist Political Economy without Hegel: Contrasting Marx and Luxemburg with Plekhanov and Lenin', in *The Legacy of Rosa Luxemburg, Oskar Lange and Michal Kalecki: Volume 1 of Essays in Honour of Tadeusz Kowalik*, edited by Riccardo Bellofiore, Ewa Karwowski and Jan Toporowski, New York: Palgrave MacMillan.