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David Harvey

MARX'S 'CAPITAL'

SIXTH EDITION

Ben Fine &
Alfredo Saad-Filho

Marx's *Capital*

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Sixth Edition

Ben Fine and Alfredo Saad-Filho



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We are grateful to everyone at Pluto Press for their support in the relaunch of Marx’s *Capital* and in particular to Anne Beech and Anthony Winder for their contributions to the publication of this new edition.

Preface to the Sixth Edition

Marx's *Capital* was originally written in the early 1970s and was very much a product of its time. Then, in Britain and elsewhere, an interest in Marx's political economy had been awakened after several years of intense repression under the guise of blaming working people and left-wing movements for the end of the post-war boom. This interest grew, and was fed by the evident decline of the world capitalist economy, and the rejection of mainstream explanations for the growing economic malaise associated with stagflation. Much has changed since then, and successive editions of this book have, in their own ways, reflected the shifting fortunes both of the global economy and of political economy.

The fourth edition of Marx's *Capital* relaunched this little book with Pluto Press for new times and a new audience in 2004, the third edition having appeared in 1989. The rise of neoliberalism in the 1980s and 1990s had reshaped the capitalist world, extended the hold of global capital to most corners of the planet, and remoulded the political system to support it. Expectations of economic, political and social change were ground down over time, in what has been termed the hollowing out of the state in face of the declining strength and organisation of progressive movements. As the great mobilisations of the 1960s and 1970s receded into the distance, a new generation grew up with much reduced hopes, demands and expectations. For the first time since the mid nineteenth century, there seemed to be no alternatives to capitalism in sight, and the remaining – invariably marginal – exceptions held on precariously and unattractively in the crevices of the brave new 'globalised' world. The fourth edition offered a

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small contribution to the emerging responses to these enormous challenges, and it was well received by a wide audience in several countries.

The publication of the fifth and now this sixth edition anticipates, and hopefully in its own way contributes to, a revival of political economy in general and of Marxist political economy in particular. Such optimism is based on a number of factors.

First, while mainstream economics has tightened its intolerant grip on the discipline, dismissing heterodoxy as failing the tests of mathematical and statistical rigour, there are increasing signs of dissatisfaction with the orthodoxy, and there is a growing search for alternatives among those studying economics and the other social sciences, not least with the demands for heterodoxy, pluralism and alternatives in the teaching of economics.

Second, following the predominance of postmodernism and, especially, neoliberalism in setting intellectual agendas across the social sciences over the past two decades, there is now a reaction against the extremes of their worst excesses in theory and practice. Critical thought has turned towards understanding the nature of contemporary capitalism, as most notably reflected in the rise of concepts such as neoliberalism, financialisation, globalisation and social capital. Inevitably, the result is to raise the question of the economy outside of the discipline of economics itself, and to seek guidance from political economy.

Third, material developments have also promoted the case for political economy. These include the growing realisation that environmental degradation, most especially through global warming, is intimately related to capitalism; the aftermath of the collapse of the Soviet Union and the recognition that capitalism has not furnished a progressive alternative, even on its own narrow terms; and the eruption of imperial wars and occupations, even if fought under the name of anti-terrorism or human rights.

Fourth, the long period of relative stagnation following the breakdown of the post-war boom, and the rise of postmodern-

ism and neoliberalism, have had the paradoxical effect of allowing the capitalist economy to be perceived as engaging in business as usual with a modicum of success, even if on a sluggish basis. The eruption of financial crises over the past decade, most dramatically the global crisis that started in mid 2007, has shattered this perspective. It has brought to the fore the key role being played by finance in contemporary capitalism. The systemic relations among finance, industry and the rest of the economy more generally should occupy a prominent place in the subject matter of political economy. With capitalism so demonstrably having failed on its own terms, even under conditions that are arguably the most favourable for it, the case for socialism needs to be made as never before. And it rests upon a Marxist analysis both for its critique of capitalism and for the light it sheds on the potential for alternatives.

Each of these issues is reassessed to a greater or lesser extent in this new edition. But the main purpose of the book remains to provide as simple and concise an exposition of Marx's political economy as the complexity of his ideas allows. Because the book is constrained to be short, the arguments are condensed, but remain simple rather than convoluted; nevertheless, some of the material will require careful reading, particularly the later chapters. Not surprisingly, through its various editions, the text has increased in size, more than doubling from its original length of 25,000 words as new topics have been added, drawn both from Marx's own political economy and from its contemporary relevance. In addition, over time, specific additions have included chapter-by-chapter highlighting of controversies, issues for debate, and suggestions for further reading, which will offer guidance to those interested in more scholarly texts. We regret that this has led to successive editions losing some of the simplicity of the earlier ones (though for ease of reading footnotes continue to be omitted). These (hopefully minor) difficulties are perhaps compounded by the occasional references to how Marx's political economy

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differs from orthodox economics, placing some strain on the non-economist. But such complexities can be overlooked where necessary and, otherwise, offer compensating insights.

This carefully revised sixth edition comes at a particularly challenging time. Neoliberal capitalism is in the throes of an unprecedented crisis, which has revealed not only the limitations of ‘liberalised’ finance but, more significantly, has thrown the global neoliberal project onto the defensive for the first time, although it appears remarkably resilient. Yet, it is now possible for the mainstream to question openly the coherence and sustainability of neoliberalism, and even the desirability of capitalism itself. These emerging debates, and the simultaneous if painfully slow growth of radical social movements and organisations, have been supported by the creeping realisation that capitalism has fundamentally destabilised the planet’s environment and that it poses an immediate threat to the survival of countless species, including our own.

Marx’s *Capital* is not a book about the environment nor is it about neoliberalism, although it includes a brief section on the former and an updated chapter on the current crisis. Its aims are narrower and, at the same time, more abstract and ambitious: it reviews and explains the key elements of the most sustained, consistent and uncompromising critique of capitalism *as a system*, which was originally developed by Karl Marx. As capitalism struggles to contain its most recent crisis, Marx’s writings have increased in immediacy and relevance, and they have shot up in popularity. They now rank highly in several bestseller lists, and rival editions can be found even in mainstream bookshops, though Marx’s works are also widely available on the web and can be freely downloaded.

We hope that you will make use of them. Marx’s *Capital* has never sought to replace the real thing; instead, it aims to facilitate your reading of Marx’s economic writings by providing a structured overview of their main themes and conclusions. We

hope that this book will support your own attempt to come to terms with capitalism, its strengths and flaws, and inform your struggles against it.

We would like to thank and to encourage those who have continued to study and teach Marxist economics seriously, during a period when it has been extraordinarily hard to do so.

A Note on Further Reading

Each chapter in this book includes a list of 'Issues and Further Reading' which outlines some implications of the material examined in that chapter and suggests a small and carefully selected set of readings to help you dig deeper. There is, of course, much more out there, and we would welcome your suggestions of readings to be included in future editions of this book. Please email to let us know if you find something especially useful, or to discuss topics and problems in value theory, or to suggest changes or additional content that we might include in future editions of this book. We would like to hear from you.

To begin with, a few general suggestions. The *Collected Works of Karl Marx and Friedrich Engels* are still being published in German, and they are gradually being translated into English and other languages. The most significant works, including *Capital*, are freely available in the Marxists Internet Archive (www.marxists.org) and at several other websites.

A large number of excellent commentaries on Marx's work, and a good number of overviews of his economic writings, are available from Anglo-Saxon sources, on which we focus below. For example, Chris Arthur has prepared an abbreviated edition of Volume 1 of *Capital* (Arthur 1992), without footnotes and with an explanatory introduction, and Duncan Foley and David Harvey have written excellent introductions to Marx's work (Foley 1986; Harvey 1999, 2009, 2010). Harvey also runs an online discussion on *Capital* (<http://davidharvey.org/reading-list>).

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capital/). Alex Callinicos (2014) and Joseph Choonara (2009) have published very good overviews of Marx's value theory, which complement (and supplement) this book. A classical account of the sources of Marxism is provided by Vladimir Lenin (1913). For a more advanced overview of Marx's theory of value, see Dimitris Milonakis and Ben Fine (2009, especially ch.3) and Alfredo Saad-Filho (2002). A similarly advanced stocktaking exercise across the spectrum of Marxian economic analysis is found in Fine and Saad-Filho (2012). Research in Marxian political economy is promoted by IIPPE (www.iippe.org) and supported by journals including *Capital & Class*, *Historical Materialism*, *Monthly Review*, *Review of Radical Political Economics* and *Science & Society*. Finally, for heterodox (including Marxist) economics, news and analysis, see www.heterodoxnews.com.

*Ben Fine (bf@soas.ac.uk) and
Alfredo Saad-Filho (as59@soas.ac.uk)*
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I

History and Method

Throughout his adult life Marx pursued the revolutionary transformation of capitalist society, most famously through his writings, but also through agitation and organisation of the working class – for example, between 1864 and 1876 he was one of the leaders of the First International Working Men’s Association. In his written works, Marx attempts to uncover the general process of historical change, to apply this understanding to particular types of societies, and to make concrete studies of specific historical situations. This chapter briefly reviews Marx’s intellectual development and the main features of his method. The remainder of the book analyses in further detail other aspects of his work, especially those to be found in the three volumes of *Capital*, his leading work of political economy.

Marx’s Philosophy

Karl Marx was born in Germany in 1818 and began an early university career studying law. His interest quickly turned to philosophy, which, at that time, was dominated by Hegel and his disciples. They were idealists, believing that reality is the outcome of an evolving system of concepts, or movement towards the ‘Absolute Idea’, with a structure of concepts connecting the relatively abstract to the increasingly concrete. The Hegelians believed that intellectual progress explains the advance of government, culture and the other forms of social life. Therefore, the study of consciousness is the key to the understanding of

society, and history is a dramatic stage on which institutions and ideas battle for hegemony. In this ever present conflict, each stage of development is an advance on those that have preceded it, but it also absorbs and transforms elements from them; that is, it contains the seeds of its own transformation into a higher stage. This process of change, in which new ideas do not so much defeat the old as resolve conflicts or contradictions within them, Hegel called the *dialectic*.

Hegel died in 1831. When Marx was still a young man at university, two opposing groups of Hegelians, Young (radical) and Old (reactionary), both claimed to be Hegel's legitimate successors. The Old Hegelians believed that Prussian absolute monarchy, religion and society represented the triumphant achievement of the Idea in its dialectical progress. In contrast, the Young Hegelians, dangerously anti-religious, believed that intellectual development still had far to advance. This set the stage for a battle between the two schools, each side believing a victory heralded the progress of German society. Having observed the absurdity, poverty and degradation of much of German life, Marx identified himself initially with the Young Hegelians.

However, his sympathy for the Young Hegelians was extremely short-lived, largely through the influence of Feuerbach, who was a materialist. This does not mean that Feuerbach was crudely interested in his own welfare – in fact, his dissenting views cost him his academic career. He believed that far from human consciousness dominating life and existence, it was human needs that determined consciousness. In *The Essence of Christianity* Feuerbach mounted a simple but brilliant polemic against religion. Humans needed God because religion satisfied an emotional need. To satisfy this need, humans had projected their best qualities on to a God figure, worshipping what they had imaginatively created in thought to such an extent that God had assumed an independent existence in human consciousness. To regain their humanity, people need to replace the love of God with love for each other.

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Marx was immediately struck by this insight. Initially he criticised Feuerbach for seeing people as individuals struggling to fulfil a given ‘human nature’, rather than as social beings. However, he soon moved beyond Feuerbach’s materialism. He did this in two ways. First, he extended Feuerbach’s materialist philosophy to all dominant ideas prevailing in society, beyond religion to ideology and people’s conception of society as a whole. Second, he extended Feuerbach’s ideas to history. Feuerbach’s analysis had been entirely ahistorical and non-dialectical: humans satisfy an emotional need through religion, but the origins and nature of that need remain unexplained and unchanging, whether satisfied by God or otherwise. Marx sees the solution to this problem in material conditions. Human consciousness is crucial in Marx’s thought, but it can only be understood in relation to historical, social and material circumstances. In this way, Marx establishes a close relationship between dialectics and history, which would become a cornerstone of his own method. Consciousness is primarily determined by material conditions, but these themselves evolve dialectically through human history.

This account reveals a common property in the thought of Hegel, his various disciples and critics, and of Marx – that things do not always immediately appear as they are. For Feuerbach, for example, God does not exist other than in the mind, but appears, or is taken, to exist as an independent being and so is able to satisfy a human need. Under capitalism, a free labour market conceals exploitation; the existence of political democracy suggests equality rather than the reality of political institutions that support the reproduction of privilege and power. This divorce between reality (content, or essence) and the way it appears (form) is a central aspect of Marx’s dialectical thought. It forges the link between abstract concepts (such as class, value and exploitation) and their presence in everyday life (through wages, prices and profits).

The task that Marx sets himself, primarily for capitalism, is to trace the connection and the contradictions between the abstract

and the concrete. He recognises this as extremely demanding since, in his own words (in the 1872 Preface to the French Edition of *Capital*), '[t]here is no royal road to science'. The project involves adopting an appropriate method, a judicious starting point in choice of the abstract concepts (the starting point for the analysis), and a careful unfolding of the historical and logical content of each new concept in order to reveal the relationship between the way things are and the way they appear to be.

Significantly, as will be clear from Marx's discussion of commodity fetishism (in Chapter 2), appearances are not necessarily simply false or illusory as, for example, in religious beliefs in the existence of God. We cannot wish away wages, profits and prices even when we have recognised them to be the form in which capitalism organises exploitation, just as we cannot wish away the powers of the monarch or priest when we become a republican or atheist, respectively. For, in the case of wages, prices and profits, the appearances are part and parcel of reality itself, both representing and concealing more fundamental aspects of capitalism that an appropriate dialectics is designed to reveal. How is this complexity to be unravelled?

Marx's Method

In contrast with his extensive writings on political economy, history, anthropology, current affairs and much else, Marx never wrote a detailed essay on his own method. This is because his work is primarily a critique of capitalism and its apologists, in which methodology plays an essential but supporting role, and is invariably submerged within the argument itself. This suggests that Marx's method cannot be summarised into a set of universal rules: specific applications of his materialist dialectics must be developed in order to address each problem. The best-known example of the application of Marx's method is his critical examination of capitalism in *Capital*. In this work, Marx's

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approach has five important broad features. These will be added to and refined, often implicitly, throughout the text below (as, indeed, they were in the corpus of Marx's own writings).

First, social phenomena and processes exist, and can be understood, only in their historical context. Trans-historical generalisations, supposedly valid everywhere and for all time, are normally either invalid, or vacuous, or both. Human societies are immensely flexible. They can be organised in profoundly different ways, and only detailed analysis can offer valid insights about their internal structure, workings, contradictions, changes and limits. In particular, Marx considers that societies are distinguished by the mode of *production* under which they are organised – feudalism as opposed to capitalism, for example – with varieties of forms of each mode emerging at different times and in different places.

Each mode of production is structured according to its class relations, for which there are appropriate categories of analysis. Just as a wage labourer is not a serf, much less a slave who happens to be paid a salary, a capitalist is not a feudal baron receiving profit in place of tribute. Societies are distinguished by the modes of production and the modalities of surplus extraction under which they are organised (rather than the structures of distribution), and the concepts used to understand them must be similarly specific.

Second, theory loses its validity if it is pushed beyond its historical and social limits. This is a consequence of the need for concepts to be drawn out from the societies they are designed to address. For example, Marx claims that in capitalism the workers are exploited because they produce more value than they appropriate through their wage (see Chapter 3); this gives rise to surplus value. This conclusion, like the corresponding notion of surplus value, is valid only for capitalist societies. It may shed some indirect light on exploitation in other societies, but the modes of exploitation and the roots of social and economic change in these societies must be sought afresh – analysis of capitalism, even if

correct, does not automatically provide the principles by which to understand non-capitalist societies.

Third, Marx's analysis is internally structured by the relationship between theory and history. In contrast with Hegelian idealism, Marx's method is not centred upon conceptual derivations. For him, purely conceptual reasoning is limited, because it is impossible to assess how and why the relations evolving in the analyst's head ought to correspond to those in the real world. More generally, idealism errs because it seeks to explain reality primarily through conceptual advance, even though reality exists historically and materially outside of the thinking head. Jokingly, Marx suggested that the Young Hegelians would be able to abolish the laws of gravity if they could just escape from believing in them! In contrast, Marx recognises that reality is shaped by social structures and tendencies and counter-tendencies (which can be derived dialectically, given the appropriate analytical setting), as well as by unpredictable contingencies (which are historically specific and cannot be so derived). The outcomes of the interactions of these tendencies can be explained as they unfold as well as retrospectively, but they cannot be determined in advance. Consequently, although materialist dialectics can help in understanding both the past and the present, the future is impossible to foretell (Marx's analysis of the law of the tendency of the rate of profit to fall (LTRPF), and its counter-tendencies, is a telling example of this approach; see Chapter 9). Marx's recognition that historical analysis belongs within the method of study (or that history and logic are inseparable) is not a concession to empiricism; it merely acknowledges that a shifting reality cannot be reduced to, let alone determined by, a system of concepts.

Fourth, materialist dialectics identifies the key concepts, structures, relationships and levels of analysis required for the explanation of the concrete, or more complex and specific outcomes. In *Capital*, Marx employs materialist dialectics to pinpoint the essential features of capitalism and their contra-

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dictions, to explain the structure and dynamics of this mode of production, and to locate the potential sources of historical change; for example, through class struggle in particular and its representation through sometimes more broadly engaged economic, political and ideological conflicts. His study systematically brings out more complex and concrete concepts which are used to reconstruct the realities of capitalism in thought. Those concepts help to explain the historical development of capitalism and indicate its contradictions and vulnerabilities. In doing this, concepts at distinct levels of abstraction always coexist in Marx's analysis. Theoretical progress includes the introduction of new concepts, the refinement and reproduction of the existing concepts at greater levels of concreteness and complexity, and the introduction of historical evidence in order to provide a richer and more determinate account of reality.

Finally, Marx's method focuses upon historical change. In the *Communist Manifesto*, the Preface to the *Contribution to the Critique of Political Economy* and the introduction to the *Grundrisse*, Marx famously summarises his account of the relationship between structures of production, social (especially class) relations, and historical change. Marx's views have sometimes been interpreted mechanically, as if the supposedly unilinear development of technology unproblematically guides historical change – in which case social change is narrowly determined by the development of production. This interpretation of Marx is invalid. There are complex relationships between technology, society and history (and other factors), but in ways that are invariably influenced by the mode of social organisation and, specifically, by class relations and class struggles. For example, under capitalism technological development is primarily driven by the profit imperative across all commercial activity. Under feudalism, the production of luxury goods and (military) services and, to a certain extent, agricultural implements is paramount, which, in the comparative absence of the profit motive and given the relative inflexibility of the mode of

social organisation, limits the scope and pace of technical advance. In contrast, Marx argues that in socialist (communist) societies technological development would seek to eliminate repetitive, physically demanding, unsafe and unhealthy tasks, reduce overall labour time, satisfy basic needs and develop human potential (see Chapter 15).

Marx's Economics

In 1845–6, when he was writing *The German Ideology* with Engels and the *Theses on Feuerbach*, Marx had already begun to be influenced by the French socialists. Their ideas cannot be discussed here in detail. Suffice it to say that they were fostered by the radical heritage of the French Revolution and the failure of the emerging bourgeois society to realise the demands of '*liberté, égalité, fraternité*'. The French socialists were also deeply involved in class politics, and many believed in the necessity and possibility of revolutionary seizure of power by the workers.

Marx's synthesis between German philosophy and French socialism would have remained incomplete without his critique of British political economy, which he studied later, especially during his long exile in London from 1849 until his death in 1883. Given his conceptions of philosophy and history, explained above, it was natural for Marx to turn his attention to economics in order to understand contemporary capitalist society and identify its strengths and limitations, and its potential for transformation into communism. To do this he immersed himself in British political economy, in particular developing the labour theory of value from the writings of Adam Smith and, especially, David Ricardo. For Marx, it is insufficient to base the source of value on labour time of production, as Ricardo presumes. For Ricardo's view takes for granted the existence of exchange, prices and commodities. That commodities are more valuable because they embody more labour begs the question of why there are commodities at all, let alone

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whether it is relevant to proceed as if, in general, commodities exchange in proportion to the labour time necessary for their production. This anticipates the next chapter, but it illustrates a key feature of Marx's method and a common criticism by Marx of other writers. Marx finds other economists not only wrong in content, but also inadequate in intent. What economists tend to assume as timeless features of humans and societies, Marx was determined to root out and understand in their historical context.

Marx does take for granted the need for society as a whole to work in order to produce and consume. However, the way in which production is organised and the output is distributed has to be revealed. Very briefly, Marx argues that when working (or not) – that is, producing the material conditions for their continuing reproduction – people enter into specific social relations with each other: as slaves or masters, serfs or lords, wage earners or capitalists, and so on. Patterns of life are determined by these social conditions of production and the places to be filled around them. These relations exist independently of individual choice, even though they have been established in the course of the historical development of society (for example, no one can 'choose' to occupy the social position of a slave-owner in today's capitalist societies, and even the 'choice' between being a capitalist or a wage worker is not freely available to everyone and certainly not on an equal basis).

In all but the simplest societies, the social relations of production specific to a particular mode of production (feudalism, capitalism, and so on) are best studied as class relations. These relations are the basis on which the society is constructed and reproduces itself over time. Just as freedom to own, buy and sell are key legal characteristics of capitalist society, so fealty and divine or tributary obligations are the legal foundations of feudalism. In addition, mutually supportive political, legal, intellectual and distributional forms are also established, and tend to blinker and discourage all but the most conventional views of society, whether by force of

habit, morality, education, law or otherwise. The serf feels bound by loyalty to master and king, often by way of the church, and any vacillation can be punished severely. The wage earner has both freedom and compulsion to sell labour power. There can be struggle for higher wages, but this does not question the wage system or the legal and institutional framework supporting it, ranging from collective bargaining to the social security and credit systems, and so on. In contrast, probing into the *nature* of capitalism is frowned upon by the authorities, the media, law and other dominant voices in society. Whereas individual dissent is often tolerated, large anti-capitalist organisations and mass movements are either repressed or pressured into conformity, with protest, for example, being channelled into systemically acceptable forms.

In this context, Marx castigates the classical political economists and the utilitarians for assuming that certain characteristics of human behaviour, such as self-interest or greed, are permanent features of 'human nature', when in reality they are characteristics, motivations or behaviours emerging in individuals through their living in particular societies. Such theorists also take for granted those features of capitalist society that Marx felt it necessary to explain: the monopoly of the means of production (raw materials, machinery, factory buildings, and so on) by a small minority, the wage employment of the majority, the distribution of the products by monetary exchange, and remuneration involving the economic categories of prices, profits, interest, rent, wages, fees and transfers.

Marx's value theory is a penetrating contribution to social science in that it concerns itself with the relations that people set between themselves, rather than the technical relationships between things or the art of economising. Marx is not interested in constructing a price theory, a set of disembodied 'efficiency criteria' valid everywhere and at all times, or a series of welfare propositions; he never intended to be an 'economist' or even a classical (British) political economist. Marx was a critical social scientist, whose work straddles, and rejects, the barriers separating

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academic disciplines. The crucial questions for Marx concern the internal structure and sources of stability and crises in capitalism, and how the will to change the mode of production can develop into successful transformative (revolutionary) activity. These questions remain valid into the twenty-first century.

Issues and Further Reading

Several biographies of Karl Marx are available; see, for example, Mary Gabriel (2011), David McLellan (1974), Franz Mehring (2003), Francis Wheen (2000). Marx's intellectual trajectory is reviewed by Allen Oakley (1983, 1984, 1985) and Roman Rosdolsky (1977). The history of Marxian economics is comprehensively surveyed by Michael Howard and John King (1989, 1991); see also Ben Fine and Alfredo Saad-Filho (2012). The key concepts in the Marxian literature are authoritatively explained in Tom Bottomore (1991).

Though Marx rarely discusses his own method, there are significant exceptions in the introduction to Marx (1981a), the prefaces and postfaces to Marx (1976) and the preface to Marx (1987). Subsequent literature and controversy has more than made up for Marx's own apparent neglect. Almost every aspect of his method has been subject to close scrutiny and differing interpretations from supporters and critics alike. Our presentation here is embarrassingly simple and superficial in breadth and depth. It draws upon Ben Fine (1980, ch.1, 1982, ch.1) and Alfredo Saad-Filho (2002, ch.1), which should be consulted for a more comprehensive interpretation of Marx's method. Others have examined in considerable detail the role of class, modes of production, dialectics, history, the influence of other thinkers, and so on, in Marx's analysis. Chris Arthur has written extensively on Marx's method (for example, Arthur 2002); see also the essays in Andrew Brown, Steve Fleetwood and Michael Roberts (2002), Alex Callinicos (2014), Duncan Foley (1986, ch.1), Fred Moseley

(1993) and Roman Rosdolsky (1977, pt.1). Mechanistic interpretations of Marx, suggesting rigid causal determination between, for example, class relations and economic and other factors, are examined and criticised thoroughly by Ellen Meiksins Wood (1984, 1995), Michael Lebowitz (2009, pt.2) and Paul Blackledge (2006). The historical roots of Marxian political economy are reviewed by Dimitris Milonakis and Ben Fine (2009), with subsequent developments within mainstream economics examined in Ben Fine and Dimitris Milonakis (2009).

2

Commodity Production

Marx is renowned for his commitment to what is taken to be *the* labour theory of value. Many different aspects of his analysis of value and capital(ism) have been subjects of fierce controversy, both amongst those who are for and those who are against Marx and, something that is closely related but distinct, over differing interpretations of what he really meant: commentators disagree about what Marx is saying as well as about whether it is correct or not. As a result, there are various interpretations of the labour theory of value, many of which are foisted upon Marx out of ignorance, a wish to dismiss him or, perversely, in seeking to defend him. Further, it is often possible to trace disputes over Marx's political economy back to differences over his value theory. Rightly or wrongly, two issues have been fundamental in these continuing debates: has Marx unduly privileged labour in some way by adopting the *labour* theory of value, and how well does the labour theory of value serve as a theory of prices?

The purpose of this chapter is to embark upon an analytical journey that is carried forward through the remainder of the book. We ask various questions of the labour theory of value, ones that are close to the method and content of Marx's work. For him, the labour theory of value cannot be proved correct by some conceptual wizardry or through technical or algebraic acrobatics. Rather, Marx's value theory aims to reproduce in thought – at increasing levels of complexity – the key economic relations, processes and structures prevailing in capitalist society (see Chapter 1). It is against this test that his value theory, and inter-

pretations of it, should be judged. While Marx's value theory has simple beginnings, which are the focus of this chapter, it becomes richer and more complicated as it gradually unfolds in order to confront, explain and incorporate the complexities of capitalism itself. It will be shown in later chapters that these complexities do not negate Marx's value theory. Instead, they confirm its internal consistency and explanatory power, but within limits that need to be acknowledged to avoid 'reductionism' – the notion that everything can be explained by the theory of value. This is a matter of incorporating more material that is historically specific in order to proceed further.

The Labour Theory of Value

In analysing a mode of production, such as capitalism, Marx's starting point is always production – how do capitalist societies produce the material conditions of their own reproduction?

In any society, production creates use values, that is to say useful things such as food, clothing and houses, as well as immaterial products like educational, health and other personal services, all of which are (more or less) necessary for the continuing existence of the society. Thus, the division of labour and the production of use values can be taken for granted as enduring features of human organisation since our origin as a species. But who produces what and how, and with what implications for the economy and society, are crucial questions across the social sciences. Different disciplines and ideologies have given different answers, ranging from natural order and (religious) tradition through the pursuit of self-interest to the idea of necessity as the mother of invention. Mainstream (orthodox or neoclassical) economics, in particular, has taken the need for consumption and the human capacity to make choices as justifying a universal approach or method in which economics is the science concerned with the allocation of scarce resources to meet insatiable needs. From this viewpoint, the economy may be

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organised through the market, the state, the household or through slavery, for example. These are merely details, as opposed to the fundamental duality between scarcity and need that is the focus of mainstream economics and which provides the yardstick with which to measure the relative efficiency of the alternative ways of organising society and its component parts, such as firms, the family or the government.

By contrast, for Marx, social, especially class, relations are essential in distinguishing one economy from another, as well as revealing differences within an economy. This involves not only the property and distributional relations that define the modes of production, or who owns what and why, but also how ownership is organised and gives rise to forms of control of labour and its products, as well as other aspects of social organisation. Thus, for example, a crucial feature of capitalism is that it is a highly developed system of *commodity* production – but what is the significance of commodities? Following Adam Smith, Marx distinguishes use value from exchange value within each commodity: their usefulness, which cannot be quantified in general, from the ability to exchange with other commodities, which can be quantified. Every commodity has a use value, or ability to satisfy human needs, without which it could not be sold and, therefore, would not be produced for sale. But not every use value is a commodity; for example, use values that are created naturally, freely available or not exchanged for money on the marketplace have no exchange value (for example sunlight, air, open spaces, wild fruits, production for personal use, production for, or on behalf of, relatives or friends, or ‘public goods’, including access to open roads or to freely available public health and education systems).

Exchange value embodies an equivalence relationship between objects. This relationship has to satisfy certain properties that become familiar to us in daily life, especially in the marketplace and in commercial calculation. For example, if x exchanges for y (which can be represented as $x \sim y$), then, in general, $2x \sim 2y$. If, in

addition, $u \sim v$, then $(u \text{ and } x) \sim (v \text{ and } y)$, and so on. But there is an unlimited number of relationships satisfying these properties, for example, weight or volume. The question Marx seeks to answer is what social relationship can provide the basis for systematic (rather than fortuitous) market exchanges and, more generally, for social reproduction under the specific historical circumstances of capitalism? What is it that allows commodities to be equivalents in exchange? In the case of weight or volume, equivalence is due to physical or natural properties (namely mass and size, respectively), properties that exist irrespective of whether and how they are actually measured and which are independent of exchange or mode of production. Further, although every commodity is characterised by its particular physical properties that, in part, give it its use value (the other part being derived from the culture of consumption and use), its exchange value is unrelated to these properties. As mentioned already, the most useful things, air, sunlight and water, often have little or no exchange value.

What creates the relationship of exchange, then, is not a physical relationship between goods, but a historically specific social one, not least the way in which the production of use values is organised – for the market and generally for profit, in the case of commodities produced in capitalist societies. Mainstream economics has begun to take more notice of this recently by accepting that institutions, trust, culture, and so on, influence exchanges, not least because markets are, invariably, ‘imperfect’ in some sense. But this is to get the argument the wrong way round. Before examining institutions as the response to market imperfections, the market itself has to be explained as an ‘institution’, or otherwise. At a deeper level, markets are not simply neutral structures of exchange, but are specific in each case, since they fundamentally reflect the social relations that underpin them; as can be observed, for example, in the differences between the markets for foreign currency, oil, computers and foodstuffs.

COMMODITY PRODUCTION

This leads Marx to suggest that underlying the equivalence between commodities as use values is a social relationship between the producers of those commodities. This is because, for Marx, it is axiomatic that throughout history people have lived by their labour: if everyone stopped working, no society would survive beyond a few days. Further, in all but the simplest societies, some have always lived without working, that is, they have lived by the labour of others. However, the appropriation of one person's labour (or its products) by another takes different forms and is justified in different ways. Under feudalism, the products are often distributed by direct appropriation justified by feudal or even divine right. Under capitalism, the products of labour generally take the form of commodities, and they are generally distributed by market exchanges. How this market freedom brings about an appropriation of the labour of one class by another will be discussed in Chapter 3. For the moment, we are only interested in the nature of the exchange relationship. In other words, in a commodity-producing society, what is special about production and labour?

To answer this question, Marx defines commodities as *use values produced by labour for exchange*. This means that not everything which is exchanged, even through the market, is a commodity. Perhaps this is readily acceptable in the case of bribery, casually marketed second-hand goods or even works of art, although each of these can command a price (i.e. take the form of commodity) in its own way. But, in part to anticipate, for Marx these are incidental phenomena, playing no fundamental roles in economic and social reproduction, and they are causally and analytically to be abstracted from when addressing commodity production in general and under capitalism in particular.

It follows that a fundamental property which all commodities share in common is that they are the products of labour. This property draws upon the fundamental insight that societies cannot live (and profits cannot arise) through exchange alone but, instead,

that systematic exchange must be grounded within a specific mode of production in order to sustain itself (and society). By the same token, in commodity society concrete labours (producing specific use values) are not performed casually, but as part of an intricate social division of labour which connects them with one another through the market, that is, through the exchange of their products for money.

This is a qualitative and impersonal social relationship. For example, we generally buy commodities without knowing anything about who has produced them and how. For commodity production requires a division of labour within and across different workplaces, where different labours are contributed, brought together and measured against one another, albeit indirectly, through the market. This social process is the basis of the labour theory of value, and it embodies relationships that can easily be theoretically quantified by analysing exchange from the viewpoint of the labour time socially (rather than individually) necessary to produce commodities: for example, the amount of labour time required to bake a loaf of bread when contrasted with that required to sew a shirt (and, just as importantly, how these labour times are determined and modified through technological and other changes). It follows that, for Marx, the labour theory of value is not a metaphysical notion. Instead, it analytically captures the essential aspects of material life under capitalism, concerning how production is organised and attached to the market, and how the products of social labour are related to one another, appropriated and distributed within society.

Marx realises that in capitalist societies, where products typically take the form of commodities, production is primarily undertaken for exchange for profit rather than for direct or immediate use. Capitalism is a system that aims to produce social use values – use values for others unknown because of the anonymity of the market. The production of social use values, market exchanges and profit making are intimately linked to one another. But just as

products embody social use values, so they are created by social labour in the abstract (by wage workers unknown, hired through the labour market and disciplined within competing firms by the profit imperative, and outside them by the credit system and the stock market). In this way, the products of concrete labour count as abstract social labour in capitalist societies, and exchange does not concern quality or type of concrete labour, but only quantity of abstract labour, expressed through commodity prices. In exchange, what matters in how much you have to pay is not the use value you want – whether the labour time was expended by a baker, tailor, bus driver or computer programmer – but what amounts of abstract (socially necessary, rather than individual and concrete) labour time have been expended.

For Marx, the value of a commodity is the labour time socially necessary to produce it, including both direct (living) and indirect (dead, or past) labour inputs – the labour time necessary to produce the required means of production.

This is not to suggest that commodities must exchange at their values. Market prices will be affected by the ratios of indirect to direct labour, scarcities, skills, monopolies, tastes and by more or less accidental variations in supply and demand, in addition to profit equalisation across competing sectors (see Chapter 10). These contingent influences have been the primary objects of study of orthodox economists since the (neoclassical) marginalist revolution of the 1870s, with little advance being made on Adam Smith's ideas of the 1770s, except through increasing mathematical sophistication. Marx did not ignore these complicating factors, but nor did he put them centre stage, for they are irrelevant for uncovering the social relations of production specific to capitalism. If this cannot be done on the assumption that commodities exchange at their values, it certainly cannot be done in the more complicated cases when they do not. Throughout this book, unless otherwise stated, it will be assumed that commodities exchange at their values. This is not to be interpreted as a fully fledged price

theory, but as an attempt to understand the nature of the price system and the essential processes underpinning the economic reproduction of capitalist societies.

Thus capitalism, as generalised commodity production for profit, is characterised by the production of social use values and, therefore, the exchange of the products of concrete labours that exist, and contribute to value, as abstract social labour. Methodologically, this is not an analytical imposition of the notion of value, but simply a reflection of what the market system *does* – it connects concrete labours with one another and measures them against each other. Marx did not base his concept of value on a mental construct removed from the real world and requiring arbitrary (invented) assumptions in order to suit the theory. Rather, his argument is based upon the *fact* that the reduction of all types of labour to a common (price) standard is a necessary and spontaneous product of the real world of capitalism itself. Drawing upon the methodological analysis in Chapter 1, Marx's labour theory of value first and foremost reproduces in thought the way in which capitalism *actually* organises the production of the goods and services necessary for social reproduction. It recognises that the relationship between commodities as use values (their relative prices) is the outcome of an underlying social relationship between the producers that expresses the equivalence between their own qualitatively different concrete labours as abstract social labour. The important point is that the relationship between exchange, prices and values is not exclusively, or even primarily, quantitative; instead, it reflects definite social relations of production, distribution and exchange. It is these that must be understood.

Labour and Labour Power

The previous section has shown that, in capitalist society, the exchange of different types of products of labour takes place

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through the exchange of commodities. This could occur without capitalism, for example if the members of a hypothetical society of independent artisans exchanged their products directly – what is often termed simple commodity production. However, this is more a logical possibility than a mode of production that has ever been historically dominant. The thought experiment serves to highlight that what characterises capitalism is *not* the exchange of products, but the purchase and sale of the workers' capacity to labour and its use in commodity production for profit.

To distinguish the workers themselves from their ability or capacity to work, Marx called the latter *labour power*, and its performance or application *labour*. These concepts are very important for the labour theory of value, but they are often misunderstood.

The most important distinguishing feature of capitalism is that labour power becomes a commodity. The capitalist is the purchaser, the worker is the seller, and the price of labour power is the wage. The worker sells labour power to the capitalist, who determines how that labour power should be exercised as labour to produce particular commodities. As a commodity, labour power has a use value, which is the creation of other use values. This human capacity is independent of the type of society in which production takes place. However, in capitalism use values are produced for sale and, as such, embody abstract labour time or value. In these societies, the commodity labour power also has the specific use value that it is the source of value when exercised as labour. In this, labour power is unique: the consumption of all inputs assists in the production of the output, but only the consumption of labour power *also* adds value as labour time to the output.

In capitalist society the worker is not a slave in the conventional sense of the word and sold like other commodities, but owns and sells labour power. Also, the length of time for which the sale is made or formally contracted is often very short (one week, one month, or sometimes only until a specific task has been

completed; for example, in so-called ‘zero-hour contracts’). Yet in many other respects the worker is like a slave. The worker has little or no control over the labour process or its product. There is the freedom to refuse to sell labour power, but this is a partial freedom, the alternative ultimately being starvation or social degradation. One could equally well argue that a slave could flee or refuse to work, although the level and immediacy of retribution are of a different order altogether. For these reasons the workers under capitalism have been described as wage slaves, although the term is an oxymoron. You cannot be both slave and wage worker – by definition, the slave does not have the freedoms that the wage worker enjoys, irrespective of other conditions.

On the other side to the class of workers are the capitalists, who control the workers and the products of their labour through their command of wage payments and ownership of the means of production. This is the key to the property relations specific to capitalism. For the capitalist monopoly of the means of production ties the workers to the wage relation, as explained above. If the workers owned or were entitled to use the means of production independently of the wage contract, there would be no need to sell labour power rather than finished products on the market and, therefore, no need to submit to capitalist control both during production and outside it.

Drawing the distinction between labour and labour power shows that the labour theory of value not only captures the distributional relationships established through the exchange of labour products, but also embodies and expresses the relations of production and exploitation specific to capitalism. The social exchange of labour power for money, like the exchange of the products of labour through the market, presupposes, on the one hand, the monopoly of the means of production by the class of capitalists and, on the other, the existence of a class of wage workers with no direct access to the means of production (see Chapter 6). Not surprisingly, this critically important distinction between labour

and labour power is never drawn in mainstream economics, with its 'neutral' terminology of factor inputs (including labour) and outputs. The mainstream terminology suggests that the labour and capital inputs contribute in the same way to the production process, so much so that workers are conceptualised as 'human capital', and thereby reduced to the status of physical inputs, as is 'capital' itself, rather than being seen as arising from historically specific class relations.

The Fetishism of Commodities

Marx perceives that the exchange of produced use values reflects the social organisation of labour that has produced these commodities. But to many of his contemporary economists and to nearly all subsequent ones, the relationship between workers and the products of their labour remains merely a relationship between things, of the type x loaves of bread = 1 shirt, or one worker week is worth so much of a standard of living (the wage bundle). Thus, while capitalism organises production in definite social relationships between capitalists and workers, these relationships are expressed and appear, in part, as relationships between things. These social relations are further mystified when money enters into consideration and everything is analysed in terms of price. Marx calls such a perspective on the capitalist world the *fetishism of commodities*. It is most apparent in modern economics where, as was shown above, even labour power is treated as an input or factor like any other. Factor rewards are seen first and foremost as being due to the physical properties of the inputs, as if profit, interest or rent were directly produced by machinery, money or land, rather than by people existing together in particular relationships and societies.

Marx draws the brilliant parallel between commodity fetishism and feudal religious devotion; this is hardly surprising given the earlier influence of Feuerbach. God is humanity's own creation.

Under feudalism, human relationships with God conceal and justify the actual relationships to fellow humans, an absurd bond of lordly exploitation as it appears to the bourgeois (capitalist) mind. Capitalism, however, has its own God and Bible. The relationship of exchange between things is also created by people, concealing the true relationship of exploitation and justifying this by the doctrine of freedom of exchange.

But there is a major difference between religious and commodity fetishism. For, whereas God is a creation of religions, commodities do have a real existence, and their exchange represents and, to some extent, conceals the social relationships of production (see Chapter 1). Similarly, the price system does exist and is attached to the broader economic and social system, but without making the nature of that system transparent. In particular, buying and selling commodities does not reveal the circumstances by which they have come to the market, or the exploitation of the direct producers (the wage workers) by the capitalist class. Consequently, Marx's emphasis is upon prices as a value system, determined by the class relations of production and exploitation. But it is not only class and production relations that are fetishised by their commodity form. For example, it is only by tracing back from the marketplace through to production that we can pierce through the veil of advertising and discover whether products are, for example, environmentally friendly, or 'organic', or free from exploitation of child labour, and so on.

In this light, commodity fetishism can become the basis of a theory of alienation or reification. Not only are the workers divorced from the control of the product and the process of producing it, but also their view of this situation is normally distorted or, at most, partial. Further, the capitalists are subject to social control through competition and the need for profitability. For both capitalists and workers, it appears that external powers exert this control, and not the social relations of production and their effects under capitalism. Once again, there is a sense in which

this is true. For example, loss of employment or bankruptcy may be blamed on a thing or an impersonal force, as in the unfortunate introduction (or, alternatively, breakdown) of a machine, changes in consumer preferences, international competition, or economic crisis of whatever origin or cause. Most recently, ‘globalisation’ has been understood in generic, almost religious, terms as being able to explain all things good or bad about contemporary capitalism (see Chapters 14 and 15). But to breathe analytical and explanatory life into competition, economic crisis and globalisation, and go beyond mysticism, we must start with a clear understanding of the social relations underpinning capitalist production, rather than fetishise its effects.

The distinction between religious and commodity fetishism is not simply academic. Because of its imaginary origins, religious fetishism can readily be rejected, at least in theory, although in reality it is buttressed by material forces and practices that give it considerable influence over our daily lives and across the range of human history. By contrast, however well it is understood, it is not possible to wish away the price system by an act of will, except in marginal instances and fragile attempts at self-sustainability. As a result, and here again there is a parallel with religious fetishism, it is possible for underlying capitalist realities to be grasped from time to time through the consequences of daily practices and reflection upon them. Just as it can be realised that God does not exist, so it can be seen that capitalism is an exploitative class system that is far from free, whatever the degree of (in)equality before the market. This opens up the terrain for both material and ideological struggle. For the existence of profits, interest and rent indicates that capitalism is exploitative; as a consequence, unemployment, economic crises, inequalities, environmental degradation, and so on, become as transparently visible as the inability of the meek to inherit the earth or eat pie in the sky when they die.

This raises two closely related and hotly debated issues within Marxism and across the social sciences and the political spectrum

more generally. The first is the methodological and analytical question of how to order the diverse empirical outcomes associated with capitalism. Can we deal with inequality independently of class, poverty apart from economic and other forms of repression, and growth separately from crisis? Second, to what extent are such conditions endemic to, or reformable within, capitalism? For it is not simply a matter of the logical connections between the different categories of political economy, between value and price for example. One of the strengths of Marx's *Capital*, acknowledged by friend and foe alike, is to have pointed to the systemic character of capitalism and to its essential features. By the same token, Marxism's antipathy to reformism, other than as part of a broader strategy for socialism, is based on reformism's inevitable limitations within, and accommodation to, the confines imposed by capitalism. Around these issues, there remains much room for dispute over method, theory and the politics of reform, in debate both within and against Marxism.

Such perspectives shed light on Marx's own intellectual development. For his mature concept of commodity fetishism forges a link with earlier work (in the *Economic and Philosophic Manuscripts of 1844*). Here, while breaking with Hegelian idealism and adopting a materialist philosophy, he developed a theory of alienation. This concentrated on the individual's relationship to physical and mental activity and to fellow beings, and on consciousness of these processes. In *Capital*, after extensive economic study, Marx is able to make explicit the coercive forces exerted by capitalist society on the individual. These can be the compulsion of profitability and wage labour, or the more subtle distortions by which these forces are justified ideologically: abstinence, the work ethic, consumerism, freedom of exchange, and other aspects of commodity fetishism. Unlike other theories of alienation, a Marxist theory places the individual in a class position and examines the perceptions of that position. Each is not seen, in the first instance, as a powerless individual in an unexplained

'system' of irrationality, impersonality, inequality, authoritarianism, bureaucracy, or whatever. These phenomena have their own character and function in capitalist society at a particular time. They can only be understood as a whole or in relation to individuals against the perspective of the workings of capitalism, as is explained in the following chapters.

Issues and Further Reading

Marx's value theory is extremely controversial among proponents and opponents alike. An essential starting point in assessing debates is the distinction between the approaches of Ricardo and Marx, with many erroneously identifying the two as holding to *the* (same) labour theory of value. But Ricardo simply counts labour time to explain price, without investigating why products take the form of commodities. The latter is Marx's starting point, justifying value as a category in his approach, since society itself, through the capitalist production process and the market, undertakes the qualitative and quantitative comparison of (concrete) labour times. On this, see especially Geoffrey Pilling (1980), and the contributions in Ben Fine (1986), Diane Elson (1979a) and Jesse Schwartz (1977, pt.5).

Marx's theory of value is discussed extensively throughout his mature works, especially Marx (1976, pt.1, 1987). For a concise overview of the theory and its implications, see Marx (1981a, pt.7, 1998); see also Friedrich Engels (1998, pt.2). The interpretation in this chapter draws upon Ben Fine (1980, ch.6, 2001, 2002, ch.3), Ben Fine, Gong Gimm and Heesang Jeon (2010) and Alfredo Saad-Filho (2003b). For similar views, see Diane Elson (1979b), Duncan Foley (1986, ch.2), David Harvey (1999, ch.1, 2009, 2010), Moishe Postone (1993) and John Weeks (1990, 2010, chs 1–2). Duncan Foley (2000) and Alfredo Saad-Filho (1997a, 2002, ch.2) and the contributions in Simon Mohun (1995) critically explain and review alternative interpretations of Marx's value theory.

3

Capital and Exploitation

In the previous chapter, it was shown that the production of use values as commodities, which is typical of capitalism, tends to conceal the social relations of production as a relationship between producers. This type of production focuses attention instead on exchange as a relationship between things. Nevertheless, as simple commodity production demonstrates logically and a history of trade demonstrates in reality, exchange itself can and does exist without capitalism. It is only when labour power becomes a commodity and wage workers are regularly hired to produce commodities for sale at a profit that capitalism becomes the mode of production typical of a given society. In this chapter, by examining exchange from the perspective first of the workers and then of the capitalists, it will be seen why capitalism is not merely a system of commodity production, but is also, more crucially, a system of wage labour.

Exchange

Beyond simple bartering, which is a very limited historical phenomenon, money is essential to exchange. The functions of money have been well explored in the literature: it is a measure of value, a standard of prices (i.e. a unit of account), a means of circulation, and a store of value. As a means of circulation, it mediates the process of exchange. When commodities are bought on credit and debt is settled afterwards, money functions as a means of payment. The use of money as a means of payment may

come into conflict with money's use as a store of value, and this is important in crises, when credit is given less readily and actual payments are demanded.

Consider initially a general problem: an individual owns some commodity but, for whatever reason, would prefer to exchange it for another. First, the commodity (C) must be exchanged for money (M). This sale is represented by $C - M$. Second, the money obtained is exchanged for the desired commodity, $M - C$. In both cases, $C - M$ and $M - C$, commodity values are realised on the market; the seller obtains money and the buyer acquires a use value, which may be used either in consumption or production. In general, then, commodities are sold in order to purchase other commodities, and this can be represented by $C - M - C$: the circulation of commodities. The two extremes of commodity circulation are denoted by C because they are in commodity form and have the same value, not because they are the same thing – indeed they cannot be the same thing, otherwise the whole purpose of the exchange is defeated, speculative activity in commodities aside.

We presume that both commodities have the same value, because commodity circulation (exchange) as such cannot add value to the goods or services being exchanged. Although some sellers can profit from the sale of commodities above value (unequal exchange), as with unscrupulous traders and speculators for example, this is not possible for every seller because whatever value one party gains in exchange must be lost to the other. In this light, simple commodity exchanges are summarised in Figure 3.1.

Typically, under capitalism, simple commodity exchanges can start with a worker or a capitalist. For the worker, the only commodity available to sell is her or his labour power, and this is exchanged for wages (M) and eventually for wage goods (C). Alternatively, the commodity sale $C - M$ could also be undertaken by a capitalist, either in order to buy goods for personal consumption

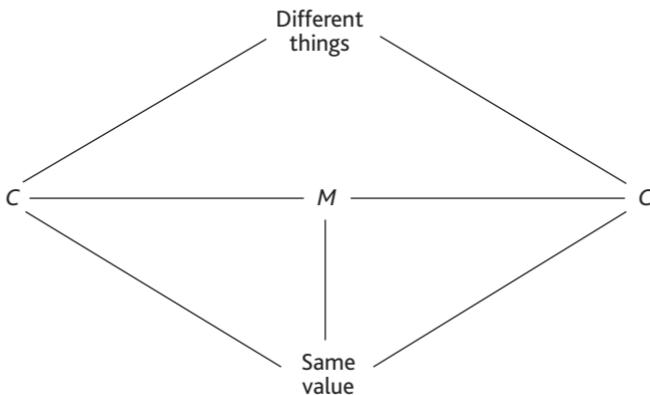


Figure 3.1 Simple commodity exchange: selling in order to buy

or to renew production, for example, through the subsequent purchase of labour power, raw materials, machines, and so on.

Capital

In contrast with simple exchanges, which start with commodity sales, capitalist production must start with the purchase of two types of commodities. These commodities are the means of production (inputs for further processing, machines, spare parts, fuel, electricity, and so on) and labour power. A necessary condition for the latter is the willingness on the part of the workers to sell this commodity. This willingness, an exercise of the 'freedom' of exchange, is forced on the workers: on the one hand, selling labour power is a condition of work, for otherwise the workers cannot gain access to the means of production, which are monopolised by capitalists. On the other hand, it is a requirement for consumption, as this is the only commodity that the workers are consistently able to sell (see Chapters 2 and 6).

Having gathered together means of production and labour power ($M - C$), the capitalists organise and supervise the production process, and sell the resulting output ($C - M$). In the latter case, the dash conceals the intervention of production in the transformation of the commodity inputs into money (see Chapter 4). For the moment, we can represent a capitalist's exchange activity by $M - C - M'$. In contrast to simple commodity exchange, $C - M - C$, discussed in the previous section, the capitalist circulation of commodities begins and ends with money, not commodities. This implies that at the two extremes one finds the same thing, money, rather than different things, commodities with distinct use values. Clearly, the only purpose in undertaking this exchange activity on a systematic basis is to get more value, rather than different use values (M' must be greater than M). The difference between M' and M is s , or *surplus value*. Capitalist exchanges are summarised in Figure 3.2.

Marx points out that capital is *self-expanding value*. Money acts as capital only when it is used to generate more money or, more precisely, when it is employed in the production of surplus value. This basic understanding of the nature of capital allows it to be

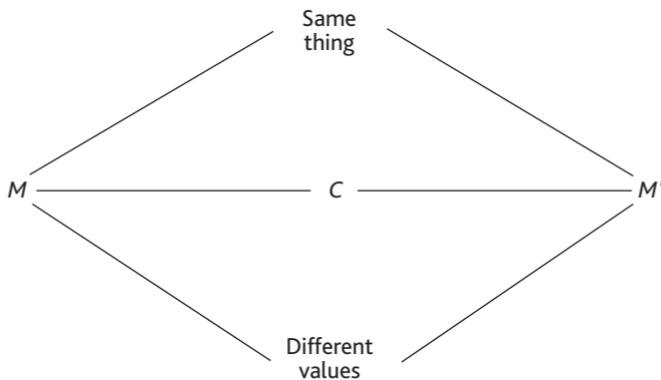


Figure 3.2 Capitalist exchange: buying in order to sell dearer

distinguished from the various specific forms it assumes and the functions undertaken by those forms, whether as money, factor input or commodity. Each of these is capital only in so far as it contributes directly towards the expansion of the advanced value. As such, money functions as capital, as well as performing its specific tasks as means of payment, depository of exchange value, or means of production.

We have characterised capital through the activity of the industrial capitalists (which includes not only manufacturing capital, but also provision of services and other activities productive of surplus value). There are other forms of capital, though, namely merchant's capital and loan capital. Both of these also expand value by buying (merchandise or financial assets rather than means of production) in order to sell dearer. Both appear historically before industrial capital. It was Marx's insight to reverse their historical order of appearance, in order to analyse capitalism abstractly and in its pure form as a social system of production. This allows him to focus on the wage relation and the production of (surplus) value without the complications introduced by forms and relations of exchange, including mercantilism or usury, which merely transfer value (for a more detailed analysis of these forms of capital, see Chapters 11 and 12).

Surplus Value and Exploitation

Most economists might find this characterisation of capital as self-expanding value uncontroversial, even if a little odd. Looking back at Figure 3.2, and with reference to Figure 3.1, it is evident that although M and M' have different values, M and C have the same value. This implies that extra value has been created in the movement $C - M'$. This added (surplus) value is the difference between the values of outputs and inputs. The existence of surplus value (profit in its money form) is uncontroversial, for this is obviously the motive force of capitalist production, and

$M - C - M'$ is clearly its general form. The problem is to provide an explanation for the *source* of surplus value.

This has already been located in production, above, by showing that exchange does not create value. Therefore, among the commodities purchased by the capitalist there must be one or more that creates more value than it costs. In other words, for surplus value production at least one commodity must contribute more labour time (value) to the outputs than it costs to produce as an input; therefore, one of its use values is the production of (surplus) value. As already indicated, this leaves just one candidate – labour power.

First, consider the other inputs. While they contribute value to the output as a result of the labour time socially necessary to produce them in the past, the quantity of value that they add to the output is neither more nor less than their own value or cost – for otherwise money would be growing magically on trees or, at least, in machines. In other words, non-labour inputs cannot transfer more value to the output than they cost as inputs for, as was shown above, *equal* exchanges do not create value, and *unequal* exchanges cannot create surplus value, only change its distribution where it already exists.

Now consider labour power. Its value is represented by its cost or, more precisely, by the value obtained by the workers against the sale of their labour power. This typically corresponds to the labour time socially necessary to produce the wage goods regularly purchased by the working class. In contrast, the value created by labour power in production is the labour time *exercised* by the workers in return for that wage. Unlike the other inputs, there is no reason why the contribution made by the workers to the value of the output (say, ten hours per day per worker) should equal the cost of labour power (whose value may be produced in, say, five hours). Indeed, it can only be because the value of labour power is less than social labour time contributed that surplus value is created.

Using social labour time as the unit of account, it has been shown that capital can expand only if the value contributed by the workers exceeds the remuneration received for their labour power – surplus value is created by the excess of labour time over the value of labour power. Therefore, labour power not only creates use values: when exercised as labour it also creates value and, potentially, surplus value. The strength of this argument is seen by its brief comparison with alternative theories of value.

Theories of abstinence, waiting or inter-temporal preference depend upon the sacrifice by capitalists of present consumption as the source of profits. Nobody could deny that these 'sacrifices' (usually made in luxurious comfort) are a condition of profit, but, like thousands of other conditions, they are not a cause of profits. People without capital could abstain, wait and make inter-temporal choices until they were blue in the face without creating profits for themselves. It is not abstinence that creates capital, but capital that requires abstinence. Waiting has existed in all societies; it is even to be found among squirrels without their earning any profits. Similar conclusions apply to viewing risk as a source of profit. It must always be borne in mind that it is not things, abstract or otherwise, that create economic categories, for example profits or wages, but definite social relations between people.

Marginal productivity theories at the heart of mainstream economics explain the increase in value between *C* and *M'* by the technically (or physically) determined contributions of labour and capital goods to output. Such an approach can have no social content, and it offers no specific insight into the nature of labour and 'capital' when attached to *capitalism*. For labour and labour power (never clearly distinguished from one another) are treated on a par with *things*, while the theory has neither the interest in explaining, nor the capacity to explain, the social organisation of production. Only the quantities of means of production and labour power matter, as if production were primarily a technological rather than a social process. However, factors of production have

existed in all societies; the same cannot be said of profits, wages, rents or even prices, which, in their current pervasiveness, are new, historically speaking. Explanation of the form of the production process, the mode of social interaction and reproduction based upon it, and the categories to which they give rise demands more than mainstream economic theory is able to offer.

Marx argues that all value (including surplus value or profit) is created by labour, and that surplus value is brought about by the exploitation of direct or living labour. Suppose that the average workday is ten hours, and that the wages correspond to half the value created in this labour time. Then for five hours each day work is 'free' for the capitalist class. In this case, the rate of exploitation, defined as the ratio of surplus to necessary labour time, is five hours divided by five hours, or one (100 per cent). Although Marx refers to the rate of surplus value when being specific about exploitation under capitalism, this concept could be similarly applied to other modes of production, for example feudalism with feudal dues or slavery. The difference is that, in these last two cases, the fact of exploitation and its measure are apparent while, under capitalism, exploitation in production is disguised by the freedom of exchange.

Denote surplus labour time by s and necessary labour time by v . Together s and v make up the living labour, l . With s known as surplus value, v is called variable capital, and l is the newly produced value:

$$s + v = l$$

The rate of exploitation is $e = s/v$. Marx calls v variable capital because the amount of value that will be added by the workers, l , is not fixed in advance, when they are hired, but depends upon the amount of work that can be extracted on the production line, at the farm, or in the office. It is variable, in contrast to constant capital, c . This is not fixed capital (as is, for example, a factory

that lasts several production cycles), but the raw materials and the wear and tear on fixed capital, in so far as these are consumed during the period of production. For example, a building or machine that has a value of 100,000 units of labour time, but which lasts for ten years, will contribute 10,000 units of value per annum to constant capital. The value of constant capital does not vary during production (since only labour creates value), but is preserved in (or, in other work, transferred to) the output by the worker's labour, a service freely and unwittingly performed for the capitalist. Clearly, c and v are both capital because they represent value advanced by the capitalists in order to make profit. Therefore, the value λ of a commodity is made up of constant and variable capital plus surplus value, $\lambda = c + v + s$. Alternatively, λ can be seen to include constant capital c plus living labour $v + s$; finally, the cost of the commodity is $c + v$, with surplus value (s) forming the capitalist's profits.

Absolute and Relative Surplus Value

The surplus value produced depends on the rate of exploitation and the amount of labour employed (which can be increased by accumulation of capital; see Chapter 6). Assume, now, that real wages remain unchanged. The rate of exploitation can be increased in two ways, and attempts to increase it *will* be made. For the nature of capital as self-expanding value imposes a qualitative objective on every capitalist on pain of extinction (that is, business bankruptcy and, potentially, degradation into the class of wage workers): profit maximisation, or at least that the growth of profitability should take a high priority.

First, c can be increased through what Marx calls the production of *absolute surplus value*. On the basis of existing methods of production – that is, with commodity values remaining the same – the simplest way to do this is through the extension of the working day. If, in the example given above, the working day is increased

from ten to eleven hours, with all else constant, including the wages, the rate of exploitation rises from $5/5$ to $6/5$, an increase of 20 per cent. The production of absolute surplus value (s') is illustrated in Figure 3.3 (total surplus value is $s + s'$).

\leftarrow	v	$\rightarrow \leftarrow$	s	$\rightarrow \leftarrow s' \rightarrow$
0		5		10 11 hours of labour

Figure 3.3 Production of absolute surplus value (s')

There are other ways of producing absolute surplus value. For example, if work becomes more intense during a given working day, more labour will be performed in the same period, and absolute surplus value will be produced. The same result can be achieved through making work continuous, without breaks even for rest and refreshment. The production of absolute surplus value is often a by-product of technical change, because the introduction of new machines, such as conveyors and, later, robots in the production line, also allows for the reorganisation of the labour process. This offers an excuse for the elimination of breaks or 'pores' in the working day that are sources of inefficiency for the capitalists and, simultaneously, leads to increased control over the labour process (as well as greater labour intensity) and higher profitability, independently of the value changes brought about by the new machinery.

The desired pace of work could also be obtained through a crudely applied discipline. There may be constant supervision by middle management and penalties, even dismissal, or rewards for harder work (i.e. producing more value). But more indirect methods might also be employed. A system of wages based on piece rates, for example, is meant to encourage the workers to set a high pace of labour, while a premium for overtime is an inducement to work beyond normal hours (although the premium

must not absorb the entire extra surplus value created in that additional time, for otherwise there would be no extra profit for the capitalist).

Yet another way of producing absolute surplus value is the extension of work to the whole working-class family. On the face of it, children, wife and husband all receive separate wages. But the structural role played socially by those wages is to provide the means to reproduce the working-class family and, therefore, the working class as a whole. With the extension of waged work to the whole family, labour-market pressure (lower wages due to more workers seeking employment) could even result in more labour being provided for little or no increase in the value of wages as a whole.

There are limits to the extent to which capitalism can depend upon the production of absolute surplus value. Quite apart from the natural limits of the number of hours in the day and the physiological requirements of reproduction of the workers, resistance of the working class and, as the result of this, labour laws and health-and-safety rules can offer barriers to the extraction of absolute surplus value. Nevertheless, absolute surplus value is always important in the early phases of capitalist development, when workloads tend to increase rapidly, and at any time it is a remedy for low profitability (even for contemporary developed capitalist countries) – to the extent that the medicine can be administered.

Relative surplus value does not suffer from the same limitations, and it tends to become the dominant method of increasing e as capitalism develops (see Chapter 6). Relative surplus value is produced through the reduction of the value of labour power (v) by means of improvements in the production of wage goods (with a constant real wage) or, more generally, through the appropriation of productivity gains by the capitalist class. In this case, the working day remains the same, for example at ten hours, but, because of productivity gains (either directly, or indirectly through the constant capital used) in the production of wage goods, v falls

from five to four hours, leaving a surplus value of six hours (e rises from $5/5$ to $6/4$, that is, by 50 per cent). There are several ways to achieve this result, including increased co-operation and finer division of labour, use of better machinery, and scientific discovery and innovation across the economy. The production of relative surplus value is illustrated in Figure 3.4. As a result of technical change, v falls to v' , and relative surplus value is produced in addition to the old surplus value. (This figure should be compared with Figure 3.3.)

Before technical change:

\leftarrow	v	$\rightarrow \leftarrow$	s	\rightarrow
0		5		10 hours of labour

After technical change (lower value of labour power):

\leftarrow	v'	$\rightarrow \leftarrow$	s'	\rightarrow
0		4		10 hours of labour

Figure 3.4 Production of relative surplus value

The production of absolute surplus value can be based on the grim determination of individual capitalists, using the threat of punishment, dismissal and lockouts, with supportive state intervention rarely found wanting when required; for example, in order to protect the viability of the firm, the competitiveness of the industry or to promote the 'national interest'. In contrast, production of relative surplus value depends upon *all* capitalists, since none alone produces a significant proportion of the commodities required for the reproduction of the working class. In particular, it depends upon competition and accumulation in

the economy as a whole inducing technical changes that bring down the value of labour power.

Machinery and Technical Change

Marx attaches great importance to the analysis of the way in which production develops under capitalism. He devotes considerable attention both to the power relations between workers and capitalists, and to the technical relations under which production takes place, while also showing that they should not be treated separately: production technologies embody relations of power. In particular, for developed capitalism, Marx argues that the factory system necessarily predominates (rather than, for example, independent craft production or the putting-out system, in which capitalists provide inputs to handicraft workers and, later, collect their produced commodities). Within the factory, the production of relative surplus value is pursued systematically through the introduction of new machinery, which can bring, at least temporarily, extraordinary profits to the innovating capitalist.

New machinery increases productivity because it allows greater amounts of raw materials to be worked up into final products in a given labour time. Initially, the physical power of the worker is replaced by the power of machinery. Later, the workers' tools are incorporated into the machinery, turning the workers into minders or appendages of the machines – to feed the machines and watch over them, and to become their servants rather than vice versa (which may, nevertheless, require high levels of technical expertise).

The introduction of machinery increases the intensity of work in a way that differs from that experienced under the production of absolute surplus value, for new machinery inevitably restructures the labour process. This has contradictory effects on the working class. They are deskilled by the machinery that displaces them and simplifies their tasks at work, but they are also required to

command new skills as a number of these simplified tasks are combined, often simply so that more complex machines can be operated at higher levels of productivity. Similarly, though the physical burden of work is lightened by the power of machinery, it is also increased through the higher pace, intensity and restructuring of work, and by the need to adapt human bodies to the demands imposed by new technology.

To a large extent, this analysis presupposes a given set of products and production processes which are systematically transformed through the increasing use of machinery. Marx does not neglect, indeed he emphasises, the roles of science and technology in bringing forth innovation in both products and processes. But such developments cannot be the subject of a general theory, since their extent and rhythm do not generally take place under the command of capitalist production and are contingent upon the progress of scientific discovery, the translation of discoveries into more productive technologies, and their successful introduction into the workplace. Nevertheless, Marx concludes that the factory system leads to a massive increase in the ratio of physical capital to labour – what he termed the technical composition of capital (see Chapter 8). On the one hand, this follows from the definition of productivity increase, since each labourer works up more raw materials into final products (otherwise productivity would not have risen). On the other hand, this is a condition for productivity growth, since the mass of fixed capital in the form of machinery and factories must also increase.

Productive and Unproductive Labour

Marx's distinction between productive and unproductive labour is a corollary of his concept of surplus value. Wage labour is *productive* if it produces surplus value directly. This implies that productive labour is wage labour performed for (and under the control of) capital, in the sphere of production, and directly producing

commodities for sale at a profit. The commodities produced and the type of labour performed – ranging from shipbuilding through harvesting to computer programming, or to teaching or singing – are irrelevant; in addition, commodities evidently need not be material.

All other types of ‘wage’ labour are *unproductive*: for example, labour that is not hired by capital (such as independent producers of commodities, the self-employed, and most government employees), labour that is not directly employed in production (such as managers or workers employed in exchange activities, including the retail and financial sectors, as well as accountants, salespeople and cashiers, even if they are employed by industrial capital), and workers not producing commodities for sale (such as housemaids and other independent providers of personal services).

The productive–unproductive distinction is specific to *capitalist* wage labour. It is not determined by the product of the activity, its usefulness or its social importance, but by the social relations under which labour is performed. For example, doctors and nurses can perform either productive or unproductive labour, depending on their form of employment – at a private clinic or a public hospital, for example. Even though their activities are the same, and possibly equally valuable for society in some sense, in one case their employment is contingent upon the profitability of enterprise, while in the other case they provide a public service that is potentially free at the point of delivery.

It is important to emphasise that, although unproductive workers do not directly produce surplus value, they are exploited if they work for longer than the value represented by their wage – being unproductive is no obstacle to capitalist exploitation! From the point of view of capital, unproductive sectors – retailing, banking, or the public health system, for example – are a drag on accumulation because they absorb part of the surplus value produced in the economy in order to obtain the wherewithal to pay wages, other expenses and their own profits. This is done

through transfers from the value-producing sectors via the pricing mechanism. For example, commercial capital purchases commodities below value and sells at value, whereas interest-bearing capital (including banks and other financial enterprises) obtains revenue primarily through the payment of customer fees and interest on loans (see Chapters 11 and 12). Finally, public services are funded by general taxation and, in some cases, user fees. None of this suggests that unproductive sectors are either ‘useless’ in general or simply a drag on social prosperity: these sectors and their workers can perform useful service for society and/or the accumulation of capital as a whole – but they do not directly produce surplus value.

Issues and Further Reading

Volume 1 of *Capital* is in part concerned with the question: how is profit compatible with freedom of exchange? The answer given transforms the question into one of how surplus value is produced. This, in turn, is answered by reference to the unique properties of labour power as a commodity, and the extraction of both relative and absolute surplus value. Marx addresses these in the theoretical terms covered here, but also in some empirical detail, focusing on changes in production methods themselves, especially the shift from manufacturing (literally production by hand) to the factory system.

It is important to Marx to explain the source of surplus value prior to examining how it is distributed as profit (and interest) and rent – something he does in Volume 3 of *Capital* (covered in later chapters). He designates profit, rent and wages as the ‘Trinity Formula’. These forms of revenue, which have very different origins and places in the structures and processes of the capitalist system, are subject to the illusion that they are symmetrically placed as the prices of capital, land and labour, respectively, as opposed to being the basis for a system of exploitation.

Marx's theory of capital and exploitation is explained in several of his works, especially Marx (1976, pts 2–6). The interpretation in this chapter draws upon Ben Fine (1998) and Alfredo Saad-Filho (2002, chs 3–5, 2003b). For similar approaches, see Chris Arthur (2001), Duncan Foley (1986, chs 3–4), David Harvey (1999, chs 1–2), Roman Rosdolsky (1977, pt.3), John Weeks (2010, ch.3) and the references cited in Chapter 2.

Once the specificity of Marx's value theory and his emphasis on the uniqueness of labour power as a commodity are accepted, his theory of exploitation to explain surplus value and profit is relatively uncontroversial. It is necessary, though, to see surplus value as the result of coercion to work beyond the value of labour power rather than as a deduction from what the worker produces or as a share taken in the division of net product (as in what are termed Sraffian or neo-Ricardian approaches). On this, see Ben Fine, Costas Lapavitsas and Alfredo Saad-Filho (2004), Alfredo Medio (1977) and Bob Rowthorn (1980, especially ch.1). Marx's theory of exploitation has inspired a rich vein of complementary analyses of the labour process, both in its technical and in its organisational aspects. Science and technology do not simply improve technique; they are governed, if not determined, by the imperative of profitability, with the corresponding need to control and discipline labour (thereby influencing what is invented and how, and, similarly, what is adopted in production and how); see Brighton Labour Process Group (1977), Les Levidow (2003), Les Levidow and Bob Young (1981, 1985), Phil Slater (1980), Bruno Tinel (2012) and Judy Wajcman (2002). In addition, there is an imperative to guarantee sale (at a profit), with a corresponding departure in products and methods of sale from the social needs of consumers (however defined and determined) in pursuit of private profitability of producers; see Ben Fine (2002) for example. By way of contrast with mainstream economics, for which work has become treated as a disutility by necessity as opposed to a

consequence of its organisation under capitalism, see David Spencer (2008).

Finally, the distinction between productive and unproductive labour is important as a starting point for examining the different roles played by industrial, financial, public sector and other workers in economic and social reproduction (see Chapter 5). One debate has been over whether the distinction is valid or worthwhile – for example, on the grounds that all exploited (wage) labour should be lumped together as sources of surplus value. Another debate, amongst those who accept the distinction, concerns who should count as productive: this can be narrowly defined, as including only manual wage labour, or more broadly, to include all waged workers. Marx explains his categories of productive and unproductive labour in Marx (1976, app., 1978a, ch.4). These categories are discussed by Ben Fine and Laurence Harris (1979, ch.3), Simon Mohun (2003, 2012), Isaak I. Rubin (1975, ch.19, 1979, ch.24) and Sungur Savran and Ahmet Tonak (1999).

4

The Circuit of Industrial Capital

Volume 1 of *Capital* is largely self-contained, and it primarily gives a general analysis of capitalism and its process of development from the perspective of production – what are the social relations that allow capital to create surplus value and how do these give rise to economic realities and social developments around production? The other two volumes of *Capital* are devoted both to elaborating and to extending this general analysis. For this reason it is appropriate that the beginning of Volume 2 should analyse the circuit of capital. This is because this circuit provides the basis for understanding a whole series of phenomena – commercial, interest-bearing and fixed capital, distribution of income and output, the turnover of capital, productive and unproductive labour, and crises – as well as providing an economic structure in which the social relations of production analysed in Volume 1 can be presented in more concrete form. In other words, Volumes 2 and 3 are about how the value relations of production, studied in Volume 1, give rise to more complex outcomes through the processes and structures of exchange and distribution.

The Money Circuit of Capital

Volume 2 begins with an account of the money circuit of capital. This is an expansion of the characterisation of capital as self-expanding value (see Chapter 3), taking explicit account of the process of production. The general form of the circuit of industrial capital is:

THE CIRCUIT OF INDUSTRIAL CAPITAL

$$M - C \dots P \dots C' - M'$$

Under the most general circumstances, and regardless of the commodity produced, the industrial capitalists advance money capital (M) in order to purchase commodity inputs (C), comprising labour power (LP) and means of production (MP). It should be realised that money is necessary for these transactions, but does not in itself make them possible. It is the separation in ownership of labour power from the means of production – a class relation of production – that allows a definite group of people (the capitalists) to hire others (the workers) in exchange for a wage. This can be stressed by explicitly separating the means of production and labour power in the circuit of capital:

$$M - C <_{LP}^{MP} \dots P \dots C' - M'$$

On purchase, the inputs (C) form productive capital (P). Production proceeds as labour power is exercised on the means of production, and the result is different commodity outputs, with a higher value (C'). C and C' are linked to P by dots to indicate that production has intervened between the purchase of inputs (C) and sale of outputs (C'). The commodities produced are denoted by C' not because their use value is different from that of the means of production (although this is generally the case), but because they contain surplus value over and above the value of the advanced capital, M . This is shown by the sale of the output for more money capital, $M' > M$.

It was shown in Chapter 3 that surplus value, $s = M' - M$, is created in production by the purchase of labour power at its value, which is less than the labour time expended (value created) in production. Surplus value makes its first appearance in commodity form immediately after production. Since the inputs (especially labour power, tools, machines and buildings) seem symmetrical in their contribution to output, it is easy to credit the creation of

surplus value to the 'productivity' of *all* the factor inputs without distinction. Correspondingly, it is difficult to credit surplus value to the excess of actual over necessary labour time, because the appearance of surplus value is delayed until after production has taken place, whereas the free exchange of labour power for its value takes place before production (even if the wages are paid in arrears).

The produced value (and surplus value) is now converted into money by the sale of the output on the market. Having obtained sales income M' , the capitalists can renew the circuit of capital – either on the same scale (by renewing the original advance, M , with given prices and technologies, and spending the surplus value on consumption), or by embarking on an expanded productive circuit, through the investment of part of the surplus value (see below, and Chapter 5).

The Circuit as a Whole

It was shown above (and in Chapter 3) that capital is the social relation underpinning the self-expansion of value, or the production, appropriation and accumulation of surplus value. Capital, as self-expanding value, is essentially the process of reproducing value and producing new value. The circuit of capital describes this motion, and it highlights that capital takes different forms in its reproduction process. The social relation that is capital successively assumes and relinquishes the forms of money, productive capital and commodities.

The circuit of industrial capital is best represented by a circular flow diagram (see Figure 4.1). This circuit is important for laying out the basic structure of the capitalist economy and for showing how the spheres of production and exchange are integrated with one another through the movement of capital as (surplus) value is produced, distributed and exchanged. As the circuit repeats itself, surplus value (s) is thrown off. Thus, capital as self-expanding

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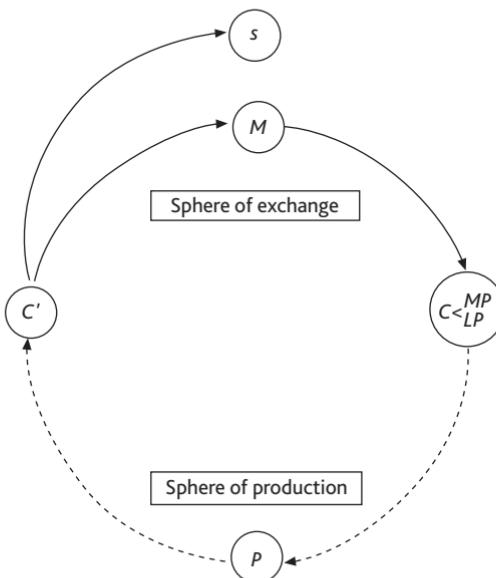


Figure 4.1 The circuit of capital

value embraces not only definite social relations of production, but is also a circular movement as it goes through its various stages repeatedly. If *s* is accumulated for use as capital, we can think of expanded reproduction as being represented by an outward spiral movement.

Industrial capital changes successively into its three forms: money capital (*M*), productive capital (*P*) and commodity capital (*C'*). Each form presupposes the existence of the other two because it presupposes the circuit itself. This allows us to distinguish the specific function of each of the forms of capital from its general function as capital. In societies where they exist, money, factor inputs and commodities can always function, respectively, as means of payment, means of production and depositories of exchange value, but they only serve as (industrial) *capital* when

they follow these functions sequentially in the circuit of capital. Then, money capital acts as a means of purchasing labour power, productive capital acts as a means of producing surplus value, and commodity capital acts as the depository of surplus value to be realised as money upon sale.

In the movement through the circuit, two spheres of activity can be identified: production and circulation (exchange). The sphere of production lies between *C* and *C'*. In this sphere, use values are transformed and value and surplus value are created. This has profound implications for Marx's theory of distribution, because it explains what there is to be distributed as well as the structures and processes of distribution of goods and values in the economy. The sphere of circulation contains the process of exchange between *C'* and *C*, and the realisation of surplus value, s.

It was shown in Chapter 3 that even if capital and labour are employed in exchange they add no value to the output. This conclusion seems strange to mainstream economists because they are usually interested in obtaining a price theory by aggregating the (supposedly independent) contribution of all the factors used in production *and* exchange. But Marx is interested in the social relations of production and distribution, and in the structures of distribution of the values produced during the circuit. For example, he argues that whereas commercial capital adds no value, this does not prevent it from receiving a share of the (surplus) value produced (see Chapter 11).

By constructing the circuit of capital in circular form, as in Figure 4.1, it becomes arbitrary to open and close the circuit with money capital, since a circle has neither beginning nor end. Note that the money circuit contains the interruption of the sphere of circulation by the sphere of production. In characterising capital as self-expanding value, it has been shown that the capitalists' motive is to buy in order to sell more dearly. So, for capital seen from the perspective of the money circuit, production appears as a necessary but unfortunate (and even wasteful) interruption

in the process of money making. Merchant's and interest-bearing capital avoid this interruption, although they depend upon production taking place elsewhere. However, what is possible for an individual (merchant or interest-bearing) capitalist does not hold for all (or even most) capitalists. If a nation's capitalists were seized by the attempt to make profit without the unavoidable link of production, they would find themselves in a speculative boom that would eventually crash. At this point the economy would be brought back to the reality of the need for production – the only possible source of the value required to pay dividends, settle debts, service interest commitments and clear financial obligations (see Chapters 7, 12 and 14).

Marx also analyses the circuit from two other perspectives, those of productive capital and commodity capital. The circuit of productive capital begins and ends with *P*, production. The purpose of the circuit appears to be production and, in so far as surplus value is accumulated, production on an extended scale. In contrast to the money circuit, for the productive circuit the sphere of circulation appears as a necessary but unwanted intrusion in the process of production. But it has been shown above that it is not sufficient to produce (surplus) value; it has to be realised on sale. Economists more often than capitalists tend to ignore this necessary but uncertain mediation by exchange, for a capitalist who unwittingly accumulates a growing inventory of commodities is soon brought back to reality with the loss of working capital. Finally, the circuit of commodity capital begins and ends with *C'*, and so its purpose appears to be to satisfy society's consumption needs. As the sphere of circulation is followed by the sphere of production, neither sphere is interrupted by the other, so neither appears as unnecessary or wasteful.

The three circuits of capital derive from the circuit as a whole. One might wonder why there are not four circuits of capital, with each 'node' on the circuit (*P*, *C'*, *M* and *C*) forming a starting and finishing point. The reason *C* is not the basis for a circuit of

capital is that it is not capital. The purchased means of production may be another capitalist's commodity production and hence commodity capital. However, labour power is never capital until it is purchased, and then it becomes productive capital and not commodity capital, which must contain produced surplus value. Thus, while from a technical point of view capitalism can be self-reliant for raw materials, it always and necessarily depends on the social reproduction of labour power from outside the pure system of production (see Chapter 5). This entails the use of political, ideological and legal as well as economic power in order to get the labourer to work. The same problems do not exist in getting a machine to work.

It has been shown above that different views of capital's process of reproduction can be constructed, each corresponding to one of the circuits of capital. These need not be uncritical of capitalism, but individually they are always inadequate, stressing one or more of the processes of production, consumption, exchange, profit making and accumulation at the expense of the others. For example, only fleetingly, as they enter the circuit, do labour power and produced means of production appear separated and then, not forming capital, they do not spontaneously generate a view of the circuit as a whole. Partly for this reason, mainstream economic theory appears to eliminate class relations altogether. However, these relations re-enter mainstream theory as distributional or exchange relations, rather than as relations of production.

In contrast, the money circuit suggests models of exchange. For mainstream economics, the matching of supply and demand becomes the be all and end all, and capital and labour are seen as merely productive services. Difficulties are associated with the informational services performed by the price (and interest rate) mechanism. The productive circuit, in turn, tends to ignore the market, and neoclassical and most growth theories can be cited in this context. This yields an excellent input-output analysis of economic reproduction, but the economy is not

clearly capitalist at all. Finally, the commodity circuit is reflected in neoclassical general equilibrium theory, where supply and demand harmoniously interact through production and exchange to yield final consumption. This circuit supports the myth that the purpose of production is consumption rather than profit or exchange, and it is well-illustrated by Edgeworth box diagrams, familiar to economics students. One of the strengths of Marx's circuit of capital is to expose the limitations of these outlooks. At the same time, it reveals the functions of the forms in which capital appears and constructs a basis on which major economic categories and phenomena can be understood.

Issues and Further Reading

Marx's analysis of exchange, especially in Volume 2 of *Capital*, has been relatively neglected despite the insights it offers. Often an approach has been adopted of complementing his theory of production with the Keynesian theory of effective demand, as if the two aspects of Marx's theory were subject to separate treatments. As suggested here and in Marx's own account, production and exchange are structurally separated, but integrally related through the circuits of capital. Marx's own analysis of the circuit of capital is developed in Marx (1976, pt.2, 1978b, pts 1–2). It is explained in Ben Fine (1980, ch.2) and Alfredo Saad-Filho (2002, chs 3–5). On Volume 2 of *Capital*, see Chris Arthur and Geert Reuten (1998). For similar interpretations to those offered here, see David Harvey (1999, ch.3) and Roman Rosdolsky (1977, pt.4). The concepts of money as money and money as capital are explained by Costas Lapavitsas (2003a) and Roman Rosdolsky (1977, pt.3).

5

Economic Reproduction

The previous chapter examined a single circuit of industrial capital. For capital as a whole, there are a large number of different circuits, each moving at its own pace and each expanding at its own rate, and these circuits must be integrated with each other. Marx analyses these processes in Volume 2 of *Capital* by dividing the economy into two broad sectors, department 1, which produces means of production (*MP*, purchased with constant capital, *c*) and department 2, which produces means of consumption (purchased by workers out of the wage equivalent of variable capital, *v*, and by capitalists out of surplus value, *s*). This chapter examines the process of reproduction of capital as a whole. It begins with *simple reproduction*, where there is no capital accumulation. It subsequently examines *expanded reproduction*, where part of the surplus value is invested. Finally, it considers the social reproduction of the capitalist economy.

Simple Reproduction

In Figure 5.1, the balance between departments 1 and 2 in conditions of simple reproduction is illustrated by a flow diagram showing values and commodities from each sector and money. The two circuits are shown, $M_1 - C_1 \dots P_1 \dots C'_1 - M'_1$, and $M_2 - C_2 \dots P_2 \dots C'_2 - M'_2$ (with M'_1 and M'_2 being absorbed into the central pool of money, M , after which they flow out again). The figure also shows the commodity flows. These go in the opposite direction to the money that is used to purchase them, with workers and

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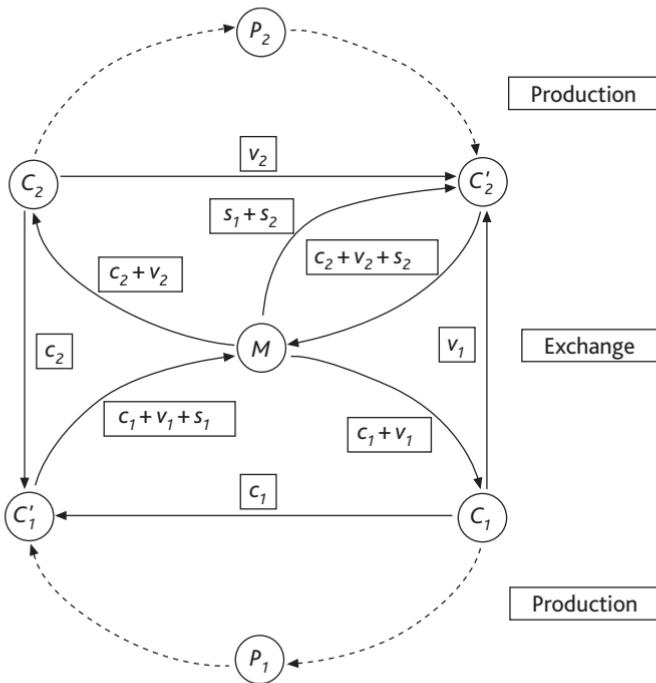


Figure 5.1 Economic reproduction

capitalists buying consumption goods from department 2 with their wages, v_1 and v_2 , and surplus value, s_1 and s_2 , and capitalists buying means of production, c_1 and c_2 , from department 1 (workers do not buy means of production, and we ignore savings).

If there is no technical change, and if the capitalists spend all their surplus value on consumption and merely repeat the previous pattern of production, the economy can reproduce itself at the same level of activity. This is what Marx calls simple reproduction, which implies a certain balance between the values produced by the two departments. The value of the output of department 1 is $c_1 + v_1 + s_1$, and the value of its sales of means of production is $c_1 + c_2$. So in simple reproduction:

$$c_1 + v_1 + s_1 = c_1 + c_2$$

For department 2, similarly, the equality of values of output and value of sales of means of consumption gives:

$$c_2 + v_2 + s_2 = v_1 + v_2 + s_1 + s_2$$

Each of the above expressions simplifies to:

$$v_1 + s_1 = c_2$$

This is Marx's famous equation for balance between the two departments in simple reproduction.

Expanded Reproduction

If the capitalists do not consume their entire surplus value, but spend part of it buying additional means of production, capital accumulation takes place. In this case, capitalists' purchases of means of production, $c_1 + v_1 + s_1$, for the next period exceed current use, $c_1 + c_2$. It follows that, for expanded reproduction, $c_1 + v_1 + s_1 > c_1 + c_2$:

$$v_1 + s_1 > c_2$$

with the extent of the inequality depending upon the rate of accumulation.

Marx's reproduction schema have been interpreted in various ways. One of the most popular is that they offer an analysis of conditions of economic *equilibrium*, either static (in the case of simple reproduction) or dynamic (expanded reproduction). Alternatively, taking mainstream growth theory as its model, expanded reproduction is seen simply as an enlarged version of simple

reproduction. The economy looks the same in all respects, except that it is bigger.

Neither interpretation is within the spirit of Marx's analysis. First, his methodology is sharply opposed to the use of equilibrium as an organising concept for the analysis of capitalism. Second, in the reproduction schema Marx is concerned to show how, despite the seemingly chaotic co-ordination of producers in exchange, *both simple and expanded reproduction* exist within the capitalist system. In other words, simple and expanded reproduction are not alternatives, either theoretically or empirically. Rather, the former exists within the latter: expanded reproduction simultaneously depends upon and breaks with the conditions associated with simple reproduction that are its starting point – both in aggregate value magnitudes, and in the values of commodities themselves, as these are subject to productivity increase as a result of accumulation. Furthermore, Marx never draws the implication, as in general equilibrium theory or for the proponents of laissez-faire, that different producers and consumers are harmoniously co-ordinated through the market at high levels of employment of resources. Rather Marx's schema points to three separate balances required by the reproduction and accumulation of capital.

The first is in values, as has been illustrated above. The second is in money and prices, since the circuit requires these to balance as flows take place. And, third, the need for balance applies to use values too, for the appropriate quantities of commodities have to be produced and exchanged with each other, both within and between the two departments.

According to the schema above, the value quantities displayed have an unspecified quantitative relationship to the use values involved. However, they cannot be entirely independent of each other. Given the value flows, asymmetric productivity growth, for example, would lead to the transfer of resources between the two departments and to a change of the use value flows between them. Therefore, Marx's balance between the two departments must

involve not only the co-ordination across the economy between the value flows already specified, together with the complementary flows of money, whose magnitudes are determined by the price system, but also the balance of flows of use values determined by technology, the composition of the output, and so on.

The diagram of economic reproduction in Figure 5.1 can be used to reinforce the partial views of the economy that were presented in the light of the single circuit of capital in the previous chapter. Little is added qualitatively, but the figure suggests what might be considered to be the factors determining the level of economic activity. Note, first, that mainstream economic theory and ideology tend to focus on the central 'box' of exchange activity, relative to which the two spheres of production appear to be extraneous. Generally, this supports the erroneous view that production can be taken for granted, or that it is simply a technical relation that forms the unproblematic basis for exchange relations, as in the neoclassical production function.

This is most apparent for neoclassical general equilibrium theory, where 'free market' exchanges are considered sufficient to guarantee equality of supply and demand at full employment of economic resources. And, in stability analysis, it becomes a question of whether disproportion between the various quantities embodied within the circuits is self-correcting through price movements in response to excess supplies and demands.

For Keynesian theory, the role of aggregate demand becomes determinant. If we focus on the investment multiplier, the level of $c_1 + c_2$ assumes a central role. If we also include the role of consumption, then this expenditure out of national income ($v_1 + v_2 + s_1 + s_2$) also becomes important. In this form, the consumption function has more affinity with the post-Keynesian methods of determining aggregate demand, in which income is divided into wages and profits. But the important point remains that, from these perspectives, a particular set of expenditure flows drives aggregate economic activity. However, in these approaches there is

no role for the production of surplus value and the conflict between capital and labour over this fundamental economic relation.

A more sophisticated post-Keynesian economics includes the role of money. In this approach, the level of economic activity is determined by the size of the flows of money streaming out of the central pool, M . If these are restricted, either because of entrepreneurial timidity or through contractionary monetary policies imposed by the central bank, the economy will falter. The roles of the banking system and the rate of interest are taken up in Chapter 12. Here it is important to note that, from this point of view, the source of unemployment is to be found in insufficient exchange activity, which determines the (in)ability of the economy to generate profitability. In Keynes's own theory, this depends largely on waves of pessimism, in which poor expectations about business profitability (and expectations of high interest rates) become self-fulfilling prophecies. More generally, recent developments within mainstream economic theory have given (so-called 'rational') expectations a considerably enhanced role in determining the path of the economy.

Finally, a more radical theory of the economy views the level of economic activity as being determined by distributional relations between capital and labour. Such a view is associated ideologically with both the right and the left, with the former arguing that the power of trade unions needs to be curbed to restore profitability, and the latter arguing that the conflicts involved are irreconcilable within the confines of capitalism. Analytically, this outlook depends on a 'fixed cake' understanding of the economy, in which national income $v_1 + v_2 + s_1 + s_2$ is divided between the two classes, with one gaining only at the expense of the other. For example, if wages, represented by $v_1 + v_2$, rise too much, then profits, represented by $s_1 + s_2$, must fall, and this undermines both the motive and the ability to accumulate.

Despite its 'radical' appearance, this view diverges sharply from Marx's own presentation of the structure of the capitalist economy.

The attribution of a central role to distribution in the determination of profitability is only possible by confining the analysis to (one part of) the arena of exchange. Once the sphere of production is incorporated as well, the apparent symmetry between capital and labour, in distributional relations and in receiving profits and wages out of national income, evaporates; for the payment of wages is a *precondition* for the production process to begin (or, more exactly, this is true of the purchase of labour power, whose actual payment may well come later). In contrast, profits are the residual after the payment of wages and other production costs, rather than being a 'slice of the cake' with a size that may be negotiated in advance. For Marx, the distributional relations between capital and labour are not of the fixed-cake variety, even if, *ceteris paribus*, profits are higher if wages are lower (although post-Keynesians might argue otherwise in view of inadequate demand). Profits depend first and foremost on the ability of capitalists to extract surplus value in production: whatever the level of wages, the capitalists need to coerce labour to work over and beyond the labour time required to produce those wages, with a productivity that depends both on the machinery available and on the level of discipline in the workplace.

Uncertainty about the production of surplus value is only one of the aspects of uncertainty facing the capitalists. Four other types of uncertainty are also relevant. First, having produced surplus value, capitalists are uncertain about how much can be realised until the output is sold. Second, the extraction of surplus value under competitive conditions leads to continuous productivity-enhancing technical change. However, it was shown above that technical change disrupts the value and use-value balances in the economy (and may contribute to antagonistic relations on the shop floor), further increasing uncertainty. Third, as is shown in Chapters 12 and 14, credit makes the resources of the entire financial system available to individual capitalists, facilitating an accumulation of capital that cannot always be sustained and

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creating conditions which may lead to financial and economic crisis. For example, credit might mislead industrial capitalists into anticipating favourable returns when none is forthcoming and, when fresh credit is used to pay for maturing obligations, the over-expansion of accumulation might create conditions of economic crisis. Finally, uncertainty becomes even greater when trading in money itself takes place, creating a class of money dealers only loosely connected to production and trade. Trading in money and money-related instruments is likely to lead to destabilising speculation and fraud, creating further uncertainty even for those not directly involved in such activities.

On the one hand, for Marx the production of absolute and relative surplus value is crucial to the understanding of distributional relations; but the latter cannot be read off from production conditions alone. On the other hand, uncertainty generated by capitalist *production* (rather than the shifting humours of industrial and financial capitalists) plays an essential role in the production of surplus value as well as in the unleashing of crises.

Social Reproduction

The previous sections have focused on simple and expanded reproduction from within the economic system alone. In principle, with one crucial exception, the circuits of capital appear to be self-sustaining. The striking exception is labour power, whose reproduction requires, first, that the provision of wage goods is adequate for that purpose. Second, by virtue of the workers' freedom once the working day is over (as well as their resistance on the shop floor and outside), capital has little control over the processes of reproduction of the workforce and, in a sense, this is where social reproduction takes over. The latter involves a complex array of non-economic relations, processes, structures, powers and conflicts that, interpreted in narrow terms, includes the processes necessary for the reproduction of the workforce

both biologically and as compliant wage workers. More generally, social reproduction is concerned with how society as a whole is reproduced and transformed over time.

In short, and largely appropriately, social reproduction has become an umbrella term within which to gather all non-economic factors. It covers the entire ground between the abstract category of *capital* and the empirical reality of *capitalism*. But even this is only a partial understanding of the scope and significance of social reproduction. Capitalism clearly depends upon satisfactory economic as well as social reproduction, of which economic reproduction is a part. Misperception of the relationship between the two is commonplace, as if economic and social reproduction were separate from one another, like work and home. To a large extent, the inappropriate juxtaposition of the economic and the social (the latter as a political, cultural or any other kind of 'superstructure') is most marked in the disciplinary boundaries between the social sciences.

One of the most significant sites of social and economic reproduction is the state. Through the state are constituted and expressed political relations, processes and conflicts that are distinct from, but not independent of, those of economic reproduction. The extent to which the state is dependent upon the economy is highly controversial. Views range, to put it in somewhat one-dimensional terms, from those in which the state is reducible to economic, especially capitalist, imperatives, to those in which the state is seen as autonomous from the economy. The nature of the capitalist state will be taken up in Chapter 15, but the issues here of what has been termed reductionism, on the one hand, and autonomy, on the other, are of more general methodological, theoretical and empirical significance. The important point is to recognise both the causal significance of the capitalist economy for the non-economic – what sort of state, property law, customs, politics, and so on, prevail in each kind of society.

Similar considerations apply to those areas of social reproduction that lie outside the immediate orbit of the state, what is often referred to as 'civil society'. Social reproduction also depends upon the household or family system and the more general areas of private activity, not least consumption and other activities of the working class that induce and enable it to present itself for work on a daily basis.

The emphasis so far has been upon the social reproduction of labour; but economic reproduction is equally dependent upon the formation and transformation of the conditions that enable the circuits of capital as a whole to be reproduced – not least the market and monetary and credit systems which require laws, regulations, and so on. These inevitably promote the interests of some capitalists at the expense of others, as well as preventing rivalry between capitalists from being unduly destructive. Such matters are equally the subject of politics, the state and civil society.

At the abstract level of this introductory exposition, only the conditions necessary for, and induced by, economic reproduction can be identified, along with the way in which economic and social reproduction are structured in relation to one another: how is the accumulation of capital accommodated socially and conflict over it contained? To progress further than this, it is necessary to introduce historical specificity, a task beyond the scope of this text.

Issues and Further Reading

As suggested in the previous chapter, Marx's analysis in Volume 2 of Capital has been neglected and so has been relatively free of controversy. For further analysis of Volume 2, with some emphasis on the three different, but integrally related, circuits of capital (associated with money capital, productive capital and commodity capital) and with implications for economic ideology and crises, see Ben Fine (1975). The same cannot be said of social reproduction. This has been heavily debated, whether

within Marxism or against it. Controversy covers the relationship between the economic and the non-economic (and how they do or do not depend upon one another), and the different aspects of the non-economic itself, from the nature of the autonomy of the state and politics to the role of 'civil society'.

This chapter focuses on the material contained in Karl Marx (1978b, pt.3). The interpretation of social reproduction developed above draws upon Ben Fine (1992b, 2013), Ben Fine and Ellen Leopold (1993) and Ben Fine, Michael Heasman and Judith Wright (1996); see also John Weeks (1983). The value of labour power and the reproduction of the working class are discussed by Ben Fine (1998, 2002, 2003, 2012a), Ben Fine, Costas Lapavitsas and Alfredo Saad-Filho (2004), and Alfredo Saad-Filho (2002, ch.4); see also Kenneth Lapidès (1998), Michael Lebowitz (2003a and 2009, ch.1) and David Spencer (2008), and Ben Fine's debate with Michael Lebowitz in Fine (2008, 2009) and Lebowitz (2006, 2010).

6

Accumulation of Capital

The previous chapters have characterised capitalism as a mode of production. This provides a framework in which capital accumulation, and the historical development of capitalism as the world's dominant mode of production, can be understood. For, having uncovered the relations of production specific to capitalism, the systemic forces behind their creation, operation, reproduction and development can be isolated from the mass of phenomena taking place more or less simultaneously.

Marx devotes large sections of Volume 1 of *Capital* to the task of interpreting the genesis of British capitalism and the fundamental role played by the compulsion to accumulate. This must stand as a major application and confirmation of his conception of historical change. Here only an outline of his work can be offered. For more depth, those interested should consult *Capital* itself for Marx's own analysis, and later Marxists for more concrete studies of the causes, nature, timing and location of the first and subsequent capitalist transitions and 'industrial revolutions'.

Primitive Accumulation

An essential feature of capitalism is the existence of labour power as a commodity. A necessary condition for this is the separation of labour from ownership of the means of production. The workers depend upon somebody else to provide these, for if the workers had unmediated access to the means of production, the product of labour rather than the capacity to work would be sold (if market

exchange of products could persist in such circumstances). Hence, on the other side of the coin must be the capitalist with money to advance to purchase labour power and the wherewithal to maintain ownership of the means of production. The historical establishment of these social relations of production out of the feudal ones in Britain holds the key to the birth of capitalism.

In any society beyond the most primitive there will be saving of current output and the production of long-lasting inputs to form means of production for the future, whether it be in the form of corn seed, animal stock, hunting weapons or other implements. One of the distinguishing features of capitalism is the increase in the rate of savings. Marx found it commonplace, once capitalism had been established, for economists to attribute the growth in savings to the self-sacrifice of energetic entrepreneurs, ploughing slowly rising profits back into their businesses. (More recently, the observation that too small a part of the national income is saved in poor countries is considered by many development economists as a major barrier to development.)

Marx pours scorn on self-sacrifice theory. Capitalism is founded upon the forcible separation of the workers from the existing means of production. In Britain, historical evidence shows that this separation was at times brutally imposed by large landowners, the aristocracy and the state, rather than being the cumulative outcome of individual thrift and selfless devotion to work in small farms and family enterprises that, very gradually, managed to enrich themselves. It entailed the conversion of the traditional (feudal) use of existing means of production and labour power into their use in capitalistic production units. This does not require, in the first instance, any additional accumulation of means of production or even their more efficient use, just their redistribution and operation according to new relations. Once this has occurred the process of competitive accumulation gathers its own momentum (see below, and Chapters 3 and 4).

Since agriculture was, by far, the dominant sector of production in the pre-capitalist era, in terms of both output and volume of employment, this sector was the source of a class of 'free' wage labourers. The secret of primitive or original accumulation of capital lay, then, in the expropriation of the agricultural population from the land, and the destruction of the right or custom of individual independent cultivation (even if feudal dues had to be paid). This could be undertaken on an individual basis by landowners responding to the growing imperative of market exchanges. For example, it might arise out of pressures for cash due to the accumulation of debt by the landowners, the impact of secular inflation, rising prices of wool relative to grain, requiring fewer people to work in the fields, and so on.

Whatever their immediate causes, these transformations required the power of the state to make any headway in a violent and violently resisted process. State intervention, representing the interests of the emerging capitalist class, was twofold. First, enclosure movements dispossessed the peasantry of both common and individual land usage. Resistance was fierce, generalised and brutally crushed. The class of landless labourers was created. Second, wage legislation and perverse systems of 'social security', culminating in the infamous Poor Law of 1834, forced long hours and industrial discipline on the landless labourers. The combined impact of these transformations, over several decades, was to turn the majority of the peasants into wage workers, creating the potential source of absolute surplus value.

Here Marx's emphasis is on the changing *use* of the existing means of production, rather than their accumulation. No doubt technical progress and the reorganisation of production contributed to the rise in agricultural output that was to feed industry as well as the industrial workers. Simultaneously, but secondarily, technical progress also contributed to the rise in manufacturing output demanded as inputs for agricultural production. However, few labourers felt the benefit of this increased output and, for

those who did, it must have paled into insignificance against the deterioration of working conditions and the destruction of a way of life. Illustrative of this is the essential role played by physical force and the state in the creation of the proletariat, involving the police, the army, the tax and justice systems, and so on, rather than the smooth operation of market forces expressing the 'preferences' of landowners, peasants, and wage workers. The tumultuous origin of the proletariat contrasts with most present-day labour relations, where the dull compulsion of economic needs and their development through tradition, education, habit and firmly established laws induces the working class to look upon the conditions of the capitalist mode of production as self-evident and morally justified, as well as unavoidable. Force rarely needs to be at the forefront now (although it is available if required), because labour is deeply tied to capital, giving the appearance that thus it has always been and must always be.

This extremely brief account explains the origins of the capitalist relations of production. By the seventeenth century the first enclosure movement had been completed (another was to follow in the eighteenth century), creating a landless labouring class as well as a class of capitalists, who first appeared as farmers. In the eighteenth century the use of the national debt, the taxation system, protectionist trade policy and the exploitation of colonies to accumulate wealth had reached its climax. The combination of labour and wealth in capitalist relations accompanied these processes, with the nineteenth century heralding the rapid pace of technological innovation and the accelerated growth of industrial society.

It is as well to recognise, however, that the creation of capitalism in Britain has been rather different from elsewhere. The forcible dispossession of the peasantry from the land was more extensive than in the rest of Europe, and its character was quite different from similar developments in other parts of the world. In Britain, a larger proportion of the population was transformed into

wage workers. This was done through the creation of a system of large-scale landed property, so that a relatively small number of aristocrats came to hold the vast majority of privately owned land. Elsewhere in Europe, as well as in the north-eastern United States, the peasantry, or sections of it, proved better able to defend themselves by taking possession of the land in smaller parcels, thereby making themselves independent of wage labour to a much greater extent. The significance of these changes persists to the present day, with Britain's agriculture continuing to be characterised by larger farms and Britain's working population containing many fewer employees (and self-employed) in the agricultural sector than is the case in the rest of Europe.

While Marx's analysis of primitive accumulation focuses on Britain, and to that extent deals with an exception, his analysis of the formation of the class of wage labourers out of the agricultural population remains an essential starting point for the study of capitalist transitions in most parts of the world.

While, for Marx, the crucial element in the transition to capitalism is the formation of a class of wage workers out of pre-capitalist class relations, this leaves open the immediate causes and mechanisms by which such transitions are achieved. These are diverse and complex, ranging over the different factors in the formation of markets both before and after the transition, from the role of the state to colonisation, access to credit, export markets, changes in property law, and so on. Not surprisingly then, as already observed, transitions to capitalism have not only been varied in content and trajectory, but they have also been heavily debated both within Marxism and between Marxism and other approaches.

The Development of Capitalist Production

In Britain capitalism came to the fore gradually, largely through the coincidence of favourable economic conditions – the discovery

and hoarding of precious metals, and low rents and wages, as well as proactive economic policies, inspired in part by mercantilism. The subsequent genesis of industrial capitalism was less protracted than elsewhere, developing out of artisans and guilds and the absorption of the workers pushed out by capitalist farming. Simultaneously, the ending of the peasantry's largely self-sufficient livelihood created a domestic market for industrial capital. Previously the peasants had generally been able to serve their own needs through their control of the means of production (especially land and agricultural tools) according to feudal custom. With the advent of capitalism, the remaining independent producers needed money to purchase seeds, tools and other agricultural implements, and to pay taxes; this contributed to their transformation into wage workers. Thus capital does not necessarily destroy household production by virtue of its superior efficiency. Indeed, household production persists even today – for example, in small firms and sweatshops. Rather, independent production is largely destroyed and generally subordinated to capitalist production by the social changes associated with the rise of capitalism. The English peasantry, for example, was destroyed by forcible eviction from the land and the commercialisation of inputs and outputs, rather than by competition from capitalist farms.

In the early stages of the formation of industrial capital in Britain, the technical methods of production remained largely unchanged. However, the workers lost their direct access to the means of production and the inputs and, therefore, the possibility of controlling their own labour and output. The process of dispossession of the peasantry, described above, made the wage workers 'free' in two quite distinct senses – free from the lords and the duties imposed by the feudal system, and free from direct access to the means of production. These 'free' workers had now to sell labour power regularly in order to be able to procure their means of subsistence. Dispossession is one of the key historical sources of the British industrial working class. The other main source is

the contracting out of independent artisans to produce goods to order and, later, to process inputs delivered by, and belonging to, a capitalist intermediary (putting-out system). The next historical stage was the bringing together of these independent producers to work in 'compounds' belonging to the capitalists, the factories, initially with unchanged technologies (see Chapter 3).

The emergence of the factory system is not simply a technological development. It is also a process of social reorganisation completing the transformation of independent artisans and dispossessed peasants into wage workers. Marx calls this the *formal subordination* (formal subsumption) of labour to capital. This choice of terminology highlights the fact that, whereas labour has been effectively subjected to capital, the labour process itself remains essentially unchanged. In this case, exploitation depends primarily upon the extraction of absolute surplus value: the extension of the working day to 12, 14, 16 or more hours per day; the employment of children and the brutal exploitation of every family member for pitiful wages; the disregard for workplace safety; and the imposition of degrading living conditions on the working class. Filth, disease, the threat of starvation, pressures from church and state, and the lack of alternatives compelled the 'free' labourers 'voluntarily' to sign up to the labour contract and turn up 'spontaneously' to work even under the most appalling conditions. This is the bedrock of the labour market, a key capitalist institution.

In spite of its humble beginnings, the factory system has profound implications for the organisation of social and individual life. It creates new conditions of labour, and changes the processes of production and social reproduction beyond recognition. Inside each factory, machinery gradually imposes its own discipline, as it fragments the labour process into uniform repetitive tasks, which are more easily monitored by the agents of capital: the line managers, supervisors, accountants, time-keepers and their hierarchy of superiors, whose own performance is appraised by

the board of directors and, ultimately, in developed capitalism, by the firm's banks and shareholders.

Through the processes of mechanisation, labour fragmentation and capitalist control, the factory system tends to transform independent artisans and skilled craftspeople into appendages of the machines that they are paid to operate – the factory workers are minders of alien fixed capital. Marx calls this the *real subordination* of labour to capital. The detailed co-operation of labour within the factory contrasts sharply with the finer division by workers' tasks that accompanies specialisation. The real subordination of labour marks the beginning of capitalist production proper, based on the extraction of relative surplus value. These are the economic battering rams with which capitalism can defeat other forms of production on the basis of its superior productivity. Simultaneously, outside the factory, towns become rapidly growing industrial centres, disrupting every relation between town and country, while life itself is revolutionised by the diffusion of capitalist methods of production throughout the economy and across the entire world.

Competition and Capital Accumulation

Capitalist competition makes itself felt through various channels. In the sphere of production, competitive pressures lead to the real subordination of labour and the extraction of relative surplus value through mechanisation. Institutionally, mechanisation is associated with the diffusion of interlocking systems of ownership and control, involving complex hierarchies of 'white collar' workers, managers, executives, shareholders, the financial system and the state, seeking to maximise corporate efficiency regardless of their impact on the welfare of the workers. Finally, at the level of exchange, firms are immersed in competition in several markets simultaneously, including those for means of production, labour power and finished commodities. At all levels, capitalists seem to find themselves at the mercy of anonymous 'market forces'. These

arise from the imperative of capital in general to accumulate, which determines the behaviour of each individual capital.

In order to distinguish between these channels of competition and explain their consequences, Marx identifies two distinct types of competition in capitalism: intra-sectoral competition (between capitals in the same branch of industry, that is, producing identical use values), and inter-sectoral competition (between capitals in different branches, producing distinct use values).

Intra-sectoral competition is examined in Volume 1 of *Capital*. This type of competition explains the tendency towards the *differentiation* of the profit rates of capitals producing identical goods with distinct technologies, the sources of technical change, and the possibility of crises of disproportion and overproduction (see Chapter 7). When competing against other capitals producing identical commodities, firms can defend their market share and profitability, and avoid bankruptcy, only by attempting to become more efficient than their immediate rivals – that is, through unit cost reduction. This requires ruthless discipline and extensive control over the labour process, mechanisation and the continuous introduction of more productive technologies, machines and labour processes, as well as economies of scale (cost minimisation by large-scale production, reducing average fixed costs).

These continuous upheavals are imposed by systemic imperatives, rather than through wickedness or restlessness on the part of individual capitalists. These forces create a situation of competitive accumulation for all of them; taking part is a condition of survival. Competitors will therefore innovate as well as adopt every available technical improvement, eroding the advantage of the innovating firms while preserving the incentives for further technical progress across the economy.

Fighting this battle increases economic efficiency and cheapens the commodities produced in every firm, farm, shop or office, including those consumed by the workers (relative surplus value). It also tends to strengthen the large capitals, which are normally

better able to invest larger sums for longer periods, select among a broader range of production techniques, and hire the best workers. In these ways they reinforce their initial advantages and tend to destroy their weaker competitors (important counter-tendencies are the diffusion of technical innovations among competing firms, the ability of smaller capitals to undermine the existing technologies through invention and experimentation, and foreign competition).

The second type of competition identified by Marx is inter-sectoral competition, between capitals producing different use values. This type of competition is examined in Volume 3 of *Capital*. Rather than leading to the transformation of production technologies and work practices, explained above, profit maximisation can lead instead to capital migration to other (presumably more profitable) sectors. These movements, in response to structural demand shifts, the development of new products or profit opportunities elsewhere, or merely because of short-term repositioning of assets in the stock market, alter the distribution of capital and labour and the productive potential of the economy. There is a tendency to increase supply in the more profitable branches, reducing their excess profits. An immediate consequence of inter-sectoral competition is the tendency for rates of profit and wages to be *equalised* as economic agents seek maximum exchange value for their commodities on the market. This type of competition also transforms the expression of values as prices, as the latter become prices of production (see Chapter 10).

Marx argues that the conflicting forces of competition within and between sectors operate at different levels, with the former being more abstract and relatively more important than the latter. This is because, first, profit must be produced before it can be distributed and tendentially equalised. Second, although migration of capital between sectors can raise the profit rate of individual capitals, technical progress can increase the profitability of capital as a whole. Because of these different levels of complexity, the

conflicting forces unleashed by different types of competition cannot simply be added up in Marx's analysis of the contradictory dynamics of capital accumulation. For the same reason, there can be no presumption that adding up the implications of different forms of competition could lead to static outcomes; as if, for example, continuing movements of capital might lead to profit rate equalisation and stable long-run equilibrium as in mainstream economics, or to the relentless concentration of capital as discussed in the analyses of monopoly produced by early-twentieth-century German social democratic writers.

Even if such a state could be reached, it would immediately be disturbed by the unavoidable pursuit of competitive advantage. Competition is never a smooth process, and it often generates instability and economic crises. For Marx, analysis of competition offers the basis on which more complex structures and processes, influential at different levels and in distinct markets, can be understood. Capital accumulation is the outcome of the interaction between these two types of competition, both of which are funded by the financial system.

A capitalist's ability to compete is clearly limited by the potential to accumulate. Sources of accumulation are twofold. On the one hand, profits may be reinvested, amassing capital over time. Marx called this the process of *concentration*. On the other hand, a capitalist can borrow and merge, gathering together existing resources. This Marx called the process of *centralisation*. Concentration is a slow process, diluted by inheritance; but centralisation, through the lever of a highly developed credit mechanism and stock markets, accomplishes in the twinkling of an eye what could take concentration many years to achieve.

As the individual capitalist accumulates, what is true of each is true of capital as a whole. This is reflected in the social accumulation of capital, the reproduction of capital and its relations of production on an expanded scale, the increase of the proletariat, and the development of the forces of production. But

the individual capitalist's solution to competition is not reproduced on a social scale: accumulation is also undertaken by competitors, so that competition itself is reproduced, both within and between sectors. Competition causes accumulation, accumulation creates competition. Those who fall behind in the accumulation process are destroyed. First it is independent artisans and other modes of production that are swept aside by the advance of productivity, mass production and the iron rule of market evaluation. Later capital turns on itself, big capital destroying little capital as centralisation, credit and concentration amass more and more capital in fewer hands. At the same time, small capitals continually emerge, often introducing new technologies that can transform the marketplace and potentially overcome older and much larger capitals. In sum, capital as self-expanding value exists in rival and separate units, and this mode of existence triggers competition, which is fought by accumulation. The need to accumulate is felt by each individual capitalist as an external coercive force. Accumulate or die: there are few exceptions.

Issues and Further Reading

Marx's study of primitive accumulation in Britain can be found in Marx (1976, pt.8). Outstanding Marxian studies of the historical origin of capitalism in different regions include Jairus Banaji (2010), Robert Brenner (1986, 2007), Terry Byres (1996), Neil Davidson (2010), Vladimir I. Lenin (1972), Michael Perelman (2003) and Ellen Meiksins Wood (1991, 2002), and the contributions in Chris Wickham (2007). The explanation for the origins of capitalism as transition from feudalism has been highly controversial, both within and against Marxism. The Dobb–Sweezy debate concerned the relative importance of developments within feudal production and its class relations (as argued for by Dobb) as opposed to the external, disintegrating role of commerce (Sweezy), with corresponding emphases on country and town,

and producers and merchants, respectively. The key texts in this debate are included in Rodney Hilton (1976). This controversy has been carried forward by the so-called 'Brenner debate'; see Trevor Ashton and Charles Philpin (1985). See also Stephen Marglin (1974) for the idea that the transition to capitalism is initially about how production is organised and ruled rather than about technical methods of production as such.

Marx explains his theory of capitalist reproduction and accumulation in Marx (1976, pt.7). The analysis of competition and accumulation in this chapter draws on Ben Fine (1980, chs 2, 6) and Alfredo Saad-Filho (2002, ch.5); see also Michael Burawoy (1979), Paresh Chattopadhyay (1994, ch.2), Diego Guerrero (2003), David Harvey (1999, chs 4–7) and John Weeks (1985–6, 2010, ch.6).

7

Capitalism and Crisis

Capitalism expands because it unleashes economic forces compelling every capitalist and, to a certain extent, every worker, to behave in ways that are functional for the accumulation of capital as a whole. In spite of this degree of internal coherence, capitalism is also deeply and irredeemably flawed, both because capitalism systematically stunts human potential, and because the subordination of human needs to the profit motive triggers crises and contradictions that limit the scope for the reproduction of capital itself. These tensions and limits are discussed below and revisited in Chapter 15. The worldwide crisis that began in 2007 is examined in Chapter 14.

Marx's Theory of Accumulation and Crisis

Marx's theory of the necessity as opposed to the mere possibility of regular crises in capitalist economies draws upon the interaction between competition, class conflicts and the laws of accumulation. These come together in his treatment of the law of the tendency of the rate of profit to fall (LTRPF). The LTRPF will be discussed in Chapter 9. For the moment, it is sufficient to observe that crises can occur apart from immediate movements in the rate of profit; indeed, they can be due to factors originating from outside the circuit of capital; for example, social, political or technical upheavals. The possibility of erosion in the profit rate because of the inability of capitals to be restructured to achieve higher profitability, and the fragility of the stock exchange to 'bad' news and

its repercussions for economic reproduction, are all too familiar. Other potential causes of crisis include price crashes due to over-production in key industrial sectors, the collapse of important financial institutions, and instability induced by foreign trade or political turmoil at home or abroad.

Marx argues that crises can always arise, because of the contradiction between the production of use values for profit and their private consumption. It is only under capitalism, where production for profit rather than use dominates, that overproduction of a commodity can prove an embarrassment. In other societies it would be a cause for celebration, because it would mean increased consumption. But for capital, consumption is not enough; sustained accumulation requires the *realisation of profit*. This depends upon sale and, if this becomes impossible, production may be curtailed and capital as a whole forced to operate on a reduced scale, with serious implications for employment and social welfare.

For example, a set of capitalists producing a particular commodity may be subject to some disturbance generated either in the economic sphere or elsewhere. However, the expanded reproduction of their own capitals is intimately integrated with other circuits of capital. Their inputs are the supplies of other capitalists, and vice versa. The economy may be seen as a system of expanding circuits linked together like interlocking cogwheels. If one set of wheels slows down or grinds to a halt, so will others throughout the system. For example, for the clothing industry to expand there must be a co-ordinated increase in the production of textiles, requiring a higher production of flax and cotton, more machinery, and so on, and more workers and finance must be available for all these industries. It is the necessary but unplanned and competitive interlocking of capitals that leads Marx to talk of the anarchy of capitalist production. In this, Marx anticipates some of Keynes's best insights, not least through his schemes of reproduction. But Marx's analysis goes further and deeper in many respects, extending consideration of the level of (effective)

demand to its sources in the production and accumulation of surplus value, and arguing that crises are forcible changes in the pace of accumulation as well as its internal structure. He sees them as *necessary* in the sense that they forcibly resolve the internal contradictions of accumulation which would otherwise persist. Crises are also *unavoidable*, as is shown below.

Possibilities of Crisis

Theories of crisis generally start from the breakdown of individual circuits of capital, together with the social consequences of private decisions on production and purchase. A circuit of capital may be broken in any of its links (see Chapter 5, Figure 5.1). The break may be either voluntary or involuntary on the part of the capitalist, who may be able but unwilling, or willing but unable, to allow the circuit to continue. In the first case the capitalist will be speculating, either anticipating that profitability may be increased by delaying the circuit, or hoping to create or exploit a monopoly position by doing so; alternatively, the capitalist may be pessimistic about the possibility of realisation of the surplus value that may be produced. In the second case, the capitalist is subject to forces beyond immediate control.

There is unlikely to be a break of the circuit in the sphere of production, unless labour takes industrial action or there are major natural or technical disruptions (including rapid technological change in unfavourable financial circumstances). Instead, almost all crises appear to originate in the sphere of circulation, as an inability or unwillingness to buy, sell or invest. Consider the moment $M - C < \frac{MP}{LP}$ in the industrial circuit of capital (Chapter 4). A voluntary break here implies that C is available for sale, but the owner of M might anticipate a lower price for the inputs or hope to create such a lower price. In particular, for LP , this may be done by reducing (or threatening to reduce) the level of employment as part of a strategy to increase the rate of surplus value.

The break in the circuit may also be involuntary. The owners of inputs may attempt to create or exploit a monopoly position – in particular, labour may strike. Alternatively, inputs may not be available because, in the previous round of production, outputs – partly present inputs – may have been produced in the wrong proportions. This will create excess demand for particular commodities and, normally, an excess supply in other sectors. If this becomes generalised across many producers and sectors, the situation is termed a crisis of disproportionality. These remarks need to be modified if the commodity in short supply is labour power, in which case there will be an excess demand for labour, but also an excess supply of (unused) money capital.

A break in the sphere of circulation may also appear between *C'* and *M'*. A capitalist may speculate about the future price of commodity capital, creating a voluntary break. Alternatively, it may be impossible to sell produce, meaning that the commodity is in excess supply. This could be because of disproportionality or because those who normally buy the commodity may be unable to do so because they do not have money to hand, access to credit or profitable prospects. For example, if other circuits have been broken, for whatever reason, workers, capitalists and others will not receive their regular flow of income and hence will not make their usual expenditures. If this becomes generalised, it is known as a crisis of overproduction (or, from another point of view, of underconsumption). Marx put the whole matter neatly when he suggested that commodities are in love with money, but the course of true love never did run smooth.

Marxists have usually looked at crises of overproduction/underconsumption and disproportionality by dividing the economy into two sectors, investment and consumption, following Marx's scheme for expanded reproduction (see Chapter 5). Some have argued that there is a persistent tendency for the supply of consumption goods to outstrip the demand for them, others that there is a tendency for a disproportionately large production of

investment goods. Both are logically possible, but disproportions (overproduction in one sector, underproduction in another) are just as likely to occur within the consumption and investment goods sectors as between the two as aggregates. Moreover, it is easy to confuse a crisis of disproportionality in which consumption goods are in excess supply with a crisis of overproduction. The latter will be characterised by a general excess in supply of commodities (a 'glut') and the previous development of excess productive capacity. A crisis of disproportionality does not presuppose this generalised excess supply, but merely localised gluts in several influential economic sectors which may, eventually, trigger a crisis of over-production.

Breaks in individual circuits of capital will occur often given the anarchy of capitalist production, fluctuations in market prices, disruptions in international trade, the vagaries of the credit system, financial or other types of speculation, monopolisation, and the economic obsolescence of fixed capital as a result of technological progress. Occasionally these will be sufficiently important to generate a crisis, its extent depending upon the patterns of disruption and, subsequently, on adjustment in economic reproduction. However, this description of the possibilities of crisis is limited, because it leaves implicit the motive of capitalist production: profit. The determining influence in production from the capitalist's standpoint is the amount of profit thrown off by the circuit of capital. All obstacles may be overcome if s is large enough. Should profitability be improving, capitalists will be reluctant to suspend sales in order to speculate on higher and later profit, deny wage increases, or in any way hinder the process of profit making. This is so much so that the financial system will often prolong a speculative boom long after profitability has started to show signs of weakness in anything other than paper terms (see Chapter 14). Profits can pay and pave the way. Should the ability to capture profits be constrained, then not only will some capitalists be expelled from production by bankruptcy, but

general pessimism will reign, production will be curtailed and a systemic crisis will be in prospect.

Movements in profitability depend not only on the conditions of sale, but also on movements in values. As has been seen in Chapter 3, the process of competitive accumulation brings frequent reductions in the values of all commodities. It is a contradictory feature of capitalism that individual profit is pursued by reducing values through relative expulsion of living labour from production, even though labour is the only source of surplus value and, therefore, of profit. Marx analyses this contradiction in the context of the LTRPF (see Chapter 9).

Theories of crisis focusing on overproduction, underconsumption, disproportionalities and the falling rate of profit have given rise to an extensive literature; however, in isolation these approaches are limited. Rather than being presented as competing Marxian crisis theories in their own right, they can more usefully be analysed as component parts of Marx's analysis of systemic fragility and economic crises in capitalism.

Intra-sectoral competition (see Chapter 6) creates a tendency toward uneven (disproportional) development between sectors, and a tendency to overproduction within each sector. In certain circumstances, possibly associated with a decline in the profit rate, these processes may trigger a general crisis. However, more important than these associations is the fundamental cause of crisis. For Marx, capitalist crises are ultimately due to the contradiction between the capitalist tendency to develop without limit the productive forces (and expand the surplus value that must be realised) and the limited social capacity to consume the product. Economic stability under these circumstances requires that an increasing part of the product must be purchased by capitalists for investment purposes or luxury consumption, which is not always possible. Capitalism therefore always tends to be unstable and prone to crisis. The crisis explodes when production has developed beyond the possibility of profitable realisation. This can

occur for various reasons, and what matters for the explanation of specific crises is how their underlying cause – the subordination of the production of use values to the production of surplus value – manifests itself through disproportionality, overproduction, underconsumption or the falling rate of profit.

Accumulation, Crisis and the Development of the Proletariat

In the simplest possible scenario, suppose that, as capital accumulates, the ratio between constant and variable capital advanced (c/v) remains unchanged; therefore, the employment of labour must also increase. It would be unrealistic to expect that the labour supply could increase indefinitely without a rise in wages. However, if the wage rate increases faster than labour productivity in the wage goods sector there will be a squeeze on profitability and, consequently, a reduction in the rate of accumulation (in the limit, there will be no accumulation of capital when wages rise so much that the production of any surplus value at all is threatened). Yet as accumulation slackens so does the demand for labour, and the upward pressure on the wage rate is reduced as the power of labour diminishes with unemployment. Profitability is restored, and with it accumulation, and the cycle repeats itself (this argument has to be qualified if the ratio c/v changes; see Chapter 8).

This is how Marx described the decennial business cycles of the early nineteenth century. He also linked them to the synchronised renewal of fixed capital and the volatility of commercial credit. Significantly, and in contrast to classical political economists, Marx explained fluctuations in employment, wages and profitability by fluctuations in the rate of accumulation, rather than vice versa. He considered absurd the Malthusian doctrine of alternating decimation and stimulation of the size of the proletariat by sexual reproduction in response to wages falling below and then rising above some physiological subsistence level. This could

hardly explain ten-year cycles. Marx was also heavily critical of the classical economists' fascination with the idea of decreasing returns in agriculture (see Chapter 13). In contrast, he stressed the driving force, under capitalism, of the increasing productivity of manufacturing industry.

Described in these aggregate terms, economic activity appears to fluctuate smoothly, driven by changes in the rate of accumulation. Nothing could be further from the truth. The overall picture may conceal enormous variations between sectors and geographical regions within the economy. Moreover, it has already been shown that capital has a persistent tendency to increase productivity and expel living labour from production.

Marx argues that, under capitalism, technical change would not only save living labour absolutely, but also relative to other means of production. This is achieved primarily by the economies of scale due to factories and the use of new machinery. Thus, the amount of machinery per worker will tend to grow over time, increasing the technical composition of capital (see Chapter 8) and speeding up production. Each worker turns over a given mass of raw materials in a shorter time, reducing the amount of labour socially necessary to produce each commodity.

The expulsion of living labour from production may be accompanied by an overall expansion in employment, because of growth of total output. But competitive accumulation proceeds in an uncoordinated fashion. Across sectors and regions, outputs and employment will not expand in balance. With the technological changes there will now be a shortage, now an excess of labour and means of production available. However, the expulsion of living labour from *all* production processes will tend to produce rising unemployment (tempered, as explained above, by economic expansion and the opening of new sectors and avenues for accumulation). Marx called this the *industrial reserve army*, or *surplus population* – note that the surplus is created and maintained over time by capital accumulation, rather than through

the biological reproduction of the workers, as had been suggested by Malthus. This surplus includes a layer of the permanently unemployed, condemned to pauperisation by the combination of the rhythm and characteristics of accumulation and their own perceived unsuitability for capitalist employment, whether because of age, gender, background, past experience (or lack thereof), disability, or for whatever reason. The greater the reserve army is relative to employment, the greater is the competition for employment and the lower will be wages. Similarly, the greater the reserve army and its layer of permanently unemployed, the greater the extension of poverty and misery. Marx singled out this feature of capitalism as the *general law of capitalist accumulation*.

So far, we have analysed the demands that capital accumulation places on the proletariat – a constant disruption of individual and social life. Particular changes may be forced by political, economic, ideological and legal coercion, or induced through the market by changes in wages and skill requirements. Both the particular method chosen and the outcome will depend upon the strength of organisation behind the two classes. In addition the strength of the capitalist class increases as accumulation is accompanied by greater centralisation and, simultaneously, by the greater strength, organisation and coercive power of the state. Marx argues that, at the same time as capital is centralised, so are masses of workers concentrated together in production. Such economic organisation tends to encourage political organisation and awareness and the struggle for economic and social change. As accumulation progresses, so the strength, organisation and discipline of the proletariat can grow with the development of its material conditions.

Capitalism fulfils the positive role of developing society's productive potential, turns the principles of economic efficiency into universally held values, and creates the material conditions for communism. At the same time, capitalism is the most *destructive* mode of production in history. Capitalist economies

are chronically unstable because of the conflicting forces of extraction, realisation and accumulation of surplus value under competitive conditions. This instability is structural, and even the best economic policies cannot avoid it completely. It was shown in Chapter 6 that competition forces every capital to find ways to increase labour productivity. This generally involves technical changes that increase the degree of mechanisation, the integration between labour processes within and across firms, and the potential scale of production. But these processes are always uneven and wasteful. They are associated with large fixed capital investment, speculation, labour-market shifts, deskilling, structural unemployment, bankruptcy, crisis, and the failure to meet the basic needs of all despite the availability of the means to satisfy them.

Accumulation also contributes to the development of the agent of capital's destruction, the organised workers, and provides the rationale for that destruction: the socialisation of production to be accomplished by a co-ordinated and radically democratic planning process harnessing society's productive potential. The proletariat accomplishes its historical role, the expropriation of the class of capitalists, when they overcome the institutions enforcing capitalist discipline within production and in society at large, and create alternatives permitting the abolition of economic exploitation.

This does not necessarily occur during an economic crisis. For while crises are associated with reduced profits, high unemployment and downward pressures on wages, a recession is also a time when the working class tends to be weakened. In addition, changes within a mode of production, let alone the transition from one to another, cannot simply be read off from economic conditions alone, because they are dependent on political and ideological conditions. These, together with the labour movement's economic position, tend to be at their strongest when conditions are prosperous. So the relationship between economic analysis and revolution is not

only complex, but is dependent upon other influences as well (this is explored further in Chapter 15).

Issues and Further Reading

The literature on crisis theory is extensive, diverse and bitterly contested. One division is between those who hold to a theory of falling profitability (and there are differences between them over how and why) and those who do not. Other differences in the literature reflect relative emphasis on production, distribution, exchange, finance and the balance of power between capital and labour and within the capitalist class. Increasingly, the (economic) role of the state has been seen as a source of, or response to, crisis, although in deference to 'globalisation' this now has less prominence. This may change once more in the wake of the current crisis.

Marx himself never discusses his theory of crisis systematically; see, however, Marx (1969, ch.17, 1972, ch.20). The interpretation in this chapter is based on Ben Fine and Laurence Harris (1979, ch.5). For overviews of Marx's theory of crisis, see Simon Clarke (1994, 2012), Duncan Foley (1986, ch.9), David Harvey (1999, ch.13), Michael Heinrich (2013), Michael Howard and John King (1990), Michael Perelman (1987), Anwar Shaikh (1978), John Weeks (2010, chs 5, 8) and *Research in Political Economy* (vol.18, 2000). Underconsumptionist theories are critically reviewed by Michael Bleaney (1976) and John Weeks (1982b). A revival of the debate on crisis has been sparked by Robert Brenner (1998, 2002). For a taste of the ensuing literature, see *Historical Materialism* (vols 4–5, 1999) and Ben Fine, Costas Lapavitsas and Dimitris Milonakis (1999). See also references in Chapter 14 for the recent renewal of the debate.

8

The Compositions of Capital

This chapter explains Marx's concepts of technical, organic and value compositions of capital, as a prelude to the study of the law of the tendency of the rate of profit to fall (LTRPF) and the transformation problem, in Chapters 9 and 10, respectively. This prelude is important for two reasons. First, although the compositions of capital are essential for understanding the relationship between values and prices, technical change, economic crises, and other structures and processes in the capitalist economy, they have been generally explained cursorily and understood only superficially (and often incorrectly) in the literature. Second, the LTRPF is traditionally seen as having only a passing relationship with the transformation problem. This is wrong, for they are closely related to one another through the compositions of capital.

The Technical Composition of Capital

In Volume 1 of *Capital*, Marx examines the capitalist method of production, i.e. the systematic way in which capitalism transforms the labour process through the factory system and appropriates the other conditions of production, for example, the natural resources (see Chapters 6 and 15). In this volume, Marx also establishes the tendency for the productivity of labour to rise systematically under capitalism, which is captured by the concept of the technical composition of capital (TCC).

The TCC is the *physical ratio* between the material inputs used up and the living labour socially necessary to transform these

inputs into the output. Although Marx shows that the TCC tends to rise over time (this being the expression of the rising productivity of labour under capitalism), attempts to measure the TCC and its changes, or to contrast the technical composition of capitals in different sectors (agriculture and electricity generation, for example) face a severe problem: the TCC cannot be measured directly, because it is the ratio between a heterogeneous bundle of use values (the material inputs) and the average quantities of labour spent in each firm or sector. In other words, the TCC can be measured by a single index only in so far as a mass of heterogeneous raw materials and living labour are reduced to a common denominator.

For mainstream theory, the measurement of the TCC is what is termed an 'index number problem'. In contrast, in Marx's theory, commodity values form the basis on which the TCC can be measured. This is not simply the choice of one index rather than another. It reflects Marx's proposition that value is a legitimate category of analysis for a capitalist society. In this society, as was shown in Chapter 2, different labours are regularly and necessarily brought into equivalence with each other in production and in exchange, establishing the dominance of value relations within capitalism. Value measurements of the TCC are legitimate (rather than simply 'convenient', with the drawbacks associated with any index number) because they express the underlying realities of production, as well as the systematic changes in the conditions of production under capitalism, in terms of the social and value relations in which they are embodied.

The Organic and Value Compositions

In addition to the technical composition, Marx distinguishes between the *organic* and *value* compositions of capital (OCC and VCC). The OCC and VCC have rarely been distinguished in the subsequent literature, and they have often been used inter-

changeably. For both, the algebraic definition has generally been denoted by c/v (constant capital divided by variable capital). However, this raises the question: what values are being used to reduce the heterogeneous bundle of raw materials, in the case of c , and of living labour, in the case of v , to single-value dimensions? This is a pertinent problem in this context, since Marx's use of the composition of capital is concerned with accumulation and, therefore, with the systematic reduction in commodity values through technical change (see Chapter 3).

Before dealing with this problem in the dynamic context of accumulation, it is useful for expositional purposes to distinguish the VCC and the OCC in a static context. Consider, for example, the production of jewellery. Suppose that exactly the same labour process and the same machines and technology are used to produce both silver and gold rings. In this case, both production processes will have the same TCC, since this measures the quantity of raw materials relative to living labour. But the production of gold rings will involve a higher VCC since it uses raw materials of a higher value (gold as opposed to silver). To reflect the lack of difference in the production processes from the technical point of view, Marx defines the OCC as *equal* for the two production processes. It follows that the OCC measures the TCC in value terms, but *leaving aside* the differences created by the greater or lesser value of the raw materials employed.

This creates some difficulty in measuring the OCC, since the appropriate values at which to define the ratio of c to v are not specified. Should we, for example, use the value of gold, the value of silver or something in between? This measurement problem is created by the attempt to make the distinction in a static context, in which the TCC and the VCC alone would suffice. It is only when production processes are changing that the distinction between the OCC and the VCC can help to illuminate the equivalence or otherwise between (changes in the) production processes from the organic point of view.

Consider now a dynamic example, involving the steel industry. Suppose that, because of technical improvements in production, the value of steel falls, with all else constant. When a widely used input like steel becomes cheaper, the VCC in every sector of the economy changes according to the relative content of steel in its constant capital and in the value of labour power. In a simple case, with a homogeneous labour force, the VCCs will vary according to the relative use of steel. In spite of these VCC changes, the OCCs in the non-steel sectors will remain *unchanged*, because – in the first instance – there has been no change in their TCCs. In contrast, the OCC of the steel industry has increased (together with its TCC) because of the original technological improvement. This example shows that the OCC measures *changes in production in value terms*, and that the OCC can measure something distinct from the VCC (and, therefore, becomes relevant in practice) only when the TCC changes.

The two examples given above serve to explain the difference between the VCC and the OCC. The matter is different once we begin to consider continually changing conditions of production across the economy. Marx argues that, at its developed stage, capitalism involves accumulation through the production of relative surplus value, with machinery systematically displacing living labour. This results in a tendency towards a rising TCC across the economy. In this case, the TCC can be measured in value terms in two different ways.

On the one hand, from the point of view of changes in production alone, the TCC is measured by the OCC. Raw materials and labour power enter the production process with given values, leading to a definite ratio of constant to variable capital according to the extent to which labour is coerced to transform inputs into outputs. If we were to put it chronologically, the OCC measures the TCC at the 'old' values prevailing prior to the technical changes and the renewal of the production process. On the other hand, whenever there is technical progress somewhere in the economy there is a

change (reduction) in the values of commodities. The VCC is measured after this stage, taking into account the TCC from the point of view of the change both in the OCC and in the values of commodities as they are realised in exchange. In chronological terms, the VCC is measured at the ‘new’ rather than the ‘old’ values. In sum, the VCC captures the contradictory implications of the rising TCC *as well as* the falling commodity values due to technological progress. Therefore, the VCC tends to rise more slowly than the TCC and the OCC.

The description of the difference between the VCC and the OCC in terms of new and old values is conceptual rather than chronological: at any moment in time some capitals will be entering the production process as others will be leaving it, while technical change is ubiquitous. What the distinction does is to draw upon, and build in a more complex context, the separation between the spheres of production and exchange (see Chapter 4). In production, the two classes of capitalists and workers confront each other over the process of production and, as accumulation proceeds, there is a tendency for the TCC to rise. In exchange, capitalists confront each other as competitors in the process of buying and selling and, as accumulation proceeds, there is a tendency for values to be reduced and for the VCC to decline. It is shown in the next chapter that the interaction of these processes is the primary concern of Marx’s LTRPF. In Chapter 10, the relationship between values and prices in Marx is explained through the role of the OCC in his analysis.

Issues and Further Reading

As mentioned, the literature has been careless over its treatment of the compositions of capital. Generally, in the context of the LTRPF, most attention has been focused, at least in terminology, upon the OCC, with scant regard for the TCC and VCC. Ironically, despite the terminological predominance of the OCC, the VCC

has been what has been meant in practice. This reflects disregard for Marx's own distinctions and misinterpretation of his work and intent, collapsing how the organic and value compositions are distinctly formed (in production and exchange, respectively) into a single process.

Not surprisingly, the literature specifically on the compositions of capital is scant. Marx explains his concepts in Marx (1969, ch.12, 1972, ch.23, 1981a, ch.8). The interpretation in this chapter draws upon Ben Fine (1990a) and Ben Fine and Laurence Harris (1979, ch.4). This interpretation is reviewed and developed in the light of the existing literature by Alfredo Saad-Filho (1993, 2001, 2002, ch.6). For a spirited critique of our position, see Moseley (2015, ch.11).

9

The Falling Rate of Profit

Marx's theory of the law of the tendency of the rate of profit to fall (LTRPF) has been extremely controversial in terms of its validity, interpretation and significance. This chapter outlines Marx's law and answers some of the criticisms that have been levelled against it. Two misguided interpretations of the LTRPF are often found in the literature. On the one hand, Marx's contribution is removed to the realm of high philosophy, with the LTRPF taking on the character of an abstract truth, something derived from the logic of capital itself and therefore irrefutable, but also lacking any empirical significance. On the other hand, Marx's analysis has been treated as if it amounted to a set of empirical propositions that are correct, incorrect or somewhere in between, depending on the analyst's inclinations and the implications of the chosen model of the economy.

The position adopted here differs from both of these, admittedly parodied, extremes. However, the argument is a complex one, depending upon conceptual rather than algebraic considerations. As a result, the structure of the analysis is summarised first, and this is followed by a more detailed account containing elaboration and justification.

Summary of the Argument

Marx's LTRPF is based upon the conceptual distinction between the organic and value compositions of capital (OCC and VCC), with the literature rarely distinguishing between the two and

generally using the term OCC when referring to the VCC (see Chapter 8). We have shown that the OCC measures the results of accumulation by exclusive reference to the sphere of *production*, i.e. (surplus) value creation, whilst the VCC measures and reflects the process of accumulation in the sphere of *exchange*, i.e. (surplus) value realisation, which centres on, but should not be confined to, the problem of sale.

The OCC tends to rise over time because of the adoption of specifically capitalist methods of production, especially the use of machinery, in the context of competition within sectors and the systematic attempt to extract relative surplus value. This tendency of the OCC to increase is the source of the law as such, whilst the formation of the VCC is associated with the counteracting tendencies (CTs) to the LTRPF. The interaction between the law and the CTs is an essential aspect of the process of accumulation. This interaction forms more complex economic phenomena, but only for that stage of development of capitalism for which machine production is predominant. This implies that the LTRPF is not an empirical law in the narrowly predictive sense – it is, rather, an *abstract law*. It does not give prospective (quantitative) indications about movements in the rate of profit, but it provides the basis on which more complex economic phenomena can be studied (see Chapter 1).

This presentation of Marx's LTRPF is in stark contrast with the understanding and criticism of it associated with the Japanese economist Nobuo Okishio, which has been taken up by the Sraffian school of economics as well as by some Marxists. Because this approach is limited to what is termed comparative statics (that is comparison of equilibria before and after technical change), it treats the accumulation process as one that necessarily engenders the harmonious integration between production and circulation rather than analysing their contradictory dynamics. Consequently, Okishio's analysis can be characterised as the dialectical opposite of Marx's.

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The Law as Such and the Counteracting Tendencies

Marx's treatment of the LTRPF occupies three chapters in the third part of Volume 3 of *Capital*. The first of these is entitled 'The Law as Such', and it contains what appears to be a simple algebraic demonstration of falling profitability in capitalism. Since the rate of profit may, in value terms, be written as $r = s / (c + v) = e / (\text{OCC} + 1)$, where e is the rate of surplus value (s/v) and the OCC is c/v , a fall in r is the direct consequence of a rising OCC, provided there is no rise in e .

This mechanistic interpretation is incorrect, however, and the LTRPF cannot predict empirical movements in the rate of profit for two reasons. First, Marxian laws are not the theoretical expression of empirical regularities. Here, an analogy with the law of gravity might help: this physical law is based upon the idea that bodies mutually attract one another, as in Newton's apple falling to the earth. But, empirically, the law of gravity can also *explain* outcomes that appear to contradict it – planets have stable elliptical orbits around the sun, aeroplanes fly and buildings remain upright. Similarly, Marxian laws express the key material forces constituted by capitalist social relations, what Marx calls *tendencies*. This is why the LTRPF is seemingly oddly named 'law of the tendency'. Although Marxian laws and tendencies arise from the social relations defining the mode of production, and they are therefore necessary (in other words, they are unavoidable in that type of society), they do not directly determine empirical outcomes. For example, the tendency towards mechanisation and (consequently) the rising OCC does not imply that the profit rate must drop continuously; conversely, fluctuations of the profit rate do not negate the LTRPF. By the same token, the tendency for profit rate equalisation across sectors as a result of profit maximisation and capital mobility does not imply that these rates will *actually* be equalised at a specific point in the future (it is only in the make-believe world of mainstream economics that this

tendency supports an actual equilibrium in which all profit rates are equalised).

For Marx, laws and tendencies have to be located analytically in the context of their sources and the (relatively more complex) ways in which these laws and tendencies manifest themselves. For example, tendencies always interact with counter-tendencies in the context of particular historical circumstances, leading to outcomes that are undetermined *ex ante* but, in principle, understandable *ex post* (see Chapter 1). In the case of competing capitals, for example, the tendency for their profit rates to be equalised has to be set against the competition between capitals in the same sector, which differentiates their rates of profit, whether this be through accumulation to increase productivity, the payment of lower wages, or whatever (see Chapter 6).

The second reason why the LTRPF does not permit empirical predictions is that any consideration of the organic (rather than value) composition of capital, as is the case in this law, is restricted to changes in production, without any reference to the reflection of those value changes in circulation. This explains why the constant value of e is not an arbitrary assumption, but, rather, an expression of the unchanging values of commodities (including labour power) during production.

Marx's second chapter, entitled 'Counteracting Factors', deals with the CTs. These fall into two categories. There are those that follow directly from the changes in values resulting from the rising OCC. If we write $r = s/(c + v)$, it follows that anything that reduces c or v , and anything that increases s , tends to increase r . The production of relative surplus value does all of these, because the increase in productivity reduces the value of c and v (whether directly in the wage goods sector or indirectly through its use of lower-valued raw materials), and raises s , through the decline in v (given the real wage). These value changes are synonymous with the formation of the VCC, highlighting the importance of this concept and its difference from the OCC.

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Marx also considers CTs of a less systematic variety. For example, he lists the super-exploitation of the workforce, especially the otherwise unemployed and the disorganised (producing absolute surplus value), the cheapening of raw materials and wage goods through foreign trade, and the formation of joint stock companies (which can take a more secure but lower rate of profit on their large-scale activities). This group of CTs does not follow of necessity from capital accumulation or the rising OCC, even though they are likely results of capitalist development. Marx appears to lump them together with the others without separating them analytically. This may be explained by the lack of final preparation of Volume 3 for publication. In addition, Marx's list of CTs follows closely that of J.S. Mill, suggesting that he had yet to rework this material. However, an important difference between Marx and Mill is that the latter's treatment of the law follows that of Ricardo, and is based upon the *declining productivity of agriculture*, rather than, as with Marx, the *increasing productivity in industry*.

Marx's treatment of the CTs also makes it appear as though he is dealing with immediate movements in r as a numerical counter-weight to the law as such. However, the CTs are necessarily located at a more complex level of analysis than the law, for, as we have seen, they involve the formation of the VCC, which incorporates changes in both production *and* exchange (whereas the law itself involves only changes in production and the formation of the OCC). Nevertheless, like the law, the CTs should not be seen as factors of empirical weight directly governing the rate of profit, but as embodying those processes of accumulation and restructuring that turn changes in the conditions of production into movements in exchange.

The Internal Contradictions of the Law

In the previous section we have interpreted both the LTRPF and the CTs as capturing relatively abstract processes and relations

rather than as predicting immediate movements in the rate of profit. This is the basis on which to examine Marx's third chapter on the LTRPF, aptly named 'Development of the Law's Internal Contradictions'. In this chapter, Marx examines the law and the CTs as a contradictory unity of underlying processes giving rise to more complex empirical phenomena. Even at this relatively concrete stage, Marx is more concerned with the antagonistic coexistence of the law and its CTs than with the prediction of movements in the rate of profit. This is because the law and the CTs cannot be added together algebraically to give a rise or fall in the rate of profit, according to which of the two happens to be the stronger, just as the effects of competition within and between sectors cannot be added up to suggest that profit rates will either diverge towards monopoly or, instead, equalise across all capitals in historical time (see Chapter 6). Rather, Marx is concerned with the contradictions between the production and circulation of (surplus) value as the process of value creation proceeds, on the basis of values that are constantly being disrupted by the accumulation of capital.

That the LTRPF concerns the interaction of abstract tendencies, rather than anticipating an unavoidable decline in the actual profit rates of capitalist firms or economies, is implicitly confirmed by Marx's analysis of the internal contradictions of the law. There is little or no discussion of movements in the rate of profit in the third part of Volume 3 of *Capital*, and a much greater concern with the ability of the economy to accumulate the mass of surplus value that it has been able to produce, and that it needs to do so in order to continue to expand. In other words, there is a greater focus on whether accumulation can be sustained than on whether it generates a higher or lower rate of profit. For example, if technical progress reduces the values of constant and variable capital, as it tends to do, this is indicative of the translation of changes in conditions of production into the sphere of exchange, which generates a tendency towards falling profit rates (to the

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extent that the value of labour power is sustained, and real wages increase in line with accumulation and productivity). In contrast, the formation of joint stock companies, the super-exploitation of the workers, and the opening up of foreign trade are conducive to a continuing accumulation, irrespective of the rate of profit at which they occur.

The Empirical Implications of the Law

The consideration of the LTRPF as an abstract law does not deny its empirical significance. Marx's main conclusion in this part of *Capital* is that the law and the CTs cannot exist side by side in harmony indefinitely, but must at times give rise to crises. This requires careful interpretation, for there is no axiomatic derivation of the necessity of crises, just as there is no axiomatic derivation of a falling rate of profit. Rather, Marx is pointing to the *immanent* possibility of crises, just as he had done in *Capital* Volume 2, as a result of the potential disjuncture between sale and purchase on the basis of unchanging values (see Chapter 7). This can be established, as in the Keynesian theory of ineffective demand, without reference to capitalism, other than as a system of supplies and demands co-ordinated by money. But in *Capital* Volume 1, Marx has established not only that accumulation is an imperative for capitalism, but also that it involves processes of economic and social restructuring that must have both simple and expanded economic reproduction, as established in Volume 2, at its heart. In other words, exchange is neither simply nor primarily a co-ordination of markets, but is the most overt expression of the contradictions of the accumulation of surplus value.

For the LTRPF, a potential source of disjuncture in the circulation of (surplus) value is the accommodation in exchange of both the relative expulsion of labour and the changing values due to the restructuring of capital. These processes are subject to incessant disruption because of technical change throughout the

economy. For example, the reduction in values as accumulation proceeds undermines the preservation of capital values, while the expulsion of labour disrupts the balances between supply and demand, the extraction of surplus value, and the reproduction of labour power.

These disturbances demonstrate that the LTRPF and the CTs have a direct connection with observable phenomena, even though they do not involve simple predictions of trends. Instead, they provide a framework for understanding the tensions and displacements due to capital accumulation, supporting the conclusion that the law and the CTs cannot coexist side by side in repose: capitals are devalued even as they are preserved and expanded. These contradictions give rise to crises, booms and cycles of production and exchange. Moreover, the development of the immanent possibility of crisis points to the *likelihood* of crisis when these processes can no longer be accommodated, especially (but not exclusively) because of disproportions, misguided investment and speculative bubbles. These crises, and the resulting unemployment, concentration and centralisation of capital, and so on, are the 'predictions' following from Marx's analysis of the LTRPF. Corresponding cycles are associated with observable movements in the rate of profit. These movements are not arbitrary, but are based on the abstract tendencies and their contradictions.

This analysis leads to further empirical implications of the LTRPF, for it suggests that crises that owe their origins to developments in the sphere of production will, nevertheless, break in the sphere of circulation, and may do so in surprising ways, depending on the relative strengths and fragilities of the participants in the circulation of capital as a whole. This is one reason why the LTRPF is liable to lead empirically to actual falls in the rate of profit: as the accumulation process falters, the mass of profit realised is set against an unchanging mass of fixed capital, and profitability tends to decline. But this need not be so. If, for example, as a result of economic stagnation or bankruptcies

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large masses of capital are depreciated or bought up by surviving capitalists at rock-bottom prices, the rate of profit may rise, a factor which often plays an important role in economic recovery.

LTRPF and Crisis Theory

The previous point illustrates that the falling rate of profit has been something of a fetish in the literature. Often, the focus has been on whether or not theory can produce a fall in the rate of profit, by whatever mechanism, whether this be a rising OCC, VCC or wages (at the expense of profits). Once the rate of profit falls, it is presumed that the economy collapses into crisis because of deficient investment, in turn leading to deficient demand for potential output, as in Keynesian theory. In this perspective, there is a complete separation between the theory that yields the fall in profitability and the results of that fall, i.e. between the cause and the course of the crisis (and, at a further remove, the recovery mechanism – which, in Keynes's analysis, depends upon a *deus ex machina*, state deficit spending, and its impact upon capitalist expectations). However, it cannot be presumed that a fall in profitability automatically results in a crisis. There may be a reduced incentive and capacity to accumulate; but some reward is better than none. Continuing accumulation may be necessary to preserve existing (fixed) capital and repay existing debts; and, most importantly, falling profitability is a powerful competitive force. Consequently, as capitalists attempt to restore profitability, they may even accumulate faster than previously!

For Marx, falls in the rate of profit can trigger economic crises (for example, industrial bankruptcies can lead to bank failures and a credit crunch), but this offers more a description than a penetrating analysis of the ultimate cause and course of crises. More importantly, it does not demonstrate the organic relationship between the crisis and capital accumulation, except trivially, by implying that an uncoordinated market economy

is unable to achieve long-term balanced growth. In contrast, if the LTRPF is understood as the combination of contradictory tendencies operating across production and exchange, crises can be analysed on the basis of the fundamental features of the process of *accumulation of capital*.

This requires an analysis of value production and its expression in exchange in a much wider context than that presented in the opening chapters of Volume 1 of *Capital*. There, value is understood as a social relation expressing the equivalence between different types of labour, through the category of abstract labour. In every capitalist economy, there will be different skills and types of labour. Within each sector, there will also be competing firms with different levels of productivity. The profit imperative, capitalist control over the labour process, competition within and between sectors, and commodity equivalence in exchange reduce these labours to the common denominator of value (see Chapters 2 and 3). With accumulation and the competition to reduce commodity values, socially necessary labour time (SNLT) in each sector becomes the centre around which individual labour and accumulation processes revolve.

Recognition of the interaction between the law and the CTs raises difficult problems for value theory, which can be resolved only through an increasingly complex and concrete understanding of value. For example, since accumulation leads to continual reduction in SNLT, the concept of value appears to be at risk, for its quantification is upset as soon as it is established. The only way to address this difficulty is through the recognition that the equivalence between different types of labour is extended to labours of different productivity. We have already illustrated two instances of this process. First, inputs manufactured at different points in time, and with different technologies, are transformed by living labour into new output which, in turn, is often consumed productively as an input in another production process. Consequently, the material equivalence between different types of

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labour and between labours of different productivity is generally established in *production* rather than exchange. Second, the OCC is determined on the basis of equivalence grounded on previously established values, whereas the VCC is formed through the emergence of new values determined by the changing production conditions associated with the rising OCC.

This is as much as one can say about the dynamics of the general profit rate at this level of analysis, and no further progress can be made without specifying the nature of the interaction between the law and the CTs. This can be done theoretically, through the analysis of the mechanisms by which value relations are expressed in exchange, or empirically, by specifying the conditions in which accumulation takes place historically. Two important factors in both aspects of the analysis of profitability are the role of finance and the role of fixed capital. In their own ways, both are hugely influential in, and directly affected by, the establishment of value equivalence in exchange as capitals seek to preserve and pass on changing values over an extended period, during which they are liable to be competitively confronted by cheaper substitutes and more productive competitors. These topics cannot be taken up here, but see Chapter 3 and further readings.

A Response to Okishio

The best-known criticism of Marx's theory of the LTRPF takes as its point of departure a theorem presented and reproduced in mathematical form by the Japanese economist Nobuo Okishio. Briefly and informally, Okishio argues that, given a wider availability of techniques of production, the rate of profit cannot fall unless real wages rise. In other words, a falling rate of profit is contingent upon rising wages, rather than being the result of contradictions internal to the process of capital accumulation, as Marx takes to be the case. In Okishio's analysis, capitalists will adopt new techniques of production only if these are more

profitable than the existing techniques, given the prevailing commodity prices and level of wages. Once these new techniques are generalised, this will result in a new (lower) set of prices and a new rate of profit, equalised across sectors. Prices will change not only in the sectors where there has been innovation, because these lower prices will be passed on to the sectors in which those commodities are used as inputs or as part of the wage. In this case, Okishio's question is the following: could the capitalists, acting blindly to increase individual profitability by introducing new techniques, paradoxically lead the system to a lower rate of profit? Unsurprisingly, he comes up with a negative answer, unless real wages increase essentially proportionately more than the productivity increase, and concludes that Marx's analysis of the LTRPF is incorrect.

Okishio's theorem is an exercise in comparative statics, i.e. it compares one position of economic equilibrium with another, even though comparative statics is inappropriate for the analysis of changes in the rate of profit as a source of crises. In other words, if we move from one position of (static) equilibrium to another, we cannot analyse crises independently of what happens to the rate of profit, since we are only comparing what we take to be one equilibrium with another. Nevertheless, Okishio reaches his conclusion on the assumptions, first, that the economy moves from one position of static equilibrium to another; and second, implicitly, that if the rate of profit falls (because of wage increases that are too large) we have a crisis, but otherwise we do not. Yet it is left unclear why a lower equilibrium profit rate would collapse into a crisis, especially as even a lower rate is preferable to an economic collapse.

This raises the much more interesting question of the movement between the two equilibria. By examining this process, it is apparent that, far from interpreting Marx's LTRPF, the approach associated with Okishio is its opposite. For, in Okishio's approach, an individual capitalist initially adopts a more advantageous

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technique of production through superior access to finance or technology and, at the initial prices, this capitalist obtains a higher profit rate. This approach contrasts sharply with Marx's analysis of the rising OCC. For Marx, as was shown above, the tendency for falling profitability is due to the evaluation of inputs and outputs at old values, which holds for *capital as a whole*.

Consider now, in the context of Okishio's theorem, the consequences of the generalisation of the new technique to all capitals in the sector, and the formation of new equilibrium prices and profit rate. It can be shown mathematically that the short-term profit rate of the innovating capitalist is greater than the new long-term 'equilibrium' rate (after the diffusion of the technical change) which, in turn, is greater than the 'original equilibrium' rate of profit (before the technical change). This implies that the capitalist who has acquired an advantage through technical innovation finds that this advantage is eroded as the innovation becomes generalised. That is, the reduction of prices through the introduction of the new technique eventually reduces the rate of profit of the innovating capitalist. Therefore, for Okishio, price formation out of technical change acts for the *individual* innovating capitalist as a pressure reducing the rate of profit towards the (new and higher than before) average. In contrast, for Marx, the process of price (and VCC) formation resulting from technical change is a counteracting tendency to the falling profitability for capital *as a whole*, since it leads to a reduction in the value of constant and variable capital.

Now put the two processes together, introducing new technology and generalising it across other producers to form new prices. For Okishio, these processes are immediate empirical equilibrium phenomena. They do not interact with one another to give more complex and concrete outcomes; instead, they are simply added together algebraically to show a rise in profitability for the economy as a whole from one equilibrium to the next. Moreover, the two disequilibrium processes cancel

each other out as processes of change and leave the system in harmonious equilibrium. Because of this, the Okishio approach cannot distinguish between the VCC and the OCC. Instead, it relies exclusively upon an equilibrium notion of the VCC which, nevertheless, is given the name organic composition. By contrast, for Marx, the law and the CTs are abstract tendencies whose interaction is not some algebraic sum, but a crisis-ridden path of accumulation which can be understood but not always anticipated.

Okishio's result is powerful only in the limited sense that the rate of profit *can* fall if wages rise sufficiently (by more than enough to outweigh the impact of productivity increases on profitability). However, the rate of profit can fall for other reasons unrelated to the movements in wages; for example, if the economy suffers an adverse external shock (a deterioration in terms of trade, say, due to higher import prices), a financial crisis (currently germane in light of stagnant wages in the last three decades or even longer) or any loss of business confidence. This suggests that we have to locate the impact of wages as (at most) a proximate influence on profitability as well as accumulation (recalling that Okishio-type analyses are entirely static). For wages, in Marx, are a *consequence* of the process of accumulation and not some sort of independent influence. Specifically, even though higher wages could precipitate a crisis, capital accumulation can also *prosper* with rising real wages, because they lead to higher levels of consumption and sales. In contrast, if real wages remain the same in spite of technical progress, there is a reduction in the value of labour power and an increase in the rate of surplus value. These are CTs for Marx. That they exist, as a result of accumulation, does not guarantee the absence of crisis. Whereas these outcomes are always possible in the context of Marx's analysis of the LTRPF and the CTs, they are precluded by Okishio's narrow interest in the profit–wage trade-off.

The current global financial meltdown demonstrates how falling profitability and crisis can result irrespective of, or even

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despite, stagnant real wages (see Chapter 14). So, Okishio's theorem at best can only be rescued by accepting that it does not apply in these circumstances. By contrast, Marx's LTRPF and CTs do apply, are different in method, scope and content, and are not invalidated by Okishio. For they target the contradictions (and the possibility of crisis) inherent in the accumulation and circulation of capital as a whole, for which rising real wages is but one part that needs to be appropriately located analytically, as opposed to being taken as an exogenous and independent factor.

Issues and Further Reading

Issues around the LTRPF have been covered in the text. Marx develops his analysis in Marx (1981a, pt.3). The exposition in this book draws upon Ben Fine (1982, ch.8 and, especially, 1992a) and Ben Fine and Laurence Harris (1979, ch.4). For similar interpretations, see Duncan Foley (1986, ch.8), Geert Reuten (1997), Roman Rosdolsky (1977, ch.26) and John Weeks (1982a). Nobuo Okishio's (1961) critique of Marx has attracted enormous attention – see, for example, *Research in Political Economy* (vol.18, 2000); but see also Okishio's (2000) acknowledgement of the limitations in his original paper (including proposed changes, which fail, however, to address the problems identified in this chapter). For a broader review of the LTRPF in Marx, see Reuten and Thomas (2011).

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The So-called Transformation Problem

In Volume 1 of *Capital*, Marx is concerned with the production of value and surplus value, and in Volume 2 with its circulation and exchange. A major part of Volume 3 deals with distributional relations as they arise out of the interaction of production with exchange. In his analysis, Marx focuses on the distribution across the economy of the surplus value produced by competing industrial capitals, including its appropriation, in part, by commercial and financial capital and the landowning class.

The starting point of Marx's analysis of distribution is his argument that capitals of equal size generally produce different quantities of surplus value, because each capital employs a different quantity of value-producing labour. In spite of this, all capitals tend to enjoy equal rates of return, otherwise they would shift to more profitable areas of the economy. Marx explains the distribution of capital and labour across the economy, and the distribution of the surplus value produced by industrial capital (in the absence of other forms of capital), through the *transformation* of values into prices of production. At an even more concrete level of analysis, commercial and financial capitalists, and the landowners, capture in exchange part of the surplus value produced by industrial capital. Marx explains these processes through his analysis of commercial profit, interest and rent (covered here, respectively, in Chapters 11, 12 and 13).

THE SO-CALLED TRANSFORMATION PROBLEM

From Values to Prices of Production

For the distribution of surplus value between industrial capitals in different sectors of the economy, Marx focuses initially on the tendency for the rate of profit to be equalised. The general rate of profit is $r = S / (C + V)$, where the value quantities S , C and V are aggregates of surplus value and constant and variable capital for the economy as a whole. Marx argues that each industrial capitalist would share in the total surplus value produced according to their share in capital advanced, rather than simply appropriating the surplus value that they had themselves produced: it is as if each capitalist receives a dividend on an equity share in the economy as a whole. As a result, the profit share of the i th capitalist, whose advance of constant and variable capital is $c_i + v_i$, would be represented by $r(c_i + v_i)$. For example, if the general profit rate is 50 per cent and the average capitalist, producing widgets, advances £100,000 (made up of variable and constant capital, including the depreciation of fixed capital), the firm's annual profits would tend to be £50,000.

Corresponding to this would be a *price of production* for the commodity concerned, formed out of cost plus profit:

$$P_i = c_i + v_i + r(c_i + v_i) = (c_i + v_i)(1 + r)$$

A simple example will illustrate this (see Table 10.1). Suppose there are only two capitals producing distinct goods, one of which uses $60c + 40v$ and the other $40c + 60v$, with the rate of surplus value being 100 per cent. (Here we follow Marx's notation in adding c , v or s after the quantities of value, 60 or 40, to indicate the value composition of the commodity.) In this case, the value of the output of the first capital will be $60c + 40v + 40s = 140$, and the value of the output of the second capital will be $40c + 60v + 60s = 160$.

This example raises a serious problem. For it implies that capitalists advancing equal sums of money but using distinct

Table 10.1 Marx's transformation*

Capitals ($M = c + v$)	Rate of surplus value ($e = s/v$)	Surplus value ($s = ev$)	Output value ($M = c + v + s$)	'Value' rate of profit ($r = s/(c + v)$)	Price ($p = (c + v)(1 + r)$)	Profit ($p = p - (c + v)$)	'Price' rate of profit ($r = p/(c + v)$)
$60c + 40v$	1	40	140	0.4	150	50	0.5
$40c + 60v$	1	60	160	0.6	150	50	0.5
$100c + 100v$	1 (or 100%)	100	300	0.5 (or 50%)	300	100	0.5 (or 50%)

(*): The last row indicates totals or averages, where appropriate.

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proportions of c and v would have *different* individual profit rates. In our example, the first capital reaps only $r_1 = 40/(60 + 40) = 40$ per cent, while the second capital enjoys a higher profit rate, $r_2 = 60/(40 + 60) = 60$ per cent. This is due to the difference in the composition of the advanced capitals, with a relatively higher proportion of variable capital leading to a higher profit rate. This should not be surprising. If only labour creates value (and, therefore, profit), while the means of production merely transfer their value to the output, the capital employing more labour produces more value and surplus value and, all else constant, has a higher profit rate.

Capitals earning different profit rates will not coexist for long, given the possibility of migration across sectors. In other words, since each capitalist contributes equally in capital advanced (100), each must share equally in profit distributed (50 each). This can only come about if the prices of production are each 150. This is despite the differences in the values produced in the two sectors – the equalisation of profit rates between capitals in different sectors requires the *transfer* of (surplus) value across sectors of the economy, which is effected by *differences* between prices of production and commodity values.

Since capitals in different sectors will generally use distinct proportions of labour, raw materials and machinery to produce commodities, Marx draws the conclusion that outputs do not exchange at their values, but at prices of production. These prices of production differ from values, as the composition of capital, c_i/v_i , is greater or less than the average for the economy as a whole. (Note that for the first capital in Table 10.1, $c/v = \frac{3}{2}$ and, for the second, $c/v = \frac{2}{3}$, compared with an average of 1 for the economy as a whole.)

Marx's Transformation and Its Critics

Marx's explanation of the relationship between values and prices has been one of the most controversial aspects of his value theory.

It has led some, even if otherwise sympathetic to Marxism, to reject the labour theory of value as irrelevant or even erroneous.

The reason for this reaction is that Marx's solution to the transformation problem is perceived to be incorrect, and that the consequences of this presumed 'error' are, supposedly, far-reaching. The crux of the critique is the following: Marx has shown that, when capitals compete across sectors (and migration of capital can occur from one sector to another), commodities no longer exchange at prices equal to their values. This leads *both* to the empirical objection that values are irrelevant, since they do not drive actual exchanges, and to the logical critique that, in Volume 3, Marx has continued to evaluate the inputs, c and v (and the 'value' rate of profit, used in the calculation of the prices of production), as if they were values, rather than prices. In other words, it is as if, for the critics, Marx presumes that commodities are purchased 'at values' (respectively, 140 and 160), but are sold 'at prices' (150 and 150) – which is inconsistent, since selling and buying prices must be the same.

For the problem of translating given values into prices of production in an economy in equilibrium, this would be a deficiency, but one of which Marx was fully aware and which can be corrected easily. It is merely a matter of transforming the inputs as well as the outputs simultaneously through a simple algebraic procedure. The implication of this 'correction' is straightforward: commodities have values as well as prices, and two distinct accounting systems (not necessarily equally significant, either in theory or in practice) are possible. One of these accounting systems expresses the socially necessary labour time required to produce each commodity, and the other the quantity of money which, in general, the commodity would fetch upon sale.

More significant than the algebraic 'solution' of the transformation 'problem' is the observation that Marx's labour theory of value cannot founder on such quantitative conundrums, as the search for a corrected algebraic solution seems to imply. Crucially,

Marx has shown that values exist as a consequence of the social relations between producers, and that price formation translates the conditions of production into exchange relations. Because they *exist* (rather than being merely a construct of the imagination), values cannot be challenged or rejected according to algebraic interpretations of Marx's theory. Rather, the *real* relationship between values and prices has to be recognised theoretically and explored analytically – for example, why do the dominant relations of production give rise to the value form, how do values appear as prices in practice and change over time, and how do tensions between values and prices contribute to economic crises?

In this light, it is significant that the literature on the transformation problem traditionally focuses on the implications of differences in the *value composition of capital* (VCC) across different sectors in the economy – as if c and v in Table 10.1 were quantities of *money*, with 140 and 160 being the ‘original’ prices of the unit of output, and 150 the unit prices ‘modified by competition’.

This is not the case for Marx. In Volume 3, Marx considers the transformation *entirely* in terms of the organic composition of capital (OCC) which, as was shown in Chapter 8, is only concerned with the effects of the differing rates at which raw materials are transformed into outputs (in contrast, the differing values of the inputs are captured by the VCC). As such, Marx is less concerned with how the inputs (c and v) originally obtained their prices, and more concerned with how differing OCCs, or differing rates of productivity across sectors, influence the formation of prices and profits.

Marx’s problem is the following. If a given amount of living labour in one sector (employed through the advance of variable capital v) works up a greater *quantity* of raw materials, represented by c (regardless of its cost) than in another sector, the commodities produced will command a higher price relative to value, as

previously discussed and numerically illustrated in Table 10.1. In other words, the use of a greater *quantity* of labour in production will create more value and more surplus value than a lesser quantity – regardless of the sector, the use value being produced, and the cost of the raw materials. This is a completely general proposition within value theory, and it underpins Marx's explanation of the existence of prices and profit. Marx's use of the OCC rather than the VCC in his transformation is significant because the OCC connects the rate of profit with the sphere of *production*, where living labour produces value and surplus value. In contrast, the VCC links the profit rate with the sphere of *exchange*, where commodities are traded and where the newly established values measure the rate of capital accumulation.

His emphasis on the OCC shows that Marx is primarily concerned with the effect on prices of the different (surplus-) value-creating capacity of the advanced capitals, or the impact on prices of the different *quantities* of labour necessary to transform the means of production into the output – regardless of the value of the means of production being used as raw materials. The use of the OCC in the analysis of profit creation and distribution is important, because it pins the source of surplus value and profit firmly down to *unpaid labour*. This helps Marx to substantiate his claims that machines do not create value, that surplus value and profit are not due to unequal exchange, and that industrial profit, interest and rent are shares of the surplus value produced by the productive wage workers.

In his transformation of values into prices of production, Marx is not dealing with equilibrium price theory (as in mainstream economics and in many conventional interpretations of the labour theory of value), but with the relationship between differences or changes in production and price formation. This acts in Volume 3 as a prelude to the treatment of the law of the tendency of the rate of profit to fall (LTRPF) (although the order of presentation

is reversed in this book). Finally, the transformation problem and the LTRPF have generally been considered as two separate problems (although an author's stance on each has often been read as a commitment for or against Marx's value theory more generally). However, in this chapter and the previous one, through the consistent use of the OCC as distinguished from the VCC, it has been found that the two problems are closely related to each other. They are both concerned with the tensions created by the integration of production with exchange and, especially, with the consequences of differences or changes in conditions of production for price formation in particular and movements in exchange more generally.

Issues and Further Reading

It is remarkable how, even among those sympathetic to Marx, the transformation of values into prices of production has floated free from other 'problems' in Marx's political economy to become a debate over (equilibrium) price formation. Not surprisingly, the literature on the transformation problem is vast. The original treatment is presented in Marx (1981a, pts 1–2). The interpretation of the transformation in this chapter was pioneered by Ben Fine (1983a), and it is explained and developed further by Alfredo Saad-Filho (1997b; 2002, ch.7). Several alternative approaches are available; for an overview, see Simon Mohun (1995) and Alfredo Saad-Filho (2002, ch.2). Sraffian analyses, rejecting value theory as irrelevant and/or erroneous, are concisely presented in Ian Steedman (1977) – for critiques, see the papers in Ben Fine (1986) and Bob Rowthorn (1980), as well as Anwar Shaikh (1981, 1982). Gérard Duménil (1980) and Duncan Foley (1982) have proposed a 'new interpretation' of the problem, focusing on the value of money as a means of resolving Marx's supposed conundrums. This is critically reviewed by Ben Fine, Costas Lapavitsas and

Alfredo Saad-Filho (2004) and Alfredo Saad-Filho (1996). More recent debates about the nature and definition of value, with direct implications for the transformation problem, can be found in the journals *Cambridge Journal of Economics*, *Capital & Class*, *Historical Materialism* and *Science & Society*. Again, Moseley (2015) offers his own original interpretation.

II

Merchant's Capital

This chapter and the next one outline Marx's theory of capital within the sphere of exchange. In earlier chapters, the focus has primarily been on the role of capital in producing surplus value, with exchange as a necessary but hardly explored complement. However, the analysis of profits, interest and crises requires close study of capitalist activity other than in production, but in close relationship with the earlier topics of study. This chapter explains the category of merchant's capital. Chapter 12 investigates interest-bearing capital.

Marx's Category of Merchant's Capital

One of the themes running through Marx's treatment of capital in exchange is that there is a crucial distinction to be made between *money as money* and *money as capital* (see Chapters 4 and 12). Money functions as money when it acts as a means of exchange between two agents, mediating commodity exchange irrespective of the position of those agents in the circulation of capital – whether they be capitalists engaging in production or capitalists and workers engaging in consumption. Hence, the role of money as money is understood by reference to simple commodity circulation, $C - M - C$. By contrast, money as capital is understood by reference to the circuit of capital, $M - C \dots P \dots C' - M'$, where money is employed for the specific purpose of producing surplus value.

There is a definite relation between the two functions of money in capitalism, since simple commodity circulation and industrial production are closely connected. For example, a worker sells labour power and buys a bicycle. This has the form of simple commodity circulation, $C - M - C$. Both phases of $C - M - C$, namely $C - M$ and $M - C$, are present if viewed from the standpoint of the worker. But from the standpoint of the capitalists, $C - M - C$ is the other way round, with first the sale of the bicycle, $C - M$, and then the purchase of labour power, $M - C$. What is $C - M$ for one agent is $M - C$ for another. Further, the use of money both as money and as capital can involve credit relations, as money is lent and borrowed to facilitate the acts of exchange. In his treatment of merchant's capital, Marx analyses in detail the operation of money as money.

Marx's treatment of merchant's capital is an abstract one. Although capitalist production and trade are closely intermingled, they are structurally distinct, and Marx identifies a tendency towards the separation of these activities in the economy. This real tendency must be captured in theory in order to comprehend the specific nature of merchant's capital, which is directed towards the carrying out of exchange alone.

Apart from distinguishing between industrial capital, which produces surplus value, and merchant's capital, which circulates it and facilitates the transition between the commodity and money forms of capital (indirectly increasing the mass of surplus value produced by industrial capital), Marx points out that merchant's capital itself tends to be divided into two forms: commercial capital (buying and selling of commodities) and money-dealing capital, or MDC (the handling of money).

With the development of production, the acts of buying and selling become the specialised tasks of particular capitalists (for example, transport, storage, wholesale and retailing). Industrial capitalists increasingly rely upon specialised merchant capitalists to undertake the realisation of (surplus) value. Furthermore,

certain functions arising from commodity production become the specialised activity of money dealers. These include bookkeeping, the calculation and safeguarding of a money reserve, and the roles of cashiers and accountants.

Marx adds that merchant's capital is subject to competitive mobility between itself and industrial capital (industrial capitalists can move into trading, as is currently shown by the ubiquity of direct sales on the internet, and vice versa, for example, when large retailers contract manufacturers to produce 'own brand' goods). Consequently, the rate of return on merchant's capital tends to become equal to the rate of profit on industrial capital, even though the former does not itself produce surplus value, which can only be created by productive labour engaged by industrial capital (see Chapter 3).

Modified Prices of Production

The intervention of merchant's capital modifies the formation of prices of production, since capital advanced in the buying and selling of commodities does not produce surplus value, but tends to share equally in the surplus value distributed as profits. From the point of view of the commercial capitalists, the labour power purchased by them seems to be productive, because it is bought with variable capital with the intention of valorising the capital advanced. However, what it creates is not surplus value, but merely the ability of the commercial capitalists to appropriate part of the surplus value produced by industrial capital. In other words, the merchant's costs (and profits on them) are not an addition to value, and commercial capital does not determine the price at which commodities are sold. Commercial profits are made up by merchants buying commodities *below* their prices of production, and selling them *at* their prices of production (see Chapter 10).

Suppose, initially, that trading is costless and that merchants simply advance money of an amount B to perform their functions. Using the usual notation, the total capital advanced is now $C + V + B$, and the general rate of profit is $r = S/(C + V + B)$. The industrialists sell commodities to merchants at prices below values, at an aggregate price $(C + V)(1 + r)$. In turn, the merchants add their profits to form the total selling price $(C + V)(1 + r) + Br = C + V + (C + V + B)r$. But $(C + V + B)r = S$, so that the total selling price equals $C + V + S$, which is the total value produced.

The situation is slightly more complex when the merchants incur costs other than the simple advance of money. These costs might include means of production used in the process of circulation (trucks, shops, and so on), and variable capital advanced as wages. Let these costs be K_m . Following the above procedure, industrialists sell to merchants below value, at $(C + V)(1 + r)$. The merchants earn the average profit rate on their money advances B , as before, and recover their costs K_m , together with profit on them. Since total value is equal to the total selling price, $C + V + S = (C + V)(1 + r) + Br + K_m(1 + r)$. This yields $r = (S - K_m)/(C + V + B + K_m)$. Not surprisingly, the commercial capital advanced, K_m , is reflected in the denominator; moreover, as an additional cost, it also appears in the numerator as a deduction from total surplus value.

Merchant's Capital at a More Complex Level

The theoretical distinction between industrial and merchant's capital is simple enough in principle, once we accept the distinction between the spheres of production and exchange in the circuits of industrial capital. But matters are not so simple in practice. For historically, and continuing to the present day, there are what might be termed 'hybrids' cutting across these distinctions. Some industrialists might undertake sales on their own account rather than

relying upon specialised merchants serving the trade as a whole. Some merchants might also play a hand in organising production, as in the putting-out system or, more recently, the way in which clothing retailers draw upon a host of more or less sweated labour. Are these industrial or merchant's capital, or neither, or both?

More generally, we often find that industrialists engage simultaneously in different types of production, commerce and financial management – for example, large automobile manufacturers offering consumer credit. These overflows across boundaries do not deny the analytical distinction between production and exchange. However, they indicate that classification problems often cannot be pre-emptively resolved in theory, but only through detailed empirical investigation. Allocation of specific units of capital to one or another of the categories identified above depends essentially on the extent to which it is normal for these activities to be undertaken independently within the spheres of production or exchange (thereby setting standards for 'hybrids', where capitals are not necessarily uniquely assigned to one sphere or the other). Also, as already hinted, since the division and allocation of industrial and merchant activity is subject to change, it is important to assess the dynamics of the relationship between the two and whether specific forms are transitional to more stable arrangements. This situation is common throughout the history of capitalism, as traders become producers, or take responsibility for production or, vice versa, as producers take on responsibility for their own sales efforts. Currently, this is particularly significant in light of the rise of subcontracting, franchising and, most importantly, the way in which credit and finance are involved across both production and sales.

Perhaps an analogy will help. Take the self-employed. What is their status? They do not appear to be exploited wage workers. But what if their earnings are equivalent to those of a skilled (or even unskilled) wage earner, and they work just as long hours,

and, possibly, for the same company, often without job security, pensions and other contractual rights? In this case, the self-employed are wage workers in disguise and are likely to be highly exploited, despite their apparent 'autonomy'. There might also be self-employed whose earnings exceed value produced (for example, top accountants and lawyers whose income and status are similar to those of managers or small capitalists).

This latter example indicates that classification problems and the presence of hybrid categories do not invalidate abstract analysis. Indeed, they make it even more essential, to avoid a descent into ever more refined description. However, in order to proceed further the limits to abstract analysis must also be acknowledged, and reference must be made to empirical realities. In this relationship, the abstract categories provide the basis on which increasingly complex empirical outcomes can be understood. Exactly the same principle applies to the distinctions between the spheres of production and exchange, and between industrial and merchant's capital. These points have been belaboured at some length here not to unravel the conundrums around merchant's capital, but primarily because they are significant for the more complex case of money and interest-bearing capital, examined in Chapters 12 and 14.

The relationship between abstract categories and their more complex, and often hybrid, empirical forms is of great relevance for the study of contemporary capitalism. Whether supermarkets deliver the goods they have sold – in which case transport is part of (unproductive) merchant's capital – or subcontract delivery to a logistics firm (productive capital operating within the sphere of exchange) might appear to be of marginal significance other than to those involved. But the unprecedented expansion of credit, and of financial services more generally, in the current period of capitalism has meant that private finance has become heavily involved in the provision of pensions and housing, health,

education and welfare. Such material developments require that basic abstract categories of analysis are clearly delineated and related to the evolving forms of capitalism (see Chapter 14).

Issues and Further Reading

Although the power of retailers is often highlighted, especially in analyses based on global value chains and production networks, the Marxist literature on merchant's capital remains limited, and controversy has centred on whether merchant activity is productive or not (see Chapter 3). Karl Marx's theory is developed in Marx (1981a, pt.4). The interpretation in this chapter draws upon Ben Fine (1988) and Ben Fine and Ellen Leopold (1993, especially ch.20); see also Duncan Foley (1986, ch.7). For some critical analysis of global value chains and of 'store wars', see Ben Fine (2013).

I 2

Banking Capital and the Theory of Interest

Marx's analysis of merchant's capital, explained in the previous chapter, is predicated upon the role of money as means of exchange, that is, *money as money* (even if it is employed in the circulation of commodities for profit). In contrast, Marx's theory of interest-bearing capital (IBC) is based on the role of *money as capital*. This theory concerns the borrowing and lending taking place between the money capitalists and industrial or merchant capitalists. For Marx, it is not the act of borrowing from a bank or the payment of interest that characterises IBC, but the use to which the loan is put. The loan must be used to embark on a circuit of industrial capital, that is, it must be advanced as money capital. Therefore, to be able to use IBC is to be able to be a capitalist rather than simply to be able to borrow.

As the subject of borrowing and lending in this relationship, money capital becomes a special type of commodity. It provides the use value of self-expansion for the lender and the borrower simultaneously, the former realising the interest and the latter the profit of enterprise that remains to industrial capital, after the payment of interest, from the surplus value produced through the use of the borrowed money capital. Marx emphasises that the price of this unique commodity (the interest rate) is 'irrational', since it is unrelated to the conditions of production. It depends entirely upon the competitive relations between borrowers and lenders. These issues are explored below.

Interest-bearing Capital

Two features distinguish IBC from industrial and merchant's capital. The first concerns the use of borrowing and lending (i.e. credit relations) specifically for the purpose of advancing money capital for the appropriation of surplus value. These credit relations involve the two most important fractions of the capitalist class: the money capitalists, who control the supply of IBC, and the industrial capitalists, who borrow IBC to use as capital in production and are responsible for the functioning of capital over the industrial circuit, supervising production and, often, sale. To this division of the capitalist class corresponds a division of the surplus value it extracts. As explained above, whereas the money capitalists receive interest, the industrial capitalists appropriate the profit of enterprise left over after the payment of interest (the determination of the rate of interest is discussed below).

Second, for its existence IBC draws upon the money capital accumulated through the sale of commodity capital, as well as the hoards of temporarily idle money of the industrial and commercial capitalists, workers, the state or anyone else. These hoards and savings are collected and centralised in the financial institutions, and transformed into potential money capital available to industrial capital. IBC therefore performs the ownership and control functions of money capital on behalf of capital as a whole. IBC is not, however, the juridical property of these institutions, and depositors are entitled to withdraw their funds (though different types of financial investment may incur temporary restrictions on the ability to make withdrawals). Banks normally extend credit over and above their levels of deposits, and such credit can be used to initiate fresh circuits of capital.

The differences between industrial capital and IBC are starkly illustrated by their respective circuits. It was shown in Chapter 4 that industrial capital is expressed by $M - C - M'$, for which money intervenes in the processes of production and exchange. In

contrast, IBC is represented by $M - M'$, where money stands apart from these processes.

It is a constant theme throughout the three volumes of *Capital* that access to IBC holds the key to rapid accumulation. Increase in the size of capital, often achieved through borrowing, is one of the most important means of competitive accumulation. For example, the process of centralisation can be financed by bank loans, as with mergers and acquisitions, and the size of capital plays a critical role in the pursuit of productivity increases through the introduction of more advanced machinery. It is through the detailed analysis of these relations and processes that Marx explains the structure of the financial system and its relationship with industrial capital.

Money Capital and the Financial System

Marx's distinction between industrial capital and IBC does not always translate neatly into empirical analysis, as exemplified in the previous chapter for the 'hybrids' attached to merchant's capital. This is so for two main reasons.

On the one hand, the functions of money as money can be undertaken by various financial instruments – a credit card, for example, can serve as means of payment, but it cannot settle all accounts once and for all. As a result, there exists a complex and overlapping cascade of monetary instruments serving across all functions and circumstances, with 'money proper' – whether the US dollar or something else that is as good as gold – at its pinnacle. By the same token, the activities associated with money-dealing capital (MDC), such as bookkeeping, the calculation and safeguarding of a money reserve, and the role of cashier, can be performed in various ways; for example, in-house (when firms hire specialised staff to speculate over risky assets or exchange-rate movements, or in futures and options markets), by specialist firms outside the banking system, or by financial institutions. In analytical terms, even if these activities are performed in-house

by industrial capital they are a function of merchant's capital and attract the normal rate of profit even though they do not produce surplus value (see Chapter 11).

Three analytical distinctions separate MDC from IBC. First, MDC advances credit in general (for example, consumer credit, including credit cards), whereas IBC advances money capital so the borrower can appropriate surplus value. Second, MDC draws on industrial profit (in the same way as commercial capital), whereas IBC induces the structural division of surplus value into interest and profit of enterprise. Third, the return on MDC tends to equal the general profit rate. In contrast, the rate of return on IBC does not involve this tendency, as it arises out of the division of surplus value between interest and profit of enterprise (see below). In spite of these differences, in contemporary society the functions of MDC (for example, issuing credit cards) are normally undertaken by the banking system, so the resources involved become part of IBC. Consequently, it can be difficult to classify firms and the resources they control as belonging to one or other of the categories of industrial, commercial, money-dealing or interest-bearing capital, and there is considerable scope for the existence of 'hybrids' in practice.

IBC can be party to various operations targeted at producing or appropriating surplus value, either independently or in association with industrial capital. The credit system extends the limits of the reproduction process and accelerates the development of the productive forces and the world market. The returns on these operations may vary according to the fortunes of specific investments as well as of the capitalist macroeconomy, as with shares, derivatives or venture capital; or these returns may be designated in advance. Whatever the form and conditions taken by these transactions, IBC attaches itself through them to the reproduction of capital as a whole, representing a claim on surplus value that has yet to be produced. This claim can be expressed through transactions involving payments yet to be made, or the

transformation of these claims into tradable assets in a number of ways, ranging from bully-boy debt collection to government bonds, futures contracts, collateralised debt obligations, and so on. In turn, these markets breed upon one another, with financial services being sold in connection to portfolios of assets, as in pension funds and investment trusts. Each of these is a paper claim to property that may or may not include productive capital that, in turn, may or may not generate or appropriate surplus value. This is what Marx terms 'fictitious capital': paper claims on surplus value that may or may not be realised, but which are not necessarily fraudulent.

In this light, it is hardly surprising that the financial sector should be capable of financing overproduction and generating speculative bubbles and spectacular crashes. Nor is it surprising that fraud is ever present. The distinction between finance and industry and the shifting balance between them are dramatically illustrated by the developments in world finance and national financial systems over the past 40 years. The bloated and heavily rewarded international financial system has benefited at the expense of real accumulation and, over the past decades, has been subject to severe instability and costly crises. In Volume 3 of *Capital*, Marx investigates the circumstances in which the accumulation of IBC and the assets and markets built upon it can be validated by the accumulation of real capital. He concludes that no answer can be given in advance, because there can be no guarantee of future production and appropriation of surplus value (see Chapter 7). For example, the owner of IBC might advance to an industrialist who is corrupt, incompetent or thwarted by domestic or foreign competition, or to a consumer who is, or becomes, unable to pay back, or who ultimately refuses to do so. In either case, the circuit of IBC can be interrupted, with potentially severe implications for the reproduction of both interest-bearing and industrial capital.

In conclusion, the relationship between industrial capital and IBC is based on an intermingling of circuits of capital without

predetermined outcomes in terms of real accumulation. For this basic reason, neither the functioning of the financial system nor its interaction with real accumulation can be subject to control in the mainstream sense of fixing the supply of money or tying it (or its cost) to the level of economic activity. In case of fictitious capital, for example, this might correspond to a real accumulation of capital, with successful investment underpinned. But it might equally reflect the securitisation of a stream of income unrelated to accumulations as such – as with mortgage payments, which then become subject to speculation through derivatives formed out of them (as is universally acknowledged to have occurred with US subprime).

This is not to suggest that private or public regulation of the financial system, including monetary policy, cannot have an effect on outcomes. But the idea that fictitious capital can be fully aligned with real accumulation through regulation is misguided, because fictitious capital has become increasingly necessary for real accumulation, but cannot guarantee it. By the same token, the nature and structure of the financial system and the modalities of its interaction with real accumulation cannot be determined by abstract analysis. Rather, they evolve together, establishing particular structures of financial and industrial activity, as well as specific outcomes during the course of crises.

Interest as an Economic Category

Drawing upon the analysis above, it is possible to identify the distinguishing features of Marx's theory of finance and interest. Marx divides the capital functioning *within* exchange into merchant (commercial) capital and interest-bearing capital. Merchant capital typically involves trading, such as retailing and wholesaling, and, apart from its location within the sphere of exchange, it is logically defined by its not producing (surplus) value, whilst being subject to competitive entry and exit just like

industrial capital. Consequently, merchant capital is subject to the tendency towards equalised profit rates. Merchant capital also involves a variety of non-trading credit and other monetary relations and functions, which, for convenience, we have called money-dealing capital, along with Marx. MDC is a general category defined by the necessity of monetary circulation for capitalist reproduction. The corresponding tasks of handling reserves, and so on, may be assigned to specialised capitalists or retained within individual firms.

In contrast, IBC involves the borrowing and lending of money capital either to produce surplus value, or to appropriate it through merchant capital. IBC potentially earns interest as a result, leading to a division of surplus value between such interest and profit of enterprise, with the latter distributed across competing industrial capitals and subject to rate of profit equalisation. The operation of IBC shows that the accumulation of capital is mediated by the differential access of competing capitalists to money capital.

The division between profit of enterprise and interest is not predetermined by the value system. Rather, it is the outcome of the accumulation process, both in terms of how much surplus value is realised (as the advance of money capital is a precondition but not a guarantee of profitability), and how it is divided amongst IBC, industrial and merchant capitalists. This division bears no exact relationship to the rate of interest. Nonetheless, differences between rates of interest in borrowing and lending, bank fees and other charges are significant mechanisms through which IBC appropriates part of the surplus value produced.

This does not mean that the division between interest and profit of enterprise is not subject to systematic forces and determinations. But the capacity to appropriate surplus value as interest derives from the role of IBC as the lever of competition in capital accumulation, where IBC is differentially situated in relation to industrial and merchant capital. For example, a bank may be willing to lend to an industrialist to compete with another in the

same sector, but is less likely to lend to support the growth of a rival financial institution. Of course, this does not mean there is no competition within the financial sector, or that inter-bank lending is absent, only that such competitive (and other) relations are of a different nature than for the rest of the economy. This is precisely why the interest attached to IBC is *not* competed away to nothing, or to the normal rate of profit on the use of finance's own capital advanced. Indeed, although an extreme example, consider a bank that borrows and lends money (on a margin) whilst using minimal capital of its own. Its rate of return on its own capital would be extremely high!

Crucial, then, to Marx's theory is the simple and abstract separation between IBC and other forms of capital and the appropriation of interest by IBC out of surplus value. But, in the accumulation and circulation of capital as a whole, the role of interest payments and money markets is much more complex and mixed-up in practice, with receipt of interest, dividends or other forms of revenue constituting the mechanisms by which either profit is equalised across some (industrial and commercial) capitals *or* surplus value is appropriated by IBC. This is further complicated by the extent to which IBC itself is embedded in other types of commercial activities in hybrid form, by analogy with hybrids across industrial and merchant capital.

Nor is this of purely academic interest. For the current era of financialisation is precisely one in which there has been a disproportionate expansion of capital in exchange, not only through the proliferation of financial derivatives, but also through the extension of finance into more and more areas of economic and social reproduction, of which personal finance is a leading example (along with mortgages, pensions and health care). These processes can be understood through the application of Marx's method and the categories outlined above, which suggest that there has been an increasing shift of capitalist activity along the productive, commercial, money-dealing and interest-bearing continuum,

as well as hybridity across these categories. In other words, an increasing range of activities has come under the auspices of IBC – not least housing finance, as was dramatically illustrated by the rise and collapse of sub-prime mortgages in the United States – not so much in the selling of mortgages to homeowners as the selling on of such mortgage payment obligations as financial derivatives (i.e. fictitious capital). But this is to anticipate our final chapter.

Marx's ability to construct a theory of interest as opposed to profit is a distinguishing feature of his analysis. In classical political economy, for example, interest is a category introduced with little if any explanation, and the rate of interest oscillates around an arbitrary 'natural' rate for which there are no determinants other than supply of and demand for money. Equally, within neoclassical economics, most notably in the Fisherian theory of inter-temporal consumption and production, the rates of interest and profit are conceptually identical, and quantitatively equal in equilibrium. Even in Keynesian economics (and for Keynes himself), where monetary factors are specifically introduced, the rate of profit – represented by the marginal efficiency of capital – is equal to the rate of interest. While short-term expectations may lead to a disequilibrium value of the rate of interest, underlying Keynesianism is the idea that there is a natural or equilibrium full-employment interest rate. This significant divergence from Marx's theory is intimately connected to the failure of Keynesian theory to differentiate between demand, and hence credit, for accumulation and for consumption, except for the impact of multipliers on effective demand.

In contrast, Marx not only categorises interest distinctively, he also locates it within the analytical structure of his economic thought, deriving interest from the competitive relations between two clearly distinguished fractions of the capitalist class. He does so by reference to the abstract tendencies and structures that he has identified for the capitalist economy; for example, for the

rate of profit to be equalised between competing industrial and money-dealing capitals, for the credit system to become a key mechanism of competition and lever of accumulation, for money as capital to stand apart from other commodities, for idle hoards to be centralised in the banking system, and so on. These abstract considerations can be brought to bear on Marxist historical and empirical analyses of IBC and the specific financial structures in which it is embedded. Marx had much to say on these issues, especially in his study of the British financial system in Volume 3 of *Capital*, but this complex material cannot be reviewed here.

Issues and Further Reading

In spite of their enormous importance for contemporary capitalism, Marxian studies of money and finance have progressed relatively slowly, with little generally being said about the more fundamental issues of the nature of finance and the relationship between financial and industrial capital (except with reference to the increasing prominence of the former, especially in the historical epoch of neoliberalism).

Marxists have frequently debated whether commodity money is an abstraction for Marx, and whether this is a legitimate abstraction, or – something rather stronger – a necessity for capitalism. Our view is that Marx's theory of money demonstrates how its material presence is increasingly displaced by symbols, not least paper and credit money (see, for example, Marx 1981b, 1987). More important than the residual role of gold as such as a world money, for the purposes of hoarding, for example, are the monetary relations attached to accumulation and how these evolve over time (which is examined in Chapter 14). See the debate between Jim Kincaid (2007, 2008, 2009) and Ben Fine and Alfredo Saad-Filho (2008, 2009) for the related but separate issue of the role of money in the development and presentation of Marx's theory of value.

Marx's theory of IBC and interest is outlined in Marx (1981b and, especially, 1981a, pt.5). This chapter draws upon Ben Fine (1985–6). Different aspects of Marx's theory of money and credit are explained by Suzanne de Brunhoff (1976 and 2003), Duncan Foley (1986, ch.7), David Harvey (1999, chs 9–10), Rudolf Hilferding (1981), Makoto Itoh and Costas Lapavitsas (1999), Costas Lapavitsas (2000a, 2000b, 2003a, 2003b, 2013), Costas Lapavitsas and Alfredo Saad-Filho (2000), Roman Rosdolsky (1977, ch.27) and John Weeks (2010, ch.5).

I 3

Marx's Theory of Agricultural Rent

Marx's theory of agricultural rent contains two important and closely connected components: a theory of *differential rent* and a theory of *absolute rent*. For Marx, private ownership of land acts as an obstacle to capital accumulation, because the landowners capture part of the surplus value produced in the economy. To a limited extent the same is true of orthodox rent theory, whether Ricardian or neoclassical (although Ricardo attempted to distinguish between rent and profit, while neoclassical theory conflates these categories, as is shown below).

In neoclassical theory, the agricultural producers pay rent because of a combination of private ownership and natural or technical constraints – for example, a shortage of land, either in overall supply or in the supply of land of better quality or location. In more sophisticated accounts, the demand for the different products of land may also be taken into account. In either case, rent serves in part to allocate resources ‘efficiently’ across different lands leading to equal rates of return across the economy. The mainstream view implies that, first, ownership of land merely determines who is to receive the rent, not its level. Second, the level of rent is determined by the technical conditions of production (and demand). These implications can be used to highlight the distinguishing features of Marx's approach.

Marx's starting point is the social conditions under which part of the surplus value is appropriated by the landowners as rent.

In other words, the theory of rent derives from the relationship between capitalist production and landed property, and these are historically specific, rather than technically given. Consequently, there can be no general theory of rent, and the conclusions reached in one instance cannot automatically be applied to others. It follows that rent cannot be analysed on the basis of a general effect, for example, of impeding capitalist production. Otherwise, any obstacle to capitalist investment could be described as rent, which is the gist of the Marshallian notion of quasi-rents in the short run, when one capitalist temporarily profits from a superior method of production. In this case, privileged access to finance, markets or bureaucratic favours and a host of other conditions could also be encompassed by rent theory, as in the neoclassical theory of 'rent-seeking', eliminating the scope for a specific theory of the social role of landed property. In short, rent must be examined in conjunction with the historical conditions in which it exists, particularly as capitalism tends to sweep aside the barriers to its imperative to accumulate. Why and how does landed property limit capital accumulation over time and extract a share of the surplus value pumped out by industrial capital?

This is the most demanding chapter in this book. It is included here for two reasons: first, because it illustrates an important application of Marx's method and confronts an issue that allegedly contradicts his value theory; second, because of the continuing relevance of rent for issues as diverse as oil, mining, agricultural development, urban regeneration and housing.

Differential Rent I

Marx's theory of differential rent (DR) can be understood only by examining how landed property intervenes in the operation of capital within agriculture. How is it that competition leaves surplus value to be appropriated in the form of rent, and what are the implications of this? To confront this problem, a slight

digression is needed to examine how capitals compete with each other within a sector in the absence of the distorting effect of landed property.

It was shown in Chapters 6 and 8 that capitals within the same sector compete with each other primarily by raising productivity through increases in the organic composition of capital (OCC). This does not occur evenly across the sector, so there will tend to be significant productivity differences between these capitals. Marx argues that commodity values are formed out of these different individual productivities. Significantly, he does not insist that values must equal the average labour time for the sector (even assuming that the workers are identical across the economy). For example, if either the most favourable or the least favourable technique is sufficiently weighty as compared with the average, this technique rather than the arithmetic average regulates the sector's market value. In either case, *excess* or *surplus profits* will accrue to those capitals producing more value than the sectoral average.

Marx's explanation of differential rent begins by dividing it into two types, differential rent one (denoted by DR₁) and differential rent two (DR₂, addressed in the next section). DR₁ focuses on the existence of surplus profits within agriculture exclusively arising from fertility differences (ignoring transport and other marketing costs for convenience). This is usually associated with Ricardo's extensive margin. In brief, capital cannot flow evenly onto lands of equal fertility, since such lands are not naturally available. Capitals flowing onto the better lands meet the barrier of landed property and are forced by the landowners to forgo part of their surplus profit in the form of rent.

The result is not simply the creation of rent, but also a distortion in the formation of market value in agriculture. In industry, the worst methods of production predominate only where they are exceptionally weighty, and capitals employing more productive methods capture surplus profits. In contrast, in agriculture the worst methods *can* predominate because of landed property, and

the capitals invested in better lands may have to surrender their surplus profits to landowners in the form of DR₁. For Ricardo, this will happen irrespective of ownership of land (which, for him, merely determines who receives the fertility-determined rents). By contrast, for Marx, rent always depends upon the capacity of the landowners to appropriate the differential surplus attached to lands of distinct quality.

The existence of profitability differences in agriculture is a necessary but insufficient condition for the existence of DR₁. Those surplus profits must also be permanent and appropriated by sufficiently powerful landlords, otherwise (as in Marshall's quasi-rents) DR₁ would not only exist in every sector of the economy, but it would also be eroded like the surplus profits in industry (which tend to be competed away because of capital movements and the diffusion of technological innovations within each sector).

It should be noted that differing natural conditions as such are not the source of DR₁. They may contribute to productivity differences, but they do not create either the categories of surplus profit or differential rent. Instead, DR₁ depends upon the utilisation of natural conditions (and productivity differences) under capitalist relations of production, as well as the intervention of landed property. In other words, rent exists not because surplus profits exist, but because they are appropriated by the landowner rather than the capitalist.

Differential Rent 2

Marx's theory of DR₁ is constructed on the basis of *equal* applications of capital to *different* lands, in which case surplus profits (and rent) arise from the more or less permanent fertility differences across these lands. Differential rent of the second type (DR₂) is also concerned with competition within the agricultural sector. However, DR₂ is due to the appropriation

of surplus profits created by temporary productivity differences arising from the application of *unequal* capitals to lands with *equal* fertility. In this case, the landowners benefit from the progress of society in introducing technical innovations and organising large-scale production, allowing them to appropriate a share of the added surplus.

Clearly, though, the entire surplus profits produced in agriculture and forming the potential basis of DR₂ may not accrue to the landowners; moreover, these surplus profits tend to be eroded as initially abnormal capital investments become normal across the sector. Regardless of these limitations, DR₂ reduces the incentive to capitalist farmers to invest intensively (more capital and better technology on the same land) rather than extensively (same technology across more land), which blunts the technological development of agriculture. This is why Marx argues that agriculture tends to exhibit a slower pace of technical progress than industry. This is one of the most important conclusions to be drawn from Marx's theory of DR₂: its dynamic preoccupation with obstacles to the development of capital accumulation, rather than the static formulation of the distribution of surplus value in the form of rent.

If DR₁ and DR₂ were independent of each other, the analysis of DR, as the simple addition of DR₁ and DR₂, would now be complete. For then DR₁ would have the effect of equalising profits across lands of different quality for application of equal quantities of capital, so that DR₂ could be calculated from the profitability differences arising out of the application of unequal capitals. Alternatively, DR₂ would equalise the effects of different applications of capital, so that DR₁ could be calculated from the differing fertilities between lands. This procedure is, however, invalid. Indeed, in Volume 3 of *Capital*, Marx never examines DR₂ in the pure form of unequal applications of capital to equal lands. He always discusses DR₂ in the presence of DR₁ – that is, of lands of unequal quality. Marx's reason for doing so is to

analyse the quantitative determination of DR₂, having laid down the qualitative basis for its existence.

In this chapter, DR₁ and DR₂ have been determined on the basis of certain abstractions concerning the distribution of capitals and different fertilities of land. This has been done for expositional clarity; but a more complex analysis is necessarily involved concerning the coexistence of unequal lands and unequal capitals on those lands, as well as issues of the differential quality and location of production and sale, which may change over time. For example, for DR₁ there is the problem of determining which is the worst land in the presence of unequal applications of capital (DR₂), since some lands may be worse for one level or type of investment (tractors, say) but not for others (fertiliser). For DR₂, there is the problem of determining the normal level of investment in the presence of differing lands (DR₁). Some capitals may be normal for some types of lands (those requiring the construction of irrigation channels, say), other capitals normal for other lands (those located on mountain slopes).

There is a further difficulty for DR₂, since the decreasing productivity of additional investments would not allow for surplus profits for abnormally large capitals unless the market value of the agricultural product were to rise. This raises the question of whether the market value should be determined by the individual productivity of some plot of land, or whether it can be determined by some part of the capital invested in that land. In other words, is the size of 'normal capital' always the total capital applied to some land, or can it be some part of that capital? Even the term 'normal capital' can be inappropriate, for capital investment in a particular land is always specific rather than general.

These problems concern the simultaneous determination of *worst land* and *normal capital* in agriculture, each of which influences the formation of value in the presence of landed property. The interaction of the two gives rise to the market value of agricultural produce, from which differential rents can

be calculated. This problem does not arise for industrial capital, because the determination of normal capital is synonymous with the determination of value. It was shown above that the same is true for each of DR₁ and DR₂ in the absence of the other. For DR₁ in its pure form (equal capitals) the determination of worst land is synonymous with the determination of value, whereas for DR₂ in its pure form (equal lands) the determination of normal capital drives the determination of value.

This problem of the joint determination of normal capital and normal land cannot be resolved abstractly; correspondingly, DR₁ and DR₂ cannot be determined purely theoretically. As discussed previously, they depend upon historically contingent conditions: on how agriculture has developed in the past and how it relates to capital accumulation in terms of capitalists' access to the land, which may be affected by legal, financial and other conditions. Moreover, changes in crops and production technologies modify both the demand for land and the definitions of best and worst land. In short, DR theory does not lead to a determinate analysis of rent, but reveals some of the processes by which it may be examined concretely.

Absolute Rent

If the key to the formation of differential rent is the determination of value and the presence of surplus profits in agriculture, the basis for the formation of absolute rent (AR) is the transformation of market values into prices of production (see Chapter 10). In this sense, AR departs from DR. Both forms of rent concern the obstacle to capital investment posed by landed property, and both give rise to the appropriation of surplus profit in the form of rent. However, DR and AR are located at different levels of complexity, and their sources are correspondingly different: DR derives from productivity differences within agriculture, while AR derives from the different rates of change of productivity increase

between agriculture and other sectors of the economy as a result of the barrier to accumulation that is posed by landed property.

In formal terms, Marx's theory of AR is as follows: because of the barriers imposed by landed property, explained in the analysis of DR₂, agriculture tends to have a lower OCC than industry. Therefore, there is a higher proportion of living labour employed in agriculture, and this sector produces additional surplus value. In the absence of rent, its price of production would be below value.

This is, however, an entirely static account. In dynamic terms (the algebraic details are taken up below), the formation of prices of production depends upon competition and the possibility of capital flows between sectors. However, flows into agriculture, and the formation of prices of production in this sector, are obstructed by landed property (you cannot just invest in the sector, you have to pay rent as a condition of access to the land). Because of this obstacle, landowners can charge an AR for capital flows onto new land (alternatively, they can charge DR₂ for flows into lands already in use that subsequently become more capital intensive). This rent may increase the price of agricultural commodities above their price of production. In the limit, those commodities might be sold at value, with the difference between their sale price and price of production being captured as AR. Under these circumstances, AR would disappear under the conjunction of two conditions: (a) if the pace of development of agriculture were equal to that of industry, and agriculture's OCC were equal to (or higher than) the social average; and (b) if all land had been taken into cultivation, since AR depends upon capital movements onto new lands.

In the literature, one often finds a different interpretation of Marx's theory of AR, in which the landowners capture a rent because they can *prevent* the flow of capital into agriculture. However, this is simply AR as a monopoly rent. Similar considerations would apply in the absence of landed property – for example, if there were an essential patent involved in the

production process. This parallel is insufficient for two reasons. First, the argument is based on a static theory of surplus-value distribution. Second, in this interpretation Marx's conditions for the existence of AR become arbitrary, since OCCs differ between industrial sectors without AR being formed. Moreover, even in agriculture there would be no reason for AR to be limited to the difference between value and price of production. If AR were a monopoly rent, the market price of agricultural commodities could rise above their value according to the ability of the landowners to impose such prices.

However, Marx's discussion of the conditions under which AR would disappear suggests that a static theory is not involved. What matters, as was explained above, is the pace of development of agriculture relative to industry, and the potential movement of capital onto new lands during the accumulation process. Of course, these conditions can be interpreted statically (for example, assuming that all land is leased and all sectors have equal levels of development); but, to the contrary, the other concepts utilised, in particular the OCC, must be interpreted in the dynamic of Marx's theory of accumulation. In undertaking this task, it will be shown below that Marx's theory of AR is fully consistent with his analysis of capital accumulation.

Suppose initially that the OCC across the economy is given by c/v , and that it can be increased in any sector (including agriculture) by a factor $b > 1$, so that a given quantity of labour would convert bc constant capital into final goods, rather than c . For agriculture, before this increase in OCC, the difference between value and price of production is

$$d = [c + v + s] - [(c + v)(1 + r)] = s - (c + v)r$$

where r is the rate of profit. With technical change across the whole economy, with the exception of agriculture, the general rate of profit, r , changes from $s/(c + v)$ to $s/(bc + v)$. In agriculture, to the extent that intensive cultivation is obstructed, c remains the

quantity of value worked up by v rather than rising to bc as for other sectors. Therefore, the difference between value and price of production in agriculture becomes, from the above expression for d and the new rate of profit, r :

$$\begin{aligned} d &= s - \frac{(c+v)s}{bc+v} \\ &= \frac{(bc+v)s - (c+v)s}{bc+v} \\ &= \frac{(b-1)cs}{bc+v} \\ &= (b-1)cr \end{aligned}$$

This difference, d , is equal to the rate of profit, r , multiplied by the additional constant capital set in motion or, alternatively, equal to the surplus profits arising out of the higher OCC. These surplus profits could be captured as DR₂ if the OCC had increased on the lands currently in use, with the surplus accruing to landlords instead of being captured by the capitalists as in other sectors.

In sum, AR is limited by the maximum charge for extensive cultivation into new lands, as permitted by the alternative possibility of investment in intensive cultivation. This corresponds to the difference between value and price of production in agriculture. In other words, the choice is between investing intensively in existing lands, but giving up some, possibly all, of the surplus profits to the landlords; or investing in new lands and facing a charge of the same potential magnitude. The important point is not so much that the price of production tends to exceed its value in agriculture (or, more generally, where land is involved); rather, the presence of landed property can impede capital accumulation (and certainly influences its nature), with the potential formation of AR as a consequence, itself limited to the extra profits that could be made if the capital were invested intensively on existing land in use.

MARX'S THEORY OF AGRICULTURAL RENT

It has been shown, then, that Marx's theory of rent extends his theory of capital accumulation to examine the barrier of landed property. For him, rent is the economic form of class relations in agriculture, and it can be understood only by examining the relationship between capital and land. Rent itself depends upon the production and appropriation of surplus value through the intervention of landed property. DR derives from surplus profits formed through competition within agriculture. DR₁ results from productivity differences due to 'natural' conditions, leading to equal capitals earning different profit rates in agriculture. DR₂ is due to the different returns of unequal applications of capital (capitals of different sizes) in agriculture. In industry, the surplus profits accrue to the most productive capital. In contrast, in agriculture they may be appropriated as rent. Finally, AR arises from the difference between value and price of production in agriculture, because of its lower than average OCC, should landed property obstruct accumulation. Where capitalists own their own land or where they are encouraged or even facilitated to accumulate by landlords, such obstacles may not prevail. Even more generally, whenever a surplus arises in the presence of landed property (whether due to better fertility or intensive cultivation, better location, or for any other reason), it provides the potential for rent that can be appropriated by landlords or other agents. This is not merely a distributional issue, but has the effect of potentially obstructing the pace and forms of accumulation, or even accelerating it, should it be the capitalist who is able to appropriate that surplus as landowner.

Marx's theory of rent draws upon his theories of production, accumulation, the formation of value, and the theory of prices of production. As such, it is probably the most complex application of his understanding of the capitalist economy. At the same time, it reveals its own limits in showing how further analysis is contingent upon how landed property has developed and interacts with capitalist development.

Issues and Further Reading

The most controversial aspects of Marx's theory of rent are how he differs from Ricardo in the understanding of differential rent, whether or not absolute rent is monopoly rent, and whether lower OCC in agriculture is arbitrary (together with whether AR is limited to the difference between value and price). The importance of Marx's theory lies less in its providing a quantitative theory of rent and price and more in that it draws attention to the historically specific ways in which landed property influences the pace, rhythm and direction of capital accumulation – whether in the context of agriculture, oil or 'urban regeneration'.

Marx's theory of rent is developed especially in Marx (1969, chs 1–14, 1981a, pt.6). This chapter draws upon Ben Fine (1982, chs 4, 7, 1986, 1990b). For similar approaches, see Cyrus Bina (1989), David Harvey (1999, ch.11) and Isaak I. Rubin (1979, ch.29); see also the debate in *Science & Society* (70(3), 2006). In her doctoral thesis, Mary Robertson (2014) has attached the notion of (urban) monopoly rent to the more longstanding and widely used notion of developmental gains, not confined to Marxism as such. In Marx's theory of differential and absolute rents, such rents derive from productivities attached to *individual* lands as a condition of capitalists' access to those lands. In this, Marx abstracts from the more general, if uneven, 'productivity' that accrues to lands as accumulation proceeds – think, for example, of the agglomeration benefits of urban development or the arrival of a railway station. These can be interpreted as monopoly rents and are important, for example, in the context of financialisation as rents arise out of the inflated prices of housing in a speculative boom. More generally, such monopoly rents are perceived to be the consequence of the appropriation of value, and not just surplus value, as conditions of economic and social reproduction, and not just production, evolve and are contested.

I 4

Financialisation, Neoliberalism and the Crisis

This book has primarily been concerned with providing a relatively simple overview of Marx's political economy, especially as presented in the three volumes of *Capital*. This chapter seeks to apply that political economy to the global crisis of capitalism at the time of writing, which presents itself as deriving from a major dysfunction within the financial system, with devastating repercussions across each and every aspect of economic and social reproduction. But, in light of the issues raised in the previous chapter, and other issues of power and conflict around war, gender, race, poverty and development, for example, it is important to bear in mind that the current crisis is neither an acute break with the past, nor is it confined to narrowly defined economic issues. Indeed, crises tend to accentuate and, to that extent, reveal the nature and contradictions of the society in which we live; this is especially well illustrated by the fall from grace of the financial fraternity. However, the merciless light shone by the crisis obviously does not render contemporary capitalism an open book, to be easily read from cover to cover in large print. So, whilst neoliberalism temporarily suffered a crisis of legitimacy in addition to its economic crisis, the reasons for the latter as well as proposals for resolution remain disputed across the intellectual and political spectrums, and within Marxism itself.

The Crisis of Financialisation

Each crisis incorporates specific characteristics, whether by virtue of proximate causes, depth, breadth or incidence across the economy, ideology or political system, or through its differential impact within and between economic sectors or upon segments of the working class in each country, or for other reasons. But the current crisis – meltdown even – is remarkable across a number of separate dimensions as well as in their combination. First, the crisis was not initiated by a tulip bulb, South Sea Island or dot-com bubble, or even a stock market frenzy or commodity crash – although stock markets in different countries witnessed considerable speculative turmoil in the period leading up to the crisis as well as in its wake. The crisis spread from the US sub-prime market, a market that provided mortgage finance to the poorest households of the country. Of course, locating the origin of the crisis still leaves open the question of why it should have triggered such a worldwide blast.

Second, no one blames the poor for the speculative boom or the crash and its aftermath. Far from it; unlike in other instances of economic malfunction in recent times, ‘excessive’ wages and benefits have nowhere been targeted as causal, as has occurred in the past, according to neoclassical, Keynesian or even Marxian ‘profit squeeze’ views – helping to legitimise, more or less explicitly, the shift of the burden of adjustment onto working people and the poor. This time, finance and its excesses are obviously to blame, but (wait for it!) finance must be rescued in order to prevent an even worse impact upon the rest of us, whose hardening times for years to come are thereby legitimised. Not your fault, or anyone else’s for that matter (conveniently leaving aside the neoliberal incentives to finance and generalised promotion of the interests of the rich); but the milk is spilt, the pitcher is broken, and so we have to work together to fix it, with less to go around in the meantime.

Third, despite its severity, unprecedented since the 1930s, the current crisis both closed a 30-year period of relative slowdown in accumulation in the West, after the 'Keynesian' post-war boom, and announced a 'new normal' of slower growth rates around the world lasting into the indefinite future. Whatever its immediate causes in the US housing market and elsewhere, the crash and its severity are not simply the result of some manic, overstretched phase of financialised accumulation, whose contradictions, tensions and conflicts have induced a corresponding reaction in the opposite direction and which may be expected to resolve itself through the spontaneous 'purging' of those excesses. Rather, the crisis is clearly nested within the neoliberal mode of accumulation which consolidated itself after the demise of post-war Keynesianism.

Fourth, the current crisis is one in a sequence of financial or balance-of-payments crashes that have affected mostly poor and middle-income countries on a regular basis since the late 1970s. These have generally been contained even when severe within particular regions, not least through multilateral state intervention engineered by the US Treasury Department and implemented by the World Bank, the International Monetary Fund and the institutions of the European Union. Today's situation is different. For the transmission mechanisms of the current crisis have overwhelmed even the unprecedented degree of state intervention seeking to control and temper its worst effects and geographical spread. The limitations of macroeconomic policy and international co-operation, most notably signalled by the domino effects emanating from the sub-prime crisis itself, reflect the complexity of contemporary financial asset structures. This has led to significant difficulties in selecting what to target for rescue, by what criteria, to what end, how, for how long and at what cost, and what supplementary policies are necessary at the domestic and the interstate levels.

These factors are indicative of a broader crisis in neoliberalism, requiring an explanation of some sophistication. At a superficial

level, and only with minor exceptions, there seemed to be no neoliberals left in the wake of the crisis. The dramatic failure of the financial system induced a desperate search for remedies through a return to mild and finance-led Keynesianism and piecemeal and reactive state control, even public ownership of finance and industry, which would have been anathema only months before. The ideological acrobatics required to justify these policy choices, as well as the deficiencies in institutional mechanisms for formulating and implementing policy, were all too obvious. Even so, the extraordinarily expensive measures involved in 'rescuing' the economy were initiated by the ultra-neoliberal US president G.W. Bush in the twilight of his administration and were continued smoothly by his presumably very different successor, Barack Obama. The same fundamental continuity across distinct political actors was also observed in the United Kingdom, France, Italy, and many other countries. Invariably, the policies addressing the crisis were unmistakably neoliberal and they were meant to be reversed as soon as possible. To put into perspective the depth of the crisis of finance and the extent of state intervention, two facts are striking. One is that the resources offered to shore up the financial system far exceed the total revenue accrued from *all* privatisations ever. The other is that the rescue packages would have been sufficient to *eliminate* world poverty for the next 50 years, if not indefinitely.

Neoliberalism and Crisis

At a deeper level, neoliberalism is attached to a specific mix of ideology, scholarship and policy in practice. But this mix has gone through two phases: the first, shock phase was based on extensive state *intervention* to promote private capital as far as possible, with limited regard to the social, economic and political consequences – a Reagan/Thatcherism that was most notoriously imposed upon Eastern Europe under this very terminology of shock therapy. But

the ‘just do it’ ethos of the first phase of neoliberalism (which talked about leaving things to the market, but used the state to promote private capital – not least in its oppressive relations with working people) neither originated with nor has been confined to transition economies. The second phase, Third Wayism or the ‘social market’, which continues to this day, has witnessed different modalities of state intervention, both to temper the worst effects of the first phase and, more importantly, to sustain what has become the defining characteristic of neoliberalism itself: financialisation. For the past 40 years, financialisation has prospered through, and under the guise of, the promotion of the market (i.e. private capital) in general. In practice, this means the subordination of social reproduction to financial market imperatives in everything from privatisation and deregulation to inflation targeting, the commercialisation of public services, and the diffusion of personal credit and private insurance as opposed to reliance on social welfare.

Inevitably then, the crisis brings the significance of finance to the fore. It is difficult to exaggerate the expansion of the financial system over the past 40 years. There has been a proliferation and growth of the financial markets themselves, in terms of derivatives, futures, foreign exchange, mortgages, government instruments, as well as stocks and shares, *and* the penetration of finance into areas of economic and social reproduction that had been removed from the direct control of private capital in the previous era of Keynesian welfarism and ‘modernisation’. This applies to health, education, energy, telecommunications, transport, housing finance, pensions, benefits, social care, and much more. In addition, industrial corporations have been thoroughly caught up in financialisation, with a drive for ‘shareholder value’ through financial dealings, restructuring, and changes in corporate governance dominating the sources of profitability, often at the expense of investment to expand and enhance capacity and increase productivity.

These economic considerations are embedded in a new pattern of imperialism (so-called 'globalisation'), not least in the wake of the Cold War. Both the strengths and the weaknesses of the United States as hegemonic power have intensified and been exposed in recent years. In contrast, the collapse of Soviet-style socialism and the weakness of progressive movements, despite some green shoots, in Latin America for example, are striking. So is the rise of China, its conversion to capitalism, and its provision of wage labour to world capitalism numbering tens if not hundreds of millions of workers. Equally significant is China's peculiar relationship with the United States, with regard to the major support it offers to recycling the US fiscal, trade and current account deficits. China is far from alone in this, even across the 'developing' world, and Germany and Japan have been at least as important in sustaining both the dollar and the US trade deficit for even longer. This reveals an extraordinary mix of US strength and weakness, with the dollar as world money commanding external support: at the time of writing, any moves to supplant its corresponding roles as reserve currency and means of payment are marginal at most. The result is that the value of the dollar has been volatile; but it has not crashed, despite its potential fragility and the widely recognised structural weaknesses of the US economy – weaknesses of the sort that would lead to collapse in the value of any other currency.

Marxism Facing the Crisis

Not surprisingly, as the orthodoxy has been left floundering during the crisis, Marxist and heterodox scholarship and commentary have assumed a more prominent role. The issue, however, is less to observe than to explain, which requires locating these developments within an analytical framework. In particular, three issues need to be confronted. First is the reasons for the slowdown of the past 40 years, particularly given conditions that could not

have been more conducive to capital accumulation, including legal and regulatory incentives to capital, stagnant if not declining levels of money and social wages, weakness of labour and progressive movements, expansion and ‘flexibility’ of the global workforce, and neoliberal hegemony in policy, politics and ideology. Without an explanation for the slowdown, it is impossible to explain why such a financial crisis should have emerged and why it has been so severe, and to specify what is the nature of the crisis itself, beyond its immediate economic parameters.

Second is to unravel the significance of financialisation and its relationship to the accumulation of (productive) capital. Paradoxically, whilst finance and financialisation have attracted extensive attention from Marxist scholars, there has been relatively little by way of attempt to embed finance within Marx’s own analysis. This even extends to the tradition laid down by and through Rudolf Hilferding – not least, no doubt, because his notion of finance capital seems insufficiently attuned to the diversity and extent of today’s financialisation, which goes far beyond the relationship between banks and industry. Despite the understandable draw of Marxist political economy in light of the crisis, much more attention has been focused on Hyman Minsky than on Karl Marx when it comes to the role of finance in the crisis.

Third is how to locate the role of class struggle in these circumstances, in which it seems both weak and removed from its classic location for Marxism, at the point of production. Of course, one of the mantras of neoliberalism is ‘flexibility’ in labour markets, which, in practice, is imposed on behalf of capital through state intervention using legislation and, where necessary, authoritarianism. This has contributed to the cumulative decline of working-class strength, organisation and activism, whilst the influence of organised labour in social reproduction has also been weakened through depoliticisation, disorganisation, privatisation, declining job security, and so on. These pose both analytical and strategic challenges, which, even before the crisis, have been

addressed in terms of arguments ranging from the 'demise' of the working class and capitalism as we knew them to the emergence of new (more or less anti-capitalist) social movements.

In addition to these three analytical issues – the slowdown, financialisation, and the role of class – is a strategic fourth: how to respond in the dire circumstances of economic crisis and weakened progressive movements. The relationship between reform within capitalism and socialist revolution to transcend it raises the classic Marxist conundrum of how to advance one without compromising the other. But, currently, these considerations seem a utopian luxury, since, despite the severity of the economic crisis and the corresponding crisis of the legitimacy of neoliberalism, both radical reform and revolution are off the agenda.

Our own approach to these three analytical issues is to deploy and develop Marx's theory of accumulation, both logically and historically, on the basis of the categories of analysis offered in the three volumes of *Capital*. We have argued that Marx's theory addresses accumulation as the quantitative expansion of productive capital through its continual and uneven restructuring, generally into larger and more complex units, organised, in today's world, primarily through transnational corporations. Crucially, though, the pace and rhythm of the restructuring of capital is largely dependent upon agencies other than the industrial capitalists themselves, especially state policies and the working class, and the restructuring of other capitals in competing markets and in finance, as well as through more general transformations of economic and social life. Each of these elements may be more or less conducive to accumulation by restructuring, as well as being uneven in their effects. Their impact is contingent upon the shifting configurations and conflicts of economic, political and ideological interests within the bounds set by the system of accumulation as a whole. The role of the state is paramount across all of these constituent factors, including economic policy deployed in conjunction with the exercise of force, and state-

sponsored arguments for the legitimacy of the dysfunctions, inequities and iniquities of capitalism.

This abstract account may be developed by emphasising, as already indicated, that the current slowdown is not due to working-class strength or militancy and, accordingly, that explanations for the crisis must be sought in intra-capitalist relations. In particular, crucial to the explanation is the process of financialisation – something that is now recognised by all. But this looks slightly different once set in Marx's categories of analysis. For what marks financialisation in the neoliberal era, as was hinted at in Chapter 12, is the expansion of interest-bearing capital (IBC) across the economy as a whole, including the financial operations of putatively independent industrial corporations, as well as in health, education, welfare, consumer credit, housing, and so on. Accordingly, in hybrid forms, IBC has actively promoted accumulation of financial (fictitious) capital at the expense of productive assets. Although profitable for individual capitals, and in the short term, this has been dysfunctional for the sustained accumulation of capital in general, both quantitatively and qualitatively.

In short, financialisation is underpinned by the quantitative expansion of IBC and its extension across the economy, sometimes driving the restructuring of industrial capital, and sometimes at the expense of it, thus influencing, both directly *and* indirectly, the broader impact of neoliberalism upon social reproduction. The accumulation of financial assets has taken priority, both systemically and in policy, over the accumulation of industrial capital, despite (and, to some extent, *because of*) the rapid growth of the proletariat across the globe. This is strikingly revealed in the current crisis by the extent to which the state has intervened on behalf of finance, when, in far more favourable circumstances, expenditure of much more modest proportions has been denied, not only to health, education and welfare, but also to the

development of industry, the provision of infrastructure and the management of international competition.

Crisis and Class Struggle

Given our understanding of the slowdown, crisis and the financialised underpinnings of neoliberalism, how are we to locate class struggle and the reform/revolution divide? Consider three extreme, possibly caricatured, positions. One perceives finance merely as some epiphenomenon, implying that strategy must be focused back upon the working class, organised at the point of production. The problem here is that such activism has proved to be weak and possibly weakening, and to be disconnected from struggles around issues that will, by necessity, proliferate away from production – for example, over wages, benefits and social provision, but also over and around the environmental catastrophes unleashed by global capitalism. The second extreme is to bypass both the economic crisis and the realities of production and to focus instead on continuing confrontations around the environment, lifestyle choices, and the multiplicity of discriminations routinely (re)produced by contemporary capitalism. However significant these concerns may be, attempting to confront them separately from their structural roots in production is unlikely to be more successful in the future than it has been in the recent past. The third is to concentrate on something akin to attacking 'exploitation in exchange' by finance, building upon popular antipathy to discredited bankers, while bypassing the systemic questions posed by the financialisation of production and social reproduction under neoliberalism. There are significant analytical as well as political problems in posing issues purely in terms of finance versus the rest of us, whatever merits this may have as a strategic and opportune starting point. For example, and to reiterate the previous point, what about other forms of exploitation and oppression, especially

in production itself, for which reform of the financial system offers little by way of purchase?

An alternative is not so much to reject the three extremes just presented as to move beyond them by connecting production and class to the specific struggles engendered by economic and social reproduction under neoliberalism. As should be apparent, the ways in which financialisation has intervened in economic and social reproduction are both pervasive and heterogeneous and so, accordingly, will be the more or less spontaneous reactions to their effects and the search for alternatives. From a Marxist perspective, and from others as well, it is much easier to see the need to smash the financial system than either to bring this about or to attach it to more deep-rooted, effective and secure movements for economic and social transformation. As Marx famously put it in *The Eighteenth Brumaire of Louis Napoleon* (1852):

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. The tradition of the dead generations weighs like a nightmare on the brain of the living.

What is true of our brains is equally true of our material circumstances. Crises in mortgage finance (and their connection to the provision of housing) are distinct from those of the environment (and the neoliberal push for trading in carbon futures, for example, which has conjured into being a vast new market that creates actual profits while pretending to address the environmental disasters of capitalism), and from crises in the public and private productive spheres, whether for health, education or welfare. Of necessity, these arenas of struggle will be as diverse as are the alliances that might be formed to challenge specific facets of neoliberalism, and which can help to strengthen, broaden and transform individualised, often financialised, struggles towards

a renewed vision of alternative modes of provision based on the values of democratic control and solidarity, rather than on the extraction and distribution of surplus value. This transformation is unlikely to happen spontaneously: a positive platform for social mobilisation, inspired by careful analysis and theoretical understanding, remains essential. In this regard, the contribution offered by Marxian analyses and experiences of struggle remains indispensable. Such prognoses stand shoulder to shoulder with the slogan that marks the epitaph on Marx's gravestone, a quotation of his eleventh thesis on Feuerbach: 'Philosophers have hitherto only interpreted the world in various ways; the point is to change it.'

As with much of Marx's writings, this call to nineteenth-century socialists should be interpreted both as a means of gaining understanding and also as an imperative to act. It remains valid into the twenty-first century as we seek to abolish capitalist society, drawing upon reaction against the contradictions and inequities that it throws up, their study through the best tools of the social sciences, and, most importantly, the practical experiences of struggle of a multiplicity of groups, associations, unions, political organisations and the masses of millions which breathe life into them.

Issues and Further Reading

In general, the Marxist literature on financialisation and the current crisis divides between those who think finance is crucial and those who think it is not, and between those who argue that the current crisis is a delayed consequence of the failure to resolve the contradictions of accumulation in the post-war ('Keynesian') period and those who see the current crisis as being due to financialised restructuring and its social and economic consequences. Financialisation has been examined from different perspectives in the Marxian literature; for a review, see Fine (2012b, 2014). Much has also been written about the ongoing crisis; see, for

example, Gérard Duménil and Dominique Lévy (2011), David McNally (2011), Leo Panitch and Martijn Konings (2008), Martijn Konings and Leo Panitch (2008), and recent issues of the *Cambridge Journal of Economics*, *New Left Review*, *Historical Materialism* and the *Socialist Register*, and the wealth of material available on the Dollars and Sense (www.dollarsandsense.org) and Socialist Project (www.socialistproject.ca) websites, among many others. Each and every left journal and website dedicated to political economy or otherwise will include a great deal of useful readings. However, financialisation has rapidly become so widespread and amorphous in its use across the social sciences (other than mainstream economics where it is notably absent), that Brett Christophers (2015a and b) has, in debate with critics, denied it any analytical purchase. This is a position which we consider untenable once financialisation is seen in terms of the extensive (to new areas of activity) and intensive (within existing areas) expansion of interest-bearing capital in a neoliberal context. See especially Kate Bayliss et al. (2015).

I 5

Marxism and the Twenty-first Century

The popularity and prominence of Marxism rises and falls with intellectual fashions and with the rhythm of world events. These two influences are far from independent of one another; and, further, what is understood to be the content and emphasis of Marxism is equally variable across time, place and context. Marxism may be seen on the one hand as a critique of capitalism (a position that is currently to the fore in the presumed era of globalisation); or on the other hand it may be interpreted as providing alternatives to capitalism, as in the cases of the (previously) ‘socialist countries’ or in the present struggles of some post-colonial countries. Marxism has also been heavily embroiled in all the major academic debates across the social sciences, although, once again, the weight and content of its presence have been both diverse and uneven over time, topic and discipline.

The purpose of this final chapter is to argue for the continuing salience of Marx’s political economy for the study of contemporary issues. Necessarily, it can only be suggestive and limited in coverage, as well as skewed towards topics that have played a significant role in the development of Marxism. An appropriate starting point is the major academic assault made against Marxism in the West since its last peak of popularity during the 1960s and 1970s. Apart from promoting the mythical idea that Keynesianism had more or less resolved the problem of capitalist crises (which was later discarded, at least in theory, under neoliberalism), anti-Marxism

has flourished through suggesting that Marxism is crude and doctrinaire. Two intimately connected issues come to the fore – one concerns the nature of class and the other the nature of the (capitalist) state. Concerns with the environment and the aftermath of capitalism are also examined below.

Class

The major criticism made against Marxism with respect to class is its supposed inability to deal with the complexity and diversity of class relations within advanced capitalist society, variously dubbed as post-industrial, democratic, welfarist, essentially ‘middle-class’, meritocratic and so on. The critique has two separate components, one concerning class *structure*, the other concerning the *implications* of that structure. In short, and partly because Marx allegedly predicted increasing polarisation in class structure (including, wrongly, the presumption of the ‘absolute’ pauperisation of the workers), it is argued that the division between bourgeoisie and proletariat is too crude, and, not least because of Marx’s revolutionary aspirations for the working class, class action and ideology have presumably failed to match his expectations drawing upon this posited class structure. For example, why do wage workers vote for right-wing governments, and why do conservative governments introduce reforms that benefit working people? These questions are taken up below. At a methodological level, concerns are voiced over both the structure of Marx’s theory and its causal content. For example, it is deemed to be too deterministic and reductionist – supposedly it implies that everything flows from the economic, with the economic itself identified primarily with production and class relations and with the evolution of capitalism leading inevitably to the numerical supremacy and political hegemony of the proletariat, itself dominated by the cohort of (overwhelmingly male) industrial workers.

No doubt many Marxists have been guilty of these analytical sins of oversimplification and the omission of other factors, if in part in the attempt to expose the fallacies of 'freedom', 'efficiency' and 'equality' that are too readily paraded as virtues of capitalism. Hopefully, though, enough of Marx's political economy and method has already been presented in this book to show that Marx himself could not be accused of these shortcomings. Indeed, Marx once declared himself as not a Marxist, in view of the way his method had been abused in his own lifetime!

More specifically, in the case of class, Marx's political economy reveals the crucial and core component of the class structure of capitalism: that capital and labour necessarily confront one another over the buying and selling of labour power. Further, as presented in this book, Marx's political economy is concerned with the consequences of this class structure for accumulation, reproduction, uneven development, crises, and so on. Thus, far from reducing all other economic and social phenomena to such analysis, Marx's political economy *opens the way* for broader, systematic and more complex investigation of the structure, relations, processes and consequences of capitalism – and what this achieves is a great deal and of crucial importance.

Thus, Marx's political economy does not reduce the class structure to that of capital and labour. On the contrary, it locates other classes *in relation* to capital and labour, whether as essential or contingent parts of the capitalist mode of production. Within capitalism itself, for example, Marxism shows how scope is created for the self-employed to emerge and for 'professionals' to prosper because, for different reasons, they can retain the full fruits of their labour despite being paid a wage or, more exactly, a salary – although this can take different forms, including fees, commissions, and so on. Formally, this can be represented by the idea that such strata receive the full reward for their living labour, $I = v + s$, rather than remuneration at the value of labour power, v . More important, though, is to explain why such strata, and their

associated activities and conditions of work, are not appropriated by capital and driven down in skill or social status to the level of wage labour.

A number of general arguments can be given, some structural and some contingent. For example, a precondition for advanced capitalism is the emergence of sophisticated credit and commercial systems in which handsome rewards can accrue to those who mobilise and allocate funds and commodities on behalf of others. The same applies to the professions needed to ease or safeguard the circulation of capital and its social reproduction more generally, although these activities vary in weight and significance across time and place and, where professional associations prove ineffective, are subject to proletarianisation. There are, after all, huge differences between the 'self-employed' casual building worker or contracted-out cleaner and the specialist doctor or management consultant.

Finally, and drawing upon the above, what is perceived to be the greatest challenge to the political economy of class is the rise of the middle class, itself a highly diverse stratum in terms of its composition and characteristics. Advanced capitalism has witnessed the decline of the industrial workers and the rise of services, significantly those employed by the state and, thereby, potentially removed from direct commercial motivation and calculation. In short, does the growing army of health, education and other workers employed by the state undermine analysis predicated upon a class structure grounded upon capital and labour?

Posing the problem in these terms points to the continuing relevance of economic class under contemporary capitalism, with labour defined in terms of its dependence upon a wage. This is not to deny that the class of labour is heavily differentiated within itself – by sector, skill (manual and mental), labour process; between industry and commerce; between the public and the private sectors, and so on. Such differentiations do not invalidate

the concept of class, but they highlight that class interests and actions cannot always, or even predominantly, exist as immediate consequences of class structure. Rather, class interests are formed economically, politically and ideologically through concrete economic relations and historical circumstances. Thus, it is not a matter of slotting one or other individual into this or that class on the basis of their *individual* characteristics – manual workers, trade unionists, members of workers' parties, and so on – but of tracing the relations by which the working class is reproduced concretely and represented in material and ideological relations. On this basis, there can be no presumption of a neat or fixed correspondence between economic and other social characteristics, but nor are these independent of one another. That the working class (i.e. wage earners in general, rather than the much narrower subset of blue-collar industrial workers) depends upon wages for its reproduction conditions every aspect of contemporary social life, even where it appears to be otherwise; but nor are wages and social conditions subject to iron determination in incidence and content.

The State and Globalisation

These general observations on class have relevance for the theory of the capitalist state. Once again, Marxism has been subject to criticism in the form of parody, with its theory of the state perceived as reducing to the simple proposition that the state serves only the ruling class and, hence, capitalist interests. This is immediately open to the objection that the state often implements policies that benefit working people, especially through the provision of welfare. Marxism is then crudely portrayed as defending itself through understanding reform as a devious strategy on the part of the ruling class to pre-empt revolution – where it is not otherwise securing a working class better able to produce (and fight wars) on its behalf.

As before, the historical record fails to bear out such simple motives for the timing and content of reform, and nor is it sufficient to explain provision of health, education, pensions and so on as simply the means by which to enhance short- or long-term labour productivity. Another popular misrepresentation of Marxist theory is to view the ('relatively autonomous') state as essential in mediating between conflicting interests *within* the capitalist class, rather than between capital and labour. In this case, the main function of the state is to prevent capitalists from cheating one another, and the intensity of competition from being unduly dysfunctional. Like the theory of the state as the instrument of one class against another, this approach sheds only limited light on the complexity and diversity of the state's role and actions.

The problem in each of these cases is that the state is seen as an internally homogeneous institution, clearly separated from 'the market', and an instrument serving readily identifiable interests – of capital against labour, or for capital as a whole against the destructive inclinations of its individual elements, or even for 'the nation' against rival nations and capitals. But such interests do not and cannot always exist in such highly abstract and yet readily recognisable forms. Rather, classes and class interests are formed through economic, political and ideological actions, conditioned but not rigidly determined by the accumulation and restructuring of capital and the patterns of social reproduction upon which class formation depends to a greater or lesser extent and in diverse ways. (These patterns include employment structures, conditions of work, trade union and other forms of activity, and daily reproduction at home, in the workplace and elsewhere.)

In each of these areas, the capitalist state occupies an increasingly central role. The circulation of capital carves out an economic sphere of activity that is structurally separate from the non-economic, but simultaneously dependent upon and supporting it. Workers' compliant observance of property relations and the legitimation of economic and other inequalities need to

be reproduced at least as much as immediate value relations. Thus, the structural necessity of the capitalist state is created largely by its non-economic role, in social as opposed to, but in conjunction with, economic reproduction. Even so, the state is always heavily and directly embroiled in the economic life of capitalism – appropriating and disbursing (surplus) value through taxation and expenditure, regulating accumulation, restructuring capital as it goes through its cyclical patterns, manipulating exchange rates through monetary and other macroeconomic policies, and influencing distributional relations through taxation, spending and incomes policy.

Unfortunately, these critically important insights of Marxism have often been overlooked, even when Marx has been commended for his foresight in anticipating globalisation or for recognising similar processes at an earlier historical stage. Certainly Marx does emphasise the international character of capitalism and its restless search for profits wherever they can be found. This forges affinities with those who understand globalisation in terms of the withering away of the nation state as it supposedly becomes increasingly powerless against an internationally mobile capital that roams the world effortlessly through electronic trading (and globally imposes US cultural values through the media).

Whatever the level of internationalisation of capital in its three forms (money, commodities and production), the non-economic reproduction of capitalism inevitably requires and even strengthens the role of the nation state, although pressure to conform to the one-dimensional imperatives of commerce does not lead to uniformity. In a sense, this has been recognised by those who oppose 'globalisation', pointing to and posing alternatives to its deleterious manifestations. Yet such views remain limited, with capitalism often being understood as merely globalisation – from which all its evil consequences can easily be read off and, in principle, corrected through the implementation of 'adequate' policies. However, globalisation, in whatever aspect and however

understood, should be seen as the effect of capitalism's international reproduction and, consequently, as *the form taken by the laws of political economy in the current period*. In short, whatever meaning is to be attached to globalisation in its application across economic, political and ideological aspects, its fundamental attachment to the production and appropriation of surplus value needs to be sustained analytically.

Capital's Environment

Consider now the problem of environmental degradation. Here Marxism has been accused of privileging the social at the expense of the natural, underestimating the potential for reform, and even of precluding consideration of the natural because of excessive preoccupation with the economic. Whilst Marx had much to say about what we would now term the 'environment', he rarely addressed it directly. But his theories of commodity fetishism and of the labour process offer excellent insights into his emphasis upon both social *and* material factors, as the production of value is always, simultaneously, the production of use values with a physical and environmental content.

This offers the basis for an appropriate approach to the environment, which should be understood in terms of environmental *relations* (and corresponding structures and conflicts) characteristic of *capitalism*. This contrasts with the idea of a trans-historical conflict between humans and ecological systems, or between the environment and the economy. The environmental relations of capitalism are driven by the dominant relations of production. Thus, as is readily recognised, the drive for profitability leads, through the rising organic composition of capital, to the working up of ever more raw materials into commodities and the corresponding extraction and use of energy and minerals, without immediate regard to the resulting environmental impact.

Yet, capitalism is also capable, not least through the development of new materials and through state regulation, of tempering or even reversing, at least in part, such environmental degradation. In this respect, it is important to recognise the multidimensional nature of the environment and the diverse range of issues and outcomes involved: pollution, biotechnology, drugs, vaccines, and so on. Again, the lessons to be drawn from commodity fetishism are significant. Marx argues that commodity relations are social relations expressed as relations between things, appearing at a superficial level purely as monetary magnitudes, thereby concealing as much as is revealed. What is not apparent is the underlying class relations of exploitation, the dynamics to which they give rise, and the reasons for them. By the same token, how commodities have been created as use values, with their corresponding attachment to the environment, is no more revealed to us than the geographical origins of the commodity or its dependence (or not) on sweated or child labour – unless they are overtly deployed, legitimately or not, as a selling point.

Not surprisingly, these ‘hidden’ aspects of the commodity, and its systems of production, distribution and exchange, are inevitably brought to our attention from time to time, inducing reactions against them. Struggles against child labour, in order to reveal its incidence and to campaign against it from the point of production through to the point of sale, are after all directed at the *nature* of humanity and its reproduction in material and cultural respects. By the same token, the reproduction of environmental relations, optimistically dubbed ‘sustainability’, is inevitably a shifting confrontation with a range of aspects of capitalist commodity relations. As long as these relations persist, so will the system of production to which they are attached, with the corresponding tendencies to appropriate, transform and degrade the environment – however much this may be tempered by regulation, which tends to be obstructed or evaded by competitive pressures.

Socialism

What is socialism, and does it offer better prospects in social, environmental and other respects? Socialist experiments in the twentieth century closely associated themselves with Marx(ism), and were seen as Marxist in popular understanding. However, long before the collapse of the Eastern European bloc, controversy had raged among Marxists over the nature of the Soviet Union, with stances ranging from uncritical support to condemnation as (state) capitalism.

In the event, the Soviet Union, over what is in relative terms a brief historical period, went through a remarkable transformation, well captured in Marx's notion of primitive accumulation. For what was largely a semi-feudal society, with a large proportion of its workforce in agriculture, succeeded in creating at breakneck speed a wage-labour market and a relatively advanced and well-integrated industrial base. The period since the collapse of the USSR has witnessed the completion of this transition through the re-emergence of a class of capitalists and private ownership of most of the means of production. Some have argued that such an end result was inevitable, given the low initial productive base and the relentless international hostility faced by the Soviet Union throughout its history. Even so, the pace, direction and consequences of such a transition to capitalism were far from predetermined, as is evident from the less cataclysmic, if equally dramatic, adoption of a misnomered 'socialism with Chinese characteristics' in the world's second largest economy.

Whilst Marx is well known for his criticisms of capitalism as an exploitative system, he is probably just as often thought of as having inspired failed attempts at constructing socialism. Even though there is little work by Marx dealing directly and exclusively with the economics of socialism, Marx does, contrary to much opinion, have a great deal to say on the topic, not least in the *Critique of the Gotha Programme*. Generally, he is less interested in

designing utopian blueprints than drawing upon, and extrapolating from, developments within capitalism itself, proceeding in two separate but closely related ways.

First, he sees capitalism as increasingly socialising life – through the organisation of production, the economy more generally, and through state power – but in ways that are fundamentally constrained by the private nature of the market, private property and the imperative of profitability. Competition tends to socialise capitalist production through the increasingly intricate division of labour on the shop floor and in society as a whole. In addition, the increasing role of the state in welfare provision, redistribution and production itself, through planning or nationalised industries, for example, all anticipate some of the economic and social forms of a future socialism. The same applies to the formation of such things as worker co-operatives, with or without state support.

Yet these embryonic forms are inevitably constrained in content, form and even survival by their confinement within capitalist society, the direct or indirect drive for profitability, and the economic and social system that imposes commercial imperatives upon everyone. Some forms of socialisation – the planning of production within large-scale firms to the exclusion of the market, or the broader and deeper role of money through the financial system – have a very different affinity with socialism than have the provision of health, education and welfare by the state. In this respect, the popular slogan ‘people before profit’ expresses socialist values within an acceptance of capitalism, since profit is allowed as long as it is not privileged. Here there is a neat correspondence with Marx’s critique of Proudhon’s notion that ‘property is theft’, for Proudhon both condemns and accepts property (without which there cannot be theft).

Second, then, Marx’s anticipation of socialism derives from the contradictions within capitalism, irrespective of whether these have evolved into embryonic socialist forms. Most notable is the revolutionary role to be played by the working class, with

capitalism creating, expanding, strengthening and organising labour for the purposes of production, but necessarily exploiting the working majority and failing to meet their aspirations and potential. In the telling phrase of the *Communist Manifesto*, 'what the bourgeoisie ... produces, above all, is its own gravediggers. Its fall and the victory of the proletariat are equally inevitable.'

Such is the means for socialist revolution. Motivation arises out of the various aspects of exploitation, alienation and human debasement characteristic of capitalism, and how they may be superseded. Under capitalism, the working class is deprived of control of the production process, of its results in products themselves, and of comprehensive knowledge of, and influence upon, the workings of society and its development. The workers are also subjected to severe limitations in their prospects and potential achievements, and continuous upheaval in their living conditions, whose fortunes shift with the ebb and flow of the profit imperative and the fortunes of the economy. This is highly wasteful in economic and, more importantly, in human terms. This has led to workplace resistance and political confrontation and, historically, has provided a powerful stimulus for social reforms and anti-capitalist rebellion.

For Marx, the abolition of capitalism marks the end of the *pre-history* of human society. However, the transition to communism is neither inexorable nor unavoidable. The social relations at the core of capitalism will change only if overwhelming pressure is applied by the majority. Failing that, capitalism may persist indefinitely, in spite of its rising human and environmental costs. In all cases, the passage to socialism can only be achieved in stages, rather than being magically completed on demand. Its first phase will inevitably be marked by the continuing influence of the heavy historical baggage of capitalism. Marx argues that, at a later stage, when the division of labour and the opposition between mental and manual labour have been overcome, and the development of the productive forces has reached a level that is sufficiently high

to permit the all-round development of individuals, the advanced phase of socialism (communism) can be reached. As he put it in the *Critique of the Gotha Programme*, 'from each according to his ability, to each according to his needs!'

Issues and Further Reading

Outstanding Marxian studies of class include Geoffrey de Ste. Croix (1984) and Ellen Meiksins Wood (1998); see also the essays in *Socialist Register* (2001, 2014, 2015) and Sam Gindin (2015). Marxian theories of the state are reviewed by Ben Fine and Laurence Harris (1979, chs 6, 9); see also Simon Clarke (1991), Bob Jessop (1982, 2012) and Ellen Meiksins Wood (1981, 1991, 2003).

Capitalist 'globalisation' is discussed in a vast literature. This section draws on Ben Fine (2002, ch.2), Alfredo Saad-Filho (2003a) and Alfredo Saad-Filho and Deborah Johnston (2005); see also Peter Gowan (1999), Hugo Radice (1999, 2000) and John Weeks (2001). Another set of Marxian studies refers specifically to imperialism; see, for example, Anthony Brewer (1989), Norman Etherington (1984), Eric Hobsbawm (1987), *Socialist Register* (2004, 2005) and recent issues of *Historical Materialism*, *Monthly Review* and *New Left Review*. The relationship between neoliberalism and globalisation is also discussed in Gerard Duménil and Dominique Lévy (2004, 2011), David Harvey (2005), Ray Kiely (2005a, 2005b, 2012) and Alfredo Saad-Filho (2003c, 2007).

There is a growing literature on the environment and environmental crisis. See, for example, Ted Benton (1996), Finn Bowring (2003), Paul Burkett (1999, 2003), John Bellamy Foster (1999, 2000, 2002, 2009), Les Levidow (2003), Tony Weis (2007, 2013) and *Socialist Register* (2007). The journals *Capitalism, Nature, Socialism* and *Monthly Review* include a wealth of material.

Marx's comments on socialism and communism can be found mainly in Karl Marx (1974) and Karl Marx and Friedrich Engels

(1998); see also Friedrich Engels (1998, pt.3). This chapter draws upon Ben Fine (1983b). Current debates about socialism are reviewed by Al Campbell (2012), Makoto Itoh (2012), Michael Lebowitz (2003b, 2013), David McNally (2006); see also Michael Perelman (2000), *Socialist Register* (2000, 2013), and recent issues of *New Left Review* and *Science & Society*. The journal *Critique* has published extensively on the Soviet experience; see also John Marot (2012) and Marcel van der Linden (2007).

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