Capitalist development, contradictions and crises
in China, 1993-2011

A case study within a theoretical framework for the comparative study of capitalism

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zur Erlangung des akademischen Grades eines Dr. phil.

vorgelegt von
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## Abbreviations

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<tbody>
<tr>
<td>ACFTU</td>
<td>All-China Federation of Trade Unions</td>
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<td>CC</td>
<td>Comparative Capitalism</td>
</tr>
<tr>
<td>CME</td>
<td>Coordinated Market Economy</td>
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<tr>
<td>CPC</td>
<td>Communist Party of China</td>
</tr>
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<td>CSY</td>
<td>China Statistical Yearbook</td>
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<tr>
<td>COE</td>
<td>Collectively-owned enterprise</td>
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<tr>
<td>CULS</td>
<td>China Urban Labor Force Survey</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
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<tr>
<td>FIE</td>
<td>Foreign-invested enterprise</td>
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<td>FIRE</td>
<td>Finance, insurance and real estate</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>I-O tables</td>
<td>Input-output tables</td>
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<td>LFS</td>
<td>Labor force survey</td>
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<td>LME</td>
<td>Liberal Market Economy</td>
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<td>LTV</td>
<td>Labor Theory of Value</td>
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<tr>
<td>NBS</td>
<td>National Bureau of Statistics (of the PRC)</td>
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<td>NIA</td>
<td>National Income Accounts</td>
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<td>NIPA</td>
<td>National Income and Production Accounts</td>
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<tr>
<td>NPC</td>
<td>National People’s Congress</td>
</tr>
<tr>
<td>POE</td>
<td>Privately-owned enterprise</td>
</tr>
<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
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<tr>
<td>RMB</td>
<td>Renminbi</td>
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<tr>
<td>RT</td>
<td>théorie de la régulation/Regulation Theory</td>
</tr>
<tr>
<td>SASAC</td>
<td>State-owned Assets Supervision and Administration Commission</td>
</tr>
<tr>
<td>SNA</td>
<td>System of National Accounts</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
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<tr>
<td>TFP</td>
<td>Total factor productivity</td>
</tr>
<tr>
<td>TVE</td>
<td>Township and village enterprise</td>
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<td>VoC</td>
<td>Varieties of Capitalism</td>
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1 Introduction

1.1 Problem, relevance, and research question

Chinese society and economy have rapidly and fundamentally changed in the past three decades. At the end of the 1970s, the People’s Republic of China (PRC) had just recovered from more than a decade of political upheaval and economic stagnation caused by the Cultural Revolution. Then a developing economy by most standards, China today is the world’s second largest economy measured by Gross Domestic Product (GDP). In the course of this rapid development, China has turned from a predominantly rural and agrarian society into one in which the majority of its citizens live in cities and work in industry and services.

This process of social transformation has been accompanied by continuous reforms of the economic order away from a planned socialist economy towards what in official dictum is today called a Socialist Market Economy (社会主义市场经济: shēhùi zhūyì shìchǎng jīngjì). Centralized economic planning has apparently given way to the market, the decentralized coordination of economic activity by prices determined by supply and demand. The state-owned and state-controlled sectors of the economy have retreated in absolute size and contribution and arguably relevance, while foreign and privately owned companies today make the greatest contributions to GDP and employment, of which wage labor on a contract basis is its most widespread form. China has furthermore become an integral part of the globalized economy. Foreign direct investment has played an important role in expanding and modernizing China’s industries, its companies were integrated into global value chains, and the commodities they produce are ubiquitous to consumption all over the world.

China’s socioeconomic transformation has been accompanied by a political continuity – at least with regard to the dominant role of the Communist one-party-state – which in the light of political developments elsewhere in the world and the expectations of China-related research of until a decade ago, appears unlikely, even astonishing. While the market has replaced central planning, the Chinese party-state has remained all but unchanged, yet the Communist Party of China’s (CPC) grip to power appears to be stronger today than it was thirty years ago.

This development stands in stark contrast to the expectations frequently expressed in research on China that the transition to a market economy would sooner or later be followed by fundamental political reforms ending one party rule. In this line of argument, the pluralization and individualization of interests, which were believed to go along with the marketization of
society, are thought to be in principle incompatible with the type of authoritarian rule we find in China.

More recently, the idea of a ‘transition’ from plan to market and eventually from authoritarianism to democracy has lost credibility as CPC rule apparently continues to consolidate and the state-sector continues to play and important role in the political economy of China. What has instead emerged in the popular discourse and in academic research on China is the idea of a China model, a specific, possibly developmentalist, configuration of authoritarian polity with a particular mix of state control and interventionism within an otherwise liberal market economic context, which is responsible for China’s extraordinary economic performance. Two terms used to describe this model are “Beijing Consensus” and various forms of “state capitalism” (cf. Dirlik 2011; Breslin 2011; Kennedy 2010; Naughton 2010).

The idea that the Chinese socioeconomic order, despite its official socialist brand, represents a particular form of capitalism coincides with a renewed interest in the social sciences on the diversity and varieties of capitalism (i.e. Streeck 2012; Hall and Thelen 2009; Coates 2005b; Crouch 2005; Boyer 2005; Streeck and Thelen 2005a; Amable 2003; Hall and Soskice 2001), which itself has emerged as a counter-motion to previous research emphasizing a global convergence of socioeconomic orders on a universal liberal market economy in the context of the collapse of the Communist Block and globalization.

As Tobias ten Brink (2013: 14-15) writes in the introduction to his volume on China’s Capitalism, no consensus has emerged in the literature on the questions of what the predominant features of China’s socioeconomic order actually are, what the main drivers for its rapid socioeconomic development have been, or which characteristic problems and contradictions have arisen from this process. This lack of consensus on the general features of China’s development can be attributed to a lack of theoretically guided research in Chinese studies that would allow for such generalizations. ten Brink (2013: 16) points us to statements by David Shambaugh (2009) and Fligstein and Zhang (2011), who support his view. David Shambaugh criticizes the empirical and micro-orientation of current China research:

“My final observation on the state of the field today concerns it [sic] pervasive myopia and failure to generalize about ‘China.’ The field is, in my view, far too microoriented in its foci and increasingly preoccupied with methodological concerns. China scholars today know ‘more and more about less and less’ and see research methodologies as an end in itself rather than as a means to generate broader observations. Whatever the causes, the result has been an unfortunate losing of the forest for the trees. Having deconstructed China over the past two decades in such considerable detail, scholars should begin to put the pieces of China
back together again and offer generalizations about ‘China’ writ large.” (Shambaugh 2009: 916)

Fligstein and Zhang (2011) point out that the various explanations of China’s growth often contradict one another, yet there is usually some empirical support for all of them:

“Given there is some empirical support for all these positions, this implies that the empirical work is probably based on a non-random or narrow sample. Part of this reflects the size of the country and the heterogeneity of the development projects. But more importantly, this reflects the limits of empirical study and the lack of systematic, overarching theoretical thinking about what is happening.” (Fligstein and Zhang 2011: 41)

Fligstein and Zhang propose that the research literature of the Comparative Capitalism (CC) field, including the institutionalist Varieties of Capitalism approach and economic sociology, may well be suited to provide the theoretical framework for a systematic and macro-oriented research agenda on capitalist development in China. However, as will be shown in our review and discussion of recent developments in theoretical research on capitalism, this research field has not produced a consolidated theoretical perspective on capitalism, and has its own conceptual shortcomings, which hamper its ready application to research on China’s socioeconomic order as a historically specific form of capitalism.

In the Varieties of Capitalism (VoC) field these are foremost the tendencies to equate the concept of capitalism with that of market economy and, in consequence, difficulties to theorize change and development in capitalism and its relation to institutional orders. Theoretical approaches hailing from the direction of economic sociology, on the other hand, are much more open to discussing the dynamics and contradictions of capitalist development and their relation to the social fabric, but appear to be reluctant to construct theories of capitalism that reach beyond explaining the empirically observable behavior of social agents and their immediate context.

Furthermore, both theoretical schools appear to be rather reluctant to incorporate actual economic analyses into their research. As will be argued later in more detail, this is the case because both seek to compensate for the perceived shortcomings of orthodox economics by supplying complimentary, extra-economic explanations, without, however, engaging critically with the fundamental assumptions of the economic theory they seek to enhance.

In this light, any study of Chinese development as capitalist development requires at first that we deal theoretically with the concept of capitalism itself. What is capitalism, what are its salient features, and what would an appropriate analytical approach look like? If we wish to
understand China’s socioeconomic order as a specific kind of capitalist order and China’s socioeconomic development as a specific kind of capitalist development, then we need to theoretically specify what the generic features of capitalism are. A case study guided by the specification of capitalism’s generic properties will then set the Chinese case into a comparative perspective by revealing the relation of generic and specific forms of capitalist development within it.

The purpose of this doctoral thesis then is to

1) contribute to the ongoing debate on the varieties and diversity of capitalism in the social sciences, and

2) to apply a theoretical framework to an analysis of the case of capitalist development in China to specify the salient features of its socioeconomic order, the sources of its rapid development, and the contradictions and crises that it has produced.

The study will thus follow these two guiding research questions:

• How can we theoretically conceptualize capitalism to account for its historically varied forms and dynamics, and, based on such a conceptualization, how can we devise an analytical framework suitable for the analysis of a specific case of capitalist development?

• How can China’s capitalist development be analyzed guided by such a theoretical framework, and, more specifically, what is the relationship of its general and specific features with regard to its socioeconomic order, the sources of its rapid development, and its contradictions and crises?

1.2 Outline and method

This doctoral thesis is divided into four major parts: a literature review in chapter 2, analyzing and discussing recent research on capitalism in the social sciences and research on China’s socioeconomic order; the construction of a theoretical framework to study Chinese capitalism in comparative perspective in chapter 3; finally the case study of capitalist development in China comprising an analysis of the Chinese accumulation regime and of the mode of regulation in chapters 4 and 5 respectively. Chapter 6 will conclude this thesis.

Our review in chapter 2 finds that the newer research literature that is at the heart of the discourse on Comparative Capitalism (CC) in the social sciences, i.e. literature in the traditions of the Varieties of Capitalism approach and in economic sociology, fails to adequately theorize capitalism as a socioeconomic order. The CC literature aims to address shortcomings in the
conceptual tenets of neo-classical economics, such as the axiomatic concepts of the economic man and the general equilibrium model of the market, in explaining the persistence of varied political-economic orders in a globalized capitalist economy. The CC literature itself, however, suffers from a variety of conceptual and theoretical shortcomings that are ultimately owed to an apparent unwillingness to fundamentally engage with concepts and theories of the economic. It is thus difficult to find critical discussions or even only definitions of such terms as capitalism, market economy and economy in the mainstream CC literature.

In CC research of the Varieties of Capitalism brand, we find instead an emphasis on the role of institutions, which are, metaphorically spoken, applied as scaffolding to a concept of capitalism equaling market economy, directing no critical attention to these concepts per se (i.e. Hall and Soskice 2001). Similarly, the post-Granovetterian (New) Economic Sociology in its central concept of *embeddedness* seeks to explain how wider social relations overlay the economic rationalism of market relations. The theory’s focus on individuals and their immediate social context removes from view a macro perspective on capitalist order and development. As a result, New Economic Sociology also accepts uncritically the idea of capitalism as market society by focusing its analysis on forms of social organization superimposed on market relationships at the micro level.

Thus, in both theoretical schools, ‘capitalism’ or usually just ‘the economy’ remain un- or under-theorized concepts, which merely provide “coincidental research material” (Streeck 2010b: 8) for research interests that remain firmly confined in the disciplinary boundaries of political science and sociology and their respective foundational ontologies, which exclude the economic as field of theoretical inquiry. This has led to the creation of a CC literature that knows little of and cares little for the foundations of capitalism as a socioeconomic order, its development, dynamics, contradictions, and crises.

Following this, we review the literature on Chinese political economy and socioeconomic development and find similar theoretical shortcomings with respect to the concepts of market economy or capitalism. As ten Brink (2013), Shambaugh (2009), and Fligstein and Zhang (2011) have pointed out, this makes it difficult to produce plausible statements about the features of China’s socioeconomic order and development from a macro perspective by relating these specific features to the theoretically determined general properties of capitalism.

Based on our analysis of the existing literature, we conclude that the problems in much of current CC literature can be addressed by reincorporating Marx’ Critique of Political Economy into research on capitalism, and proceed to outline its basic tenets in chapter 3. We argue that the labor theory of value (LTV) is fundamentally a theory that analyzes the economy of
capitalism as one founded on hierarchical and contradictory social relations. As such Marx’s analysis of capitalism in *Das Kapital* provides the theoretical foundations for a macro perspective on capitalism in which its general economic, social, and political relations are already specified.

Marx’s Critique of Political Economy is developed at a level of abstraction that does not immediately lend itself to empirical analyses without risking the pitfalls of economic determinism, a problem that has been addressed, however, in works of the French *théorie de la régulation* (from now on simply regulation theory: RT), which provides a number of intermediary analytical concepts for the analysis of concrete capitalist social formations. Originally founded on a critical engagement with Marxian theory, regulation theory emphasizes the normalcy of contradictions, conflict, and crises in the process of capitalist reproduction and thus distances itself from neo-classical conceptions of market economy, which identify theoretically exogenous (and thus unexplained) disturbances of markets as causes of crises. The general comparative *Erkenntnisinteresse* of RT is how, despite and through its conditions, the reproduction of capitalist accumulation takes place over extended periods of time.

The concept of *accumulation regime* provides the macroeconomic perspective for the analysis of the specific patterns of capitalist reproduction in a given case. The concept focuses on processes of social transformation that affect sustained increases in the rate of surplus value and the specific conditions that determine the form under which this process of social transformation takes place. From the standpoint of Marx’s economics, this process can be analyzed from two points of view: 1) the accumulation of capital, including the production of value and surplus value, which causes the continued transformation of the labor-capital relation, and its relation to 2) the circulation of capital within certain structures of capitalist reproduction.

The relation of accumulation and circulation as the combined process of capitalist reproduction observable in the patterns of an accumulation regime can be explained through an analysis of its relation to the so-called *institutional forms*, of which *the wage-relation*, and the *forms of competition* are central for our analysis, and which in combination with other institutions form a *mode of regulation*. The relationship between the accumulation regime and the mode of regulation is determined by the relationship of the specific patterns of capitalist reproduction (accumulation and circulation) and the role of the institutional forms in temporarily mediating the contradictions of the specific patterns of reproduction, while at the same time contributing to their eventual manifestation as crises in specific form. This relationship would provide a central criterion for a comparison with other cases. In contrast to
much of the CC literature, this approach thus provides an integrated theoretical perspective on capitalist accumulation and development and its relationship to institutions.

We proceed with our case study of capitalist development in China in chapters 4 and 5, which is based on the evaluation of macroeconomic statistics, as well as current Chinese and ‘Western’ research literature.

Before outlining the content of these chapters, we should explain why the focus of our analysis is on the years 1993-2011, while the beginning of China’s ‘capitalist transformation’ is in retrospect usually thought to have begun in 1978, the beginning of the period of reform and opening (gaige kaifang: 改革开放). Our own shorter time frame has been chosen for theoretical and methodological reasons. With regard to theory, we do not believe that the period before the nineteen-nineties and its patterns of socio-economic development can be sufficiently understood by our analytical framework. As we will discuss in detail in chapter 5.1, the 1980s should be viewed as a period of socialism with market elements, whereas we can speak of capitalism only as a result of the reforms in the first half of the 1990s. Nevertheless, the confrontation of society and party-state over the contradictions of reforms in the 1980s is important for understanding how China took the ‘road to capitalism’. Concerning methodology, the data that we require for the analysis of China’s accumulation regime is only available for the years 1993 and onward.

The analysis of the Chinese case is designed as an interpretative case study (Lijphart 1971) with the aim to understand and explain its specific features of capitalist development in which the theoretical framework guides the empirical focus of the analysis. In the context of the research interest and questions formulated above, the case study thus will help to

- understand how the salient features of Chinese capitalism have contributed to a process of sustained rapid accumulation and social transformation, associated with in international comparison extraordinary economic growth rates; and to
- explain why capitalist development in its specific form in China has now reached a point where continued successful reproduction seems unlikely in the face of crisis tendencies, due to the maturation of specific contradictions within the development model.

We will analyze the macroeconomic patterns of the Chinese accumulation regime for the period 1993-2011 in chapter 4 in two parts. Following the analytical division of capitalist reproduction outlined in our discussion of Marx’s work, the first part will present an analysis of the patterns of the reproduction of capital from the standpoint of capital accumulation, meaning the production of surplus value, the organic composition of capital, and profit, while
the second part will analyze the patterns of the circulation of capital, i.e. the relation of profits and wages as well as investment and consumption in Chinese economic development.

The first part of the analysis is based on our own calculation of Marxian categories of value from national accounts and input-output tables with the method developed by Shaikh and Tonak (1994). It will be shown on the basis of these calculations that the rate of surplus value has risen strongly in the late 1990s and the beginning of the 2000s, but has since tended to stagnate or decline. During the whole period of observation, the organic composition of capital is rising and correlates with a secular decline in the rate of profit, which is temporarily counteracted in the period where the rate of surplus value rises. The data thus indicates a tendency for overaccumulation and for the rate of profit to decline.

The second part of the analysis is based on a critical evaluation and adjustments to income and expenditure side GDP data and an evaluation of the recent literature on functional income distribution in China. The data reveal a tendency to disproportionate development in a process of economic growth led by profits and investments to the detriment of wages and consumption. A tendency to overproduction is compensated for by the expansion of and reliance on exports.

The two sides of the accumulation regime thus exhibit analytically distinct contradictions and tendencies to crises in their development, both of which are, however, synthetically linked to a particular mode in which the production of surplus value has been expanded in the period under observation.

This leads us to the analysis of the mode of regulation and its institutional forms in chapter 5. Our analysis will focus on the two central institutional forms for capitalist reproduction, the wage-relation and competition. Both analyses also include the role of finance and credit and the world market. The role of the party-state is implicated at all times.

Our analysis of the wage-relation reveals the importance of its extensive restructuring in the late 1990s and early 2000s, which causes the rate of surplus value to increase at that time. Our analytical focus is on the expansion of capitalist labor relations and the concrete forms that the commodification of labor takes within the relevant institutional frameworks and the effects of this transformation on labor and production relations, investigating the informalization of work, and the relationship of work hours, wages, and labor productivity. Finally, we will show that the mediation and reproduction of the contradictions in capitalist reproduction within the specific institutional confines of the wage-relation has now reached a point where, due to structural changes and class struggle, 1) accumulation is not sufficiently productive to sustain an adequate level of profitability in the face of rising real-wages, while at the same time 2) consumption remains inadequately developed to provide sufficient aggregate demand for the
extensive expansion of commodity production, leading to overproduction and crisis. Even though the Chinese economy continues to grow, the current situation presents a crisis in the sense that the contradictions in the dominant features of the wage relation have matured and reached a point where their continued reproduction seems to be unsustainable. Accordingly, the new Chinese leadership under Xi Jinping faces the challenge of ‘re-balancing’, i.e. of defining and establishing a new development pattern for the Chinese economy. The 2013 decisions of the 3rd Plenum of the 18th Central Committee indicate the severity of this challenge.

Competition is the process by which the reproduction of individual capitals is integrated in the total social reproduction of capital. Our analysis of the forms of competition will in a first step analyze the relationship of ownership forms and industrial structure. We will then focus primarily on the relations of competition within and between the predominantly capital-intensive and state controlled and the predominantly labor-intensive and privately owned sectors of the industrial economy. Our analysis reveals that while the predominantly privately owned labor-intensive manufacturing sector is the driving force of accumulation during our period of observation, parts of the state-sector are strategically positioned in protected upstream industries so as to skim off surplus value produced in the labor-intensive industries. This positioning of the protected state-sector within the relations of competition exacerbates the contradictions produced by the profit-led, extensive accumulation process pursued in the mostly privately owned labor-intensive manufacturing sector.

We will also show how the policies pursued by the Chinese state as a response to the impact of the global financial crisis have been inserted into and made use of the state-sector’s positioning on the “non-level playing-field” (Yueh 2013: 309) of competition. While having offset the worst possible consequences of the demand-side shock caused by the global financial crisis, these policies have at the same time contributed to the exacerbation of the tendencies to overproduction and overaccumulation in the Chinese economy.

We conclude the thesis in chapter 6 by a summary of our analysis and findings by discussing 1) how the rapid process of capitalist accumulation as a process of social transformation, which has brought about very high economic growth rates over an extended period, has at the same time produced the contradictions that now signal the exhaustion of the current mode of development, and 2) how the mediation of this accumulation process by the relevant institutional forms is at the same time mediation and reproduction of its associated contradictions. Thus, it is shown how the mode of development, while on the one hand sustaining a process of rapid accumulation and social transformation, on the other hand brings about the conditions for its own demise.
2 Literature Review

2.1 ‘Capitalism’ in the comparative capitalism literature

The following review explores the theoretical and conceptual foundations of existing research on capitalism in the social sciences. How do the various approaches of the comparative capitalism literature that have been elaborated and refined in recent years seek to explain the phenomena of capitalist growth and development, diversity, and crisis? It will be argued, that the debate in the current social science literature on capitalism, while frequently evoking its name, shows insufficient conceptual clarity about its subject matter. ‘Capitalism’ or usually just ‘the economy’ remain un- or under-theorized concepts, which merely provide “coincidental research material” (Streeck 2010b: 8) as discussed in the introduction. This has led to the creation of a so-called political economy that shows little regard for the foundations of capitalism as a socioeconomic order, its development, dynamics and contradictions, and crises and can therefore hardly be accurate in its attempts to explain the development of China’s political and economic order in comparative perspective.

Research on capitalism in the social sciences, and predominantly in political science and sociology, has a long tradition that can be traced back to the works of Marx, Weber, and others. Since ca. the 1960s (i.e. Shonfield 1964), researchers equipped with the ideas and theories of the New Institutionalism began to challenge widely shared convictions born by the theoretical tenets of modernization theory and behaviorism as well as neo-classical economics, that modern capitalist societies were on a path to social, political and economic convergence. Ever since, researchers in political science and sociology have debated how and why national political economies or “capitalisms” diverge and converge. The issues that have been debated within the field have concerned all areas of socioeconomic organization, such as the organization of labor, hierarchies and organization within and between businesses, the structure of markets and other forms of economic coordination (for an overview see Crouch and Streeck 1997; Kitschelt et al. 1999).

The arguments made about the relation of markets and institutions in capitalism have changed with the times. The apparent success of economies such as Germany’s, Japan’s, and those of the East Asian developmental states in the 1970s and 1980s, within which non-market means of economic coordination played an important role and whose economies were linked to a wide range of non-economic social institutions, provided ample material for social scientists
to challenge the conventional wisdom of neoclassical economics about the efficiency of free or freer markets. ‘Institutionalized’ economies, it seemed, were more competitive and more efficient than their liberal-market counterparts (Crouch and Streeck 1997).

The counterpunch to this reasoning came when these economies, especially Japan and Germany, began to show much weaker performance than their liberal Anglo-American counterparts by the end of the nineteen-eighties, as well as with the Asian crisis, which disenchanted the state-led economic model of the East Asian developmental state. Subsequent reforms especially in labor and financial markets in the affected economies initially gave renewed force to the argument that capitalist economies were essentially on a path to convergence driven by the competitive pressures of economic globalization.

A new generation of studies, however, showed that many differences persisted in the organization of national political economies, in spite of the increasing competitive pressures of globalization that virtually all capitalist economies had been exposed to. To explain how and why divergence persists has once again become the subject of intense theoretical debates on capitalism in the social sciences at the turn of the millennium. This research can be broadly labeled as Comparative Capitalism, a field that is predominantly anchored in the sub-disciplines of neo-pluralist political science and economic sociology.

2.1.1 Varieties without capitalism

Arguably the most influential theoretical framework in the Comparative Capitalism literature has been created in the work of Hall and Soskice in their edited volume on Varieties of Capitalism (Hall and Soskice 2001). A related research interest and theoretical approach has been pursued by Bruno Amable (2003) in his volume on the Diversity of Capitalism. Both works provide prime examples of this research paradigm.

The VoC school discusses how the diverging institutional configurations of market economies persist due to institutional complementarities and comparative institutional advantages. The theory and concepts developed in the VoC approach weakened earlier theoretical arguments emphasizing the convergence of capitalisms on a single neoliberal model under the pressures of globalization by explaining how national varieties of capitalism persisted due to the role that non-market institutions played in providing diverging solutions to the coordination problems posed to political and economic agents. The point made was that a most efficient variety of capitalism on which all other varieties would converge didn’t exist and that instead endogenous institutional complementarities created ‘comparative institutional advantages’ for national economies.
In Hall and Soskice’s work, the varieties of capitalism were represented by two ideal typical cases, the liberal market economy (LME) and coordinated market economy (CME). Amable, on the other hand, devised a more fine-grained typology of five models of capitalism, the market-based, social-democratic, Continental European, Mediterranean and the Asian models.

To explain the continued existence of LMEs and CMEs, Hall and Soskice focus on “companies as the crucial actors in a capitalist political economy” and a “relational view of the firm” (Hall and Soskice 2001: 6ff.). According to this perspective, firms need to coordinate with a number of internal and external actors, which creates principal-agent and transaction cost problems for them. These can be solved either through market or non-market means of coordination. In ideal-typical LMEs coordination problems are solved predominantly by arm’s-length relations and market competition; in CMEs coordination is assured by non-market means, for example networking and collaboration.

Amable’s models of capitalism are based on the configuration of the five institutional fields of 1) product market competition, 2) wage–labor nexus and labor-market institutions, 3) financial intermediation and corporate governance, 4) social protection and welfare state, and 5) the education sector (Amable 2003: 14). The concrete configuration of these fields depends on the preferences of dominant social groups and blocs, which arrange the relevant institutions according to their political strategy and the political compromises that can be reached.

Hall and Soskice as well as Amable employ similar rational-choice and game-theoretical concepts of equilibrium to explain the persistence of institutions as rules and regulations that are based on a particular compromise of interests. Furthermore, both believe that the institutional configurations of national economies are sustained by institutional complementarity, a term that connotes the “interdependence of institutional influences on agents’ decision-making” (Amable 2003: 59). The differences in coordination between CMEs and LMEs, for example, are thus reinforced by the mechanism of institutional complementarities through various operational logics so that “nations with a particular type of coordination in one sphere of the economy should tend to develop complementary practices in other spheres as well” (Hall and Soskice 2001: 18). “Institutional complementarity means that the functional performance of an institution A is conditioned by the presence of another institution B and vice versa” (Höpner 2005), where functional performance can refer, for example, to an institution’s ability to provide solutions for coordination problems.

The rational-choice institutionalism underlying the VoC literature allowed it to deliver functionalist explanations rooted in principal-agent theory and transaction-cost economics,
which, as Streeck writes, imbued it with a language that “lent itself to being presented and received as so much more ‘rigorous’ and ‘theoretical’ than that of competing models of capitalist diversity” (Streeck 2010a: 23).

The wide reception and adaptation of the functionalist VoC approach in the CC literature has, however, also stirred a critical debate about its theoretical foundations, aiming either to refine the approach or to supply alternative concepts. According to this critique, the VoC approach’s functionalist understanding of institutions in capitalism, i.e. the complementarity of institutions within national models of capitalism, leads to static conceptions of such configurations (Coates 2005a; Crouch 2005). Empirical evidence, however, shows that the institutional configurations of political economies are much more dynamic than expected by the VoC approach (i.e. Schneider and Paunescu 2012).

While the theoretical assumptions of VoC may be well suited to explain the endurance of different configurations of capitalism, the same assumptions make it difficult to come up with theoretical explanations of transformations of an established institutional order. As the theoretical framework emphasizes the persistence of institutional variety on the basis of institutionalized compromises and complementarities converging on an overarching mode of coordination, transformative developments must necessarily be conceptualized as punctures or ruptures of the established equilibrium, the occurrence of which can only be explained by factors exogenous to the model. The empirically obvious dynamics of capitalist development thus remain outside the explanatory reach of the VoC approach, which instead provides static conceptions of capitalist order.

While any theory is necessarily limited in its scope of explanation, the problem here is more substantial. We can perceive of exogenous causes of change for example in the form of changes to the international political economy in which a national political economy is embedded, as manifest in the gradual phenomenon of globalization or the sudden shock of the global financial crisis of 2008. It should, however, be quickly understood that these developments are themselves merely expressions of cumulated developments in various national political economies. The reliance on exogenous explanations of change points out the substantial blind spots in the theoretical framework overlooking endogenous sources of these developments.

Hall and Thelen’s discussion of the endogenous sources of change tries to address this problem: “[T]he history of change in the European political economies should not be written as if it were entirely a series of responses to external shocks. The challenge facing analysts is to see it as a process partly endogenous to the character of the institutions developed in each
nation and driven by the unintended consequences that flow from those institutions” (Hall and Thelen 2009: 16). To explain endogenous change, Hall and Thelen point to the role of the state and of private actors, who change institutional frameworks “driven by new market pressures and opportunities” and “responding to economic developments” (Hall and Thelen 2009: 17). These dynamics of socioeconomic development as sources of change, however, are taken for granted and are never analyzed or theoretically explained.

Instead, Hall and Thelen argue that the relevant changes, which should be observed, are those that “are likely to be consequential for the efficacy of the economy and related social outcomes” and add that the “varieties-of-capitalism framework provides an answer, suggesting that the changes that should command our attention are those affecting the capacities of firms to coordinate strategically” (Hall and Thelen 2009: 17). The argument short-circuits here as it relegates the problem of change to the problem of coordination, even though the theoretical solution to the latter was the cause of the problem of the former.

Amable cites technological change as one of the possible sources of endogenously and exogenously induced change. Related decisions by economic agents may cause disturbances in the equilibria of institutional compromise, thus inciting actors to politically renegotiate it. Owed to institutional complementarity, small, localized action may translate into greater change (Amable 2003: 69ff.). Amable’s core concerns, however, are not socioeconomic dynamics as sources of change, but the process by which change may be theorized as a political process of the renegotiation of hierarchized institutional equilibria, which in turn alters the institutional configuration of the economy. Similarly, Amable and Palombarini (2009) and Schmidt (2009) emphasize the role of politics and the state and neglect socioeconomic dynamics as a source of institutional change in political economy.

Streeck and Thelen (2005b) provide a detailed typology of empirically observable institutional dynamics and change in capitalism from a historical-institutionalist perspective, without, however, delivering theoretical explanations for its origins. Following the judgment of Bohle and Greskovits (2009), it can be said that while research on institutional change has been extensive in the wake of VoC, attempts to incorporate change into the theory have met with limited success. How to explain change and how to incorporate theories of change into theories of capitalist diversity has thus become one of the focal points of the academic debate that unfolded in the wake of the original VoC literature and the critique of the concept (cf. Lütz 2006; Becker 2006; Deeg and Jackson 2007; Bohle and Greskovits 2009: 368-369; Martin 2005).
In our opinion, the reason why the literature reviewed so far is not well suited to conceptualize and explain capitalist change and dynamics is located in its fundamental (mis-)understanding of the relationship between institutions and the economy. Even though the research presented trades under the Varieties of Capitalism name, its main concern is in fact with varieties of institutions. Institutions figure as the independent variable and capitalism as the dependent variable. Particular varieties of capitalism are explained by the properties of institutions, so that explanations run unidirectional between cause (institutions) and effect (the economy). This way of explanation also entails the ontological separation of ‘the political’ or ‘the social’ as manifest in institutions, and ‘the economy’.

Consequentially, research devotes little attention to the economy itself empirically or theoretically. Capitalism, while often invoked by name, is used synonymously with the term market economy and receives no attention as an independent theoretical concept. The concept of market economy, too, is only used in its neo-classical meaning and receives no critical attention. The equation of capitalism and market economy, however, reduces our understanding of socioeconomic relations to relations of voluntary exchange between equal market participants and the associated problems to those of efficiency and coordination, which can be solved through adequate institutional governance. The problems of inequality, power, violence, crisis, to name a few, that are historically associated with the concept of capitalism, thus disappear from view.

Indeed, most of the research on the so-called varieties of capitalism manages without any explicit concept of what the economy in general, a market economy, or not to mention capitalism, are (cf. Bruff and Hartmann 2014). All these are taken for granted and remain unexplained, as ‘the economy’ is merely the field in which inquiries about institutional design take place.

Furthermore, without a theoretical specification of the commonalities of their object of inquiry, i.e. the common properties of ‘the economy’, ‘the market’ or ‘capitalism’, studies in the Varieties of Capitalism field lack the criteria for the selection of cases and points of comparison if the task is to explain institutional variety as capitalist variety (cf. Jessop 2013a).

2.1.2 Economic sociology, the economic, and capitalism

Another field that has become part of the CC discourse is that of the (New) Economic Sociology, which, with its concept of embeddedness, has developed a more sophisticated approach to the study of socioeconomic relations than the Varieties of Capitalism literature, as Bruff and Hartmann (2014) do critically argue.
The concept of embeddedness, very generally speaking, describes the notion that economic action is embedded within a wider context of social institutions, and has served as the conceptual foundation for sociological inquiry into matters economic. As Krippner and Alvarez (2007) argue, embeddedness on the one hand, serves as a potent critique of neoclassical economics’ understanding of the economy as a self-regulating market economy, but on the other hand remains relatively unspecified, as diverging understandings of the concept of embeddedness have developed from economic sociology’s critique of economics.

The ontology of neoclassical economics creates the economy as an analytically autonomous object from the sum total of the rational actions of atomized individuals, which make up the self-regulating market. Two distinctive concepts of embeddedness have been created from sociology’s critique of this neo-classical ontology. The older one is based on Polanyi’s work, which critiques the notion of the economy as an autonomous field of research by pointing out how the economic and the social are co-constituted and thus ontologically inseparable. The other concept stems from Granovetter’s work and addresses the social context of economic action, criticizing the notion of the atomized individual.

2.1.2.1 Polanyi

One of the key foundations to economic sociology has been provided by Karl Polanyi’s seminal work The Great Transformation. In the Polanyian sense, the economy is an institutionalized process of production and distribution of the material goods required for a society’s subsistence. The organizational principles and rationality of such an economy are not universal in character, but are historically determined by social institutions.

“No less a thinker than Adam Smith suggested that the division of labor in society was dependent upon the existence of markets, or, as he put it, upon man’s “propensity to barter, truck and exchange one thing for another.” This phrase was later to yield the concept of the Economic Man. In retrospect it can be said that no misreading of the past ever proved more prophetic of the future. For while up to Adam Smith’s time that propensity had hardly shown up on a considerable scale in the life of any observed community, and had remained, at best, a subordinate feature of economic life, a hundred years later an industrial system was in full swing over the major part of the planet which, practically and theoretically, implied that the human race was swayed in all its economic activities, if not also in its political, intellectual, and spiritual pursuits, by that one particular propensity. Herbert Spencer, in the second half of the nineteenth century, equated the principle of the division of labor with barter and exchange, and another fifty years later, Ludwig von Mises and Walter Lippmann could repeat this same fallacy. By that time there was no need for argument.” (Polanyi 2001: 46)
As can be read from the vivid quote above, the dominant role of the market economy in capitalism and its organizational rationality present but one historically specific form of socioeconomic order. It is the market as a historically specific institution that subjects man’s economic behavior to its rationality of barter, sidelining other rationalities of economic organization such as reciprocity, redistribution, or householding (Polanyi 2001: 59).

Important to Polanyi’s reasoning, however, is that while the market is but one of many historical economic institutions, it is nevertheless singular. The argument goes as follows: The economic rationalities of reciprocity, redistribution, and householding required are co-embedded in institutions that also follow other non-economic rationalities of social organization. The economic rationality of barter, on the other hand, creates the market as an institution exclusively of and for itself. As the economy remains the foundation of any social organization, the rationality of the market forces itself on social organization as a whole: “Instead of economy being embedded in social relations, social relations are embedded in the economic system” (Polanyi 2001: 60).

The market as a ‘disembedded’ economic institution has in (neo-) classical economics spawned the idea that it was also an institution self-regulated by the supply and demand and prices of commodities, which include commodified land, labor, and money. Polanyi points out, that land, labor, and money, while indispensable in the market-economic organization of industry, are fictitious commodities that need to be provided and subdued to the economic rationality of the market by non-economic means. Furthermore, the social devastation caused by the commodification of land and labor require further intervention into the market with the aim to check its expansion and tame its ruthless rationality. “[…] the commodity fiction disregarded the fact that leaving the fate of soil and people to the market would be tantamount to annihilating them. Accordingly, the countermove consisted in checking the action of the market in respect to the factors of production, labor, and land. This was the main function of interventionism.” (Polanyi 2001: 137).

Thus, “[f]or Polanyians, the notion that markets could exist outside of state action is simply inconceivable. This is not a matter of some markets being more or less social than others (in the same sense that some markets may be more or less personal in the Granovetterian tradition); nor is it a matter of the state simply setting the context for market transactions” (Krippner and Alvarez 2007: 233). Instead, the state and with it “a complex alchemy of politics, culture, and ideology” (Krippner 2001: 782) are invariably present in the constitution and reproduction of the market economy.
In summary, Polanyi’s concept of the market economy is one that criticizes orthodox economic conceptions of the self-regulated market and the accompanying idea that any economy can be studied as an analytically autonomous object. Vice-versa, Polanyi’s analysis of the market economy demonstrates how its logic encroaches on other social institutions. Crucial for Polanyi’s elaboration of these specific economic relationships, in our opinion, is the underlying concept of the economy as the social (gesellschaftliche) organization of production and distribution that serves as the material restraint of social organization, as “…no society can exist without a system of some kind which ensures order in the production and distribution of goods” (Polanyi 2001: 74). Here the concept of the economic and its place and relationship to the overarching concept of the social forms a clearly elaborated foundation for the inquiry into the historically concrete. Following Polanyi, the analysis of China’s political economy thus needs to explain capitalist development as a process of social transformation and its relation to the transformation of the relations of production and distribution.

2.1.2.2 Granovetter

The idea of markets as social organization leads to the concept of institutional embeddedness. Mark Granovetter (1985) reintroduced “the problem of embeddedness” and laid the groundwork for what would become to be called the New Economic Sociology. Granovetter’s reworking of the concept of embeddedness describes how economic actors are embedded into networks of social relations, which influence their decision-making.

With this concept of embeddedness, Granovetter hopes to overcome, on the one hand, conceptions of the atomized individual in economics removed from any social context, and, on the other hand, conceptions of individual action in previous sociological work, where it is utterly determined by social context. “Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations” (Granovetter 1985: 487). The concept of embeddedness thus tries to leave room for the purposive decision-making of individual actors, while moving the context of decision making away from the market to social networks. In this view then, the domain of economic sociology is the analysis of social networks that influence the decision making of economic actors as a prerequisite for economic activities, and, crucially, the degree to which non-economic social relations modify the economic rationality of markets. Economic outcomes as the dependent variable are explained from the structural properties of social networks as the independent variable (cf. Krippner 2001; Beckert 2007).
Granovetter aims to overcome the division of labor between economics and sociology, established by Parsons and others, by re-engaging sociology with research on economic phenomena. “In avoiding the analysis of phenomena at the center of standard economic theory, sociologists have unnecessarily cut themselves off from a large and important aspect of social life and from the European tradition—stemming especially from Max Weber—in which economic action is seen only as a special, if important, category of social action.” (Granovetter 1985: 507)

As can be shown, he nevertheless does this by adhering to the ontological division into separated disciplinary fields of ‘the social’ and ‘the economic’, that tends to reassert itself in more current work on economic sociology (Krippner 2001). Granovetter, for example, deems it sufficient to show that there is “social overlay in economic transactions” (Granovetter 1985: 495) to invalidate the neo-classical conception of the market. While this view may be sufficient to debilitate economics’ concept of the atomized and rational *homo economicus*, Granovetter’s and economic sociology’s adherence to this ontological division also leads them to, at least implicitly, adopt neo-classical economics’ conceptualization of capitalism as a market economy and to conceive of ‘the economic’ and ‘the social’ as two spheres with externalized relations to one another. This conceptual contradiction also inhibits New Economic Sociology’s ability to understand economic action as social action, as claimed above, a problem that has become the subject of debate more recently (see below).

What Granovetter’s concept of embeddedness thus describes is how social relations override the economic rationality of the market and how the sphere of ‘the social’ encroaches upon the sphere of ‘the economic’. As Granovetter writes himself, his theory makes no claims about explaining the sources of large-scale economic or political change (Granovetter 1985: 506), owed to the micro-level of analysis in which the economic can be left uninvestigated and unexplained.

As can be seen from this short description, the two concepts of embeddedness and their underlying theoretical understanding of the relationship of ‘the social’ and ‘the economic’ differ quite substantially between Polanyi and Granovetter. The Polanyian concept offers potential for a dynamic view of the economy as a historically specific form of social action and organization, of which the capitalist market economy is one peculiar instance. In contrast, Granovetter’s concept takes the market for granted as the dominant form of economic organization and focuses its analysis on superimposed forms of social behavior. Whereas Polanyi offers an integrative perspective on the economy as the specific form of social organization by which material needs and wants are satisfied, with Granovetter the economic remains unexplained and conceptually separated from the social. The Granovetterian approach
is thus not suitable for an analysis of the Chinese case of capitalist development due to its micro perspective and insufficient conceptualization of the economic.

2.1.2.3 Current debates in economic sociology

The concepts of embeddedness, both in the Polanyian and Granovetterian sense, have recently received renewed attention in economic sociology, often in relation to the question of how the relationship of the social and the economic can be adequately conceptualized. Granovetter’s concept of embeddedness has been criticized, for example, by Krippner (2001), Krippner and Alvarez (2007), and Beckert (2007).

Krippner (2001) as well as Krippner and Alvarez (2007) see the main problem with Granovetter’s concept of embeddedness in the separation of the economic and the social discussed above. “The concept of embeddedness posits that the world of the market exists apart from society even as it attempts to overcome that divide. It is the premise of this article that we will be unable to grasp markets fully as constitutive of and constituted by social relations until the concept of embeddedness is liberated from intellectual antecedents that presuppose the separation of economy from broader realms of social life” (Krippner 2001: 798). Until then, Granovetter’s approach “…leaves intact the notion of an analytically autonomous economy…” (Krippner and Alvarez 2007: 231).

(Beckert 2007: 9) criticizes that Granovetter’s concept “does away with Polanyi’s concern with the stability of social order, by focusing exclusively on the process of market exchange itself and not on the larger social system” (Beckert 2007: 9).

The relationship of the economic and the social also is important to the critique of Gemici (2008) of Polanyi’s work. On the one hand, embeddedness serves as a holistic methodological principle, according to which society and economy are always enmeshed. On the other hand, analytically the concept of embeddedness and its counterpart disembeddedness imply the possibility of a separation of economy and society. This, Gemici criticizes, “reifies the market economy in the way mainstream economics conceptualizes it” and “it purports an image of past economies where all economic activities are carried out in the name of non-economic ends” (Gemici 2008: 26).

We would argue that this view of Polanyi’s work is, at least with regard to “The Great Transformation” unjustified. Polanyi criticizes the neo-classical concept of the self-regulated market as untenable at its very inception (e.g. the fictitious commodities). With Polanyi, the term disembeddedness does not imply an ontological separation of the social and the economic, but instead a shift in the dominant logic of social organization, caused by the extension of the rationality of the market to all areas of social life—an extension that that will meet with
resistance from those negatively affected by it and which can be sustained only by social institutions that do not follow the rationality of the market, such as the state.

Gemici’s understanding of Polanyi and his critique are developed out of a desire to understand economic action from a general theory of social action: “[Embeddedness] does not provide an alternative theoretical framework capable of demonstrating how social factors enable and structure human action”. Gemici argues that research should develop “theoretical frameworks that show how economic activities are social in the first place” (Gemici 2008: 27-28). This demand is mirrored by a statement of Beckert and Streeck (2008: 24-25) claiming that “economic action in contemporary capitalist societies is to be treated as a special sort of social action”. Both statements mirror Granovetter’s understanding of Weber quoted above.

From the above, and in anticipation of the following discussion of Streeck’s and Beckert’s recent work, we would argue that the (New) Economic Sociology’s desire to distance itself from the theory and concepts of neo-classical economics has in fact developed into a desire to distance itself from the economic as a concept per se. In contrast to Polanyi, whose work is built on a clear concept of the economy as the social organization of production and distribution under conditions of material constraints, Streeck, Beckert and Gemici do not specify what the economy is conceptually or how capitalism is a specific form of economic organization (cf. similar points made by Bruff and Hartmann 2014).

Gemici’s critique, however, that Polanyi’s analysis “purports an image of past economies where all economic activities are carried out in the name of non-economic ends” does indeed have a point when applied to Streeck’s understanding of capitalism as an asocial and amoral economy (in contrast to earlier economies), which definitely borrows from Polanyi’s understanding, as will be discussed in the next section.

2.1.2.4 Capitalism without an economy? Beckert and Streeck

More recent research in economic sociology has advocated for a return to societal perspectives on capitalism, among them Streeck and Beckert, both of the Max Planck Institute for the Study of Societies, whose work, at least to an extent, attaches itself to Polanyi’s.

In what can be interpreted as an attempt to move from Granovetter back to Polanyi, the stated aim of Beckert (2009b: 194) is for economic sociology to focus less on the social contextualization of economic action and instead on social processes of development and their relationship to the capitalist economic system as the “motor of dynamic processes of revolution of social order” (“Motor dynamischer Umwälzungsprozesse sozialer Ordnung”).

With a view on the shortcomings of the literature emphasizing the varieties of capitalism, Wolfgang Streeck argues that research on capitalism should re-focus on “…the commonalities
of its varying institutional embodiments, or more precisely: the common dynamics that are responsible for the parallel trajectories on which national capitalisms historically move” (Streeck 2012: 22), emphasizing historical dynamics, conflict and contradictions, the interdependence of national economies, and in sum a focus not so much on national varieties but rather international variegations of capitalism. Furthermore, what needs to be overcome, according to Streeck, are on the one hand economic reductionism, and on the other hand the dichotomy between the economic and the social that was established from the disciplinary division of the social sciences (Streeck 2010b: 5).

Beckert (2009b) argues for a shift in economic sociology towards a theoretical perspective on capitalism as a social system (Gesellschaftstheorie), in which the economy is viewed as the dominant subsystem of society. In Beckert’s view, the sources of the capitalist economy’s dominance within the overall social order are money and competition. Picking up the original Polanyian argument, Beckert explains the social dynamics, conflicts and contradictions of capitalism as the clash of economic functional requirements with political and moral orders, which in the process meet with a social and political propensity to resist (“soziale und politische Widerständigkeit”).

Beckert’s research agenda, however, is not very well argued when it comes to substantiate his (in our opinion fundamentally correct) claim, that the capitalist economy should be viewed as the primary source for social dynamics. Beckert rather eclectically makes out money and competition as the two factors that establish the economy’s dominance over other social subsystems.

Beckert argues that money, as a universal symbolic means of communication is able to pervade all areas of social life. The economic system in a way unspecified by Beckert “produces’ money”, which allows it to dominate other social subsystems. Likewise, the phenomena of innovation and competition in capitalist economies are taken for granted in their significance, but their origins in capitalism as an economic order are left unexplained. It follows that Beckert remains well within an understanding of capitalism as market economy when he makes out coordination problems of market exchange to be the focal points for research into the social embeddedness of the economy (Beckert 2009b; cf. also Beckert 2007; Beckert 2009a).

Streeck, too, seeks to overcome the ontological division of economy and society and the functional division created between economics and the social sciences by creating an approach to political economy that seeks to understand capitalism as a “specific kind of social order” (Streeck 2010b: 6). Streeck criticizes how the VoC approach focuses on analyses and
explanations of the general properties and roles of institutions and actors in social relations, without, however, specifying their relation to capitalism as a social order. Furthermore, Streeck criticizes that “[…] much of contemporary political economy, not to mention contemporary institutionalism, treats the economy as a black box, relying at best on standard economics to account for the constraints and opportunities it poses for politics and society […]” (Streeck 2010b: 6; cf. Streeck 2011; Streeck 2012).

Streeck’s criticism thus confirms the findings of the preceding review of literature, where the dominant conception of the relationship of society and economy was that of two separate spheres with externalized relations. As previously noted, Streeck wants to open the economic black box by treating economic action as a sub-type of social action in general that “must therefore be analyzed in basically the same way” (Streeck 2010b: 6).

To understand capitalism as a specific kind of social order, the focus of research needs to shift towards, or at least be supplemented by, an understanding about the commonalities, as opposed to the varieties, of capitalism, that can account for “[…] its endogenous dynamism, critical instability, and continuous change […]” (Streeck 2012: 5), which are ignored in the Varieties of Capitalism literature and its functionalist understanding of economic and institutional equilibria. Streeck describes the commonalities of capitalism as a socioeconomic system as, for example, an “[…] endogenously dynamic and dynamically unstable social system […]” (Streeck 2012: 4), “[…] capital accumulation […] in the form of an expansion of markets, subsuming traditional relations of social exchange under the money economy […]” (Streeck 2012: 52), “[…] a struggle between pressures for an expansion of markets and increasing commodification of social relations on the one hand, […] and with social demands for political stabilization of relative prices and extant social structures on the other […]” (Streeck 2008: 5). These statements are obviously informed in part by a Marxian and in part by a Polanyian understanding of capitalism.

Streeck rejects, however, to substantiate his observations of the basic properties of capitalism with a corresponding theory, saying “no general theory of modern capitalism is in sight today” (Streeck 2012: 4), and that “the social sciences are, for fundamental ontological reasons, incapable of producing such theories” (Streeck 2011: 140). Instead of an explanatory theory, Streeck devises an elaborate catalogue of the “parametric specifications” of capitalism as a social order, which he determines to be, legitimate greed, institutionalized cynicism, moral deficit, a non-traditionalist super-norm, differential endowment of social classes, unlimited rewards, maximization of gain, competition privileged over solidarity, development as market expansion, fluctuating prices destabilizing social structures, among others (Streeck 2011). As
capitalism to Streeck is rooted in economic action as a specific type of social action, its specific traits are located at the micro-level of actor-based motivations.

From the traits outlined above, the capitalist social order constitutes itself as an amoral economy (the “economic economy”) of capitalism, which is embedded into society in general, where action is motivated by a moral economy in which actors strive for prosperity and social justice. These two opposing motivations of social action are the root causes of conflict, contradictions, and dynamics in capitalism (Streeck 2012: 5, passim). Here again, Streeck picks up the Polanyian perspective.

On one hand, Streeck’s critique of current social science research on capitalism addresses some of its most important impasses by re-focusing the discussion on the properties of capitalism itself and by drawing up explanations of the dynamics of capitalism. On the other hand, however, Streeck declares economic action to be a sub-type of social action, without, however, specifying why that type of action should be labeled “economic” at all, except for the assertion that it is underlain by different motivations than other types of social action.

As already indicated earlier, what Streeck’s conception of economic action as a special kind of social action does instead is to ontologically dissolve the economic. The economy as a concept, designating, for example, the socially organized appropriation and processing of scarce natural resources through human labor for the reproduction of (at a minimum) the material necessities of human life, is more or less removed from Streeck’s reasoning, so that his analysis produces a reductionist view of capitalism as a set of contradictory ‘socially’ determined moral motivations, without, however, being able to explain why these contradictions constitute themselves in the first place.

Streeck’s desire to overcome the separation of social and economic that he rightfully criticizes is thus only fulfilled by giving up on the economic altogether. The metaphorical economic black box is indeed not opened but rather discarded altogether. Crucially, however, this removes from his framework any explanatory capacity with regard to the phenomena he deems to be constitutive of capitalism, such as greed, competition, maximization, social classes, fluctuating prices, etc., their relationship amongst each other and to the concept of capitalism, thus throwing out the baby with the bathwater. The subject of capitalism, in Streeck’s hands, thus becomes predominantly a subject of social morality (cf. also the critique of Streeck in Coates 2014).

Furthermore, Streeck’s criticism of institutionalist research for its use of the topic of capitalism merely as a playing field for the development of more elaborate theories of institutions instead of developing new insights about capitalism (Streeck 2010b), here returns
to haunt its author, as he himself can be said to use capitalism as a field to elaborate on a theory of social action.

2.1.3 Summary

As was discussed above, current research on capitalism in the social sciences mostly lacks the theoretical and conceptual foundations to adequately capture and analyze its object of inquiry, *capitalism*, understood as a dynamic and contradictory socioeconomic order. While the literature discussed attempts to distance itself from the conceptualization of capitalism as a self-regulating market economy, it remains too constricted by its own disciplinary boundaries, their associated ontologies and research interests defined therein, to effectively do so. The intellectual division of labor between social sciences and economics, which was established in neo-classical economics and became to be accepted by the majority of the social sciences by the mid of the twentieth century, has certainly been identified as a problem in the literature reviewed, but has not been overcome.

Most of the literature, such as the Varieties of Capitalism approach and much of the New Economic Sociology, explicitly or, more often, implicitly accept the boundaries established by the neo-classical conception of ‘the economy’ as a market economy and the conception of the social relations that go along with it as relations of exchange. The research interest thus defined aims to discover how social relations embed or political institutions regulate the problems of efficiency and coordination associated with market relations. They remain focused on the surroundings of ‘the economic’ without engaging with its substance conceptually or empirically. In some cases, as in the recent criticism formulated in economic sociology, the desire to transcend neo-classical conceptions ironically seems to lead this literature to give up on the concept of the economic altogether.

“Today the vast majority of economists and sociologists are largely ignorant of each other’s work and intellectual inheritance and, despite significant encroachments from each side into the other’s territory, the core of the two subjects are moving apart. On balance, I believe that our understanding of the modern world has been seriously impaired by this division of intellectual labour.” (Ingham cited in Coates 2005a: 1)

Arguably, to overcome neo-classical conceptions and explanations, what is needed is not to discount economic theory and the economy as a concept altogether, but instead a different kind of theory. In light of the preceding discussion of the current theoretical problems in social science research on capitalism, I believe that it may be fruitful to reengage with Marx’s theory of capitalism precisely because it provides fundamental insights about the common dynamics
of capitalism that are born out in specific historical configurations. Marx’s theory of capitalism furthermore treats the economic and the social as inseparable aspects, making it well suited for social scientific enquiries into capitalism. Streeck has already started to implicitly draw on Marx’s ideas in his line of research, yet refrains from theoretically deepening this approach.

The critique of the fact that social sciences only know “the market” and “capitalism” can be substantiated with the help of Hodgson Hodgson (2001), who describes how Marx’s scientific approach negated the previous and subsequent attempts to construct universal, timeless economic laws:

“The classical and other economists argued from universal assumptions, such as the ahistorical, abstract individual. Marx’s approach was very different. In his view, ahistorical and universal categories cannot capture the essential features of a specific socio-economic system. Recognition of the processes of historical development led him to choose concepts that captured the essences of particular systems. Thus Marx claimed that the core categories in Capital are abstract expressions of real social relations found within the capitalist mode of production. Such categories were held to be operational as long as such social relations exist.” (Hodgson 2001: 46).

In other words, it can be argued, that the Marxian concepts already represent the equivalents concepts of institutions and social embeddedness of modern political science or economic sociology, in so far, as these concepts encompass the historically specific social relations of the economy known as capitalism. With regard to present day social science, it can furthermore be argued, that their greatest mistake in their critique of the ahistorical universalism that characterizes neoclassical economics’ concepts of ‘the economy’ has been for them to attempt to complement that concept while remaining within the boundaries of their own discipline, and thus, ironically, to remain on the sidelines which they have originally been relegated to by economics itself.

The task ahead should be to question the validity of the disciplinary boundaries in research on capitalism and to outright reject economics’ equalization of capitalism and ‘the economy’ and ‘the market’. The problems associated with such a task are, of course, manifold, not the least of which is that the disciplinary boundaries between politics, sociology, economics, and other social sciences have created isolated valleys of theoretical and methodological knowledge (which are, at times, suspiciously guarded against outsiders). Attempts by individual practitioners to bridge these boundaries, will thus inevitably lack the refinement in theory and methods achieved within in the disciplines.
2.2 Approaches to China’s political economy

2.2.1 Economics

The debates among economists about the sources of China’s rapid economic growth since the beginning of the reform and opening policy provide an insightful starting point for the discussion of social science literature on China’s political economy. It highlights some core issues that have been subject to research across the disciplines, as well as the difficulties that market-economic approaches have had in accounting for the rapid socioeconomic transformation of China. In economics and the other social sciences this socioeconomic transformation has generally been interpreted as taking the form of a transition from a planned economy to a market economy.

Much of the debate over the sources of China’s rapid growth and associated socioeconomic transformation in economics and the social sciences is related to the question of how far the Chinese case of economic transformation deviates from the expectations and challenges the assumptions of neo-classical economics.

Following the demise of the Soviet Union and the Eastern Block, Western economists and international institutions such as the World Bank and the IMF had advocated a program of ‘big bang’ reforms for these countries, meaning rapid dissolution of the planned economy and privatization of public enterprises as well as immediate introduction of market mechanisms. Underlying this recipe was a critique of gradualist approaches to market transition, from scholars such as the Hungarian economist Janos Kornai, which stated that the diverging rationalities of market and plan could not operate in unison and that any efficiency gains made by the incremental introduction of market mechanisms would be eliminated by the continued operation of the latter (cf. Whyte 2009; ten Brink 2013). Exemplary in this regard is Kornai’s concept of ‘soft budget constraint’, which refers to the political nature of administrative pricing in planned economies and its effects on the managerial operation of state-owned enterprises, as opposed to the hard budget constraints imposed by the market. The concept of soft budget constraints has found application in explaining the boom and bust cycles of the Chinese economy in the nineteen-eighties and the apparent failure of reform by the end of that decade (e.g. Kornai 1992: 180). Kornai’s argument willingly or unwillingly supports the general neo-classical economic orthodoxy that finds its expression as a political program in the Washington consensus. “The consensus consisted of a list of ten recommended economic policies/institutions: fiscal discipline, pro growth expenditure priorities, tax reform, liberalizing interest rates, a competitive exchange rate, trade liberalization, liberalization toward inward
foreign direct investment, privatization, deregulation, and private property rights” (Whyte 2009: 383).

The Chinese experience of gradual reform and “transition” to a market economy, however, seemed to defy many of the expectations associated with neo-classical economics. With regard to how they interpret the significance of Chinese gradualism and continued state-involvement in the economy, two schools of thought can be distinguished in the economic literature: the experimentalist and the convergence school (Sachs and Woo 2000).

The convergence school tends to assert the validity of neo-classical economic growth theory for the Chinese case and argues that structural conditions existed in China that allowed growth in spite of the only gradual character of reform. In this reasoning, the factor endowment of the Chinese economy was favorable enough that even under conditions of partial reform the introduction of imperfect markets enabled a more efficient factor allocation and thus growth. Market reforms would have to continue, however, to sustain growth in the face of diminishing returns and shifting production functions. The Chinese political economy is thus expected to be on a path of full institutional convergence with a market economy.

The experimentalist school argues that it was China’s process of gradual and experimental economic transformation and the resulting mix of planned and market-economic institutions that have created favorable conditions for growth. In this view, what has emerged in China is a unique configuration or hybrid ensemble of economic institutions that does not strictly conform to the neo-classical definition of growth and economic order.

While experimentalists emphasize the role of institutions such as Township- and Village Enterprises, the Household and Contract Responsibility Systems and of Special Economic Zones as well as the relative absence of economic and political strive in China’s transition, the convergence school counters that it were predominantly the non-state sectors of the economy that made the greatest contributions to growth (Sachs and Woo 2000: 13). As Sachs and Woo (2000: 14) note, however, “[t]he problem for both points of view is the absence of a complete theoretical or empirical framework for proving one point of view or another”.

In the experimentalist school of thought, researchers, in contrast to Kornai’s and the Washington consensus’ assumptions, began to stress the advantages of China’s gradual reform process. Barry Naughton, for example, described the transition of the Chinese economy as one of “growing out of the plan” (Naughton 1995). In his argument, gradual reform in China, while not following a general political strategy, has nevertheless followed an inherent institutional logic. “The institutions of the command economy are sufficiently closely knit together that unhooking a single key connection can cause the entire fabric to unravel. The argument that
one must engineer a ‘big bang’ transition because that is the only way to ensure the destruction of the old system simply does not stand up to scrutiny” (Naughton 1995: 309). In this view, central to reform were the relaxation of the state monopoly in industry, which, lured by large profit incentives, allowed for the entry of newcomers into previously protected sectors and markets. This in turn led to rapidly rising outputs, which, in addition to raising the standard of living, also equalized profit rates among sectors, creating pressures of competition and innovation (cf. Naughton 1995: 313). A fiscal crisis of the state, which is caused by moving its enterprises from the plan (revenues go to the state) to the market (declining monopoly profits, state revenues), unfolded gradually, not suddenly, which allowed reformers to preserve a certain degree of macroeconomic stability. The Chinese process of transition as analyzed by Naughton thus defies the neo-classical recipe for reform, as most of the institutions and policies prescribed in the Washington consensus have, to this day, at best been partially implemented.

Justin Yifu Lin, then chief economists of the World Bank, in 2007 criticized the Washington Consensus policies for their “failure to recognise the endogenous nature of the distortions in the economic system before transition” (Lin 2007: 44), adding that “the dual-track gradual approach adopted by the Chinese government is arguably better than shock therapy”, because “economic stability and dynamic growth were achieved simultaneously” (Lin 2007: 45). The endogenous distortions referred to by Lin resulted from the socialist emphasis on heavy, capital-intensive industrial growth, which relied on extensive government protection and subsidies for capital-intensive industries and which ignored ‘natural’ factor endowments of the Chinese economy such as cheap, unskilled labor. China’s socialist development strategy can thus be described as “comparative advantage-defying” (Lin 2007: 26). China’s gradual introduction of market elements allowed it to shift to a “comparative advantage-following” industrialization strategy in which the support for and protection of capital intensive industries was gradually abandoned while labor intensive industries were allowed to develop under the market mechanism.

As China’s economic development progressed into the 2000s, the divide between the experimentalist and convergence schools seems to have become less salient as more economists accepted the viability of gradualism in the Chinese case. Furthermore, there seems to be a shared understanding that the emerging structural impasses to growth in the Chinese economy should be addressed by further market-oriented reforms.

Brandt and Rawski (2008: 22), which can be counted into the experimentalist camp, write: “Despite […] the rapid decline in the state sector’s share in economic activity, it is increasingly evident that state ownership acts as a major drag on China’s economy. Both national and
provincial data link state-ownership with retarded growth, low capital productivity, slow transfer of labor out of farming, and major other undesirable phenomena”. And while Naughton confirms the validity of the gradualist approach to interpreting China’s economic transition, he notes that gradual reform has created institutions that may prove problematic for coming phases in China’s economic development (Naughton 2008a: 127).

### 2.2.2 Economic sociology

Some of the most influential sociological work on China’s socio-economic transformation has been written by Victor Nee, who theorized the socioeconomic transformation of China under the concept of “market transition” (Nee 1989; Nee 1991; Nee 1992; Nee and Matthews 1996). The divergences between political science institutionalism and economic sociology discussed with regard to the wider theoretical debate above are reflected in the China-related discourse. Nee and Mathews, criticizing the shortcomings of institutionalist approaches in explaining socioeconomic change, argue for “[…] the sociological study of transition societies advanced by research that brings societal institutions and structures more fully into explanations of the causes and effects of transformative change, rather than conferring causal priority to the political domain as does state-centered analysis” (Nee and Matthews 1996: 402).

Market transition theory argues that in moving from a planned to a market economy, the hierarchical social relations of the command economy are supplemented and replaced by horizontal social relations, altering social power, incentive and opportunity structures and allowing new social actors to emerge. Nee outlines three mechanisms for these changes: 1) the introduction of market relations gives greater power to direct producers over resources and exchange; 2) market relations create greater individual incentives and opportunities as the determination of supply, demand and prices shifts to the market; 3) socioeconomic mobility can be achieved through individual entrepreneurship rather than bureaucratic career paths (Nee 1989: 666ff.). Market transition theory thus predicts a decline in the capacity of the state to monitor and control the behavior of individuals due to the expansion of horizontal interpersonal social relations and correspondingly a decline in the influence and control of state bureaucrats over the actions of private entrepreneurs.

Empirical tests of the theory usually revolve around measurements of monetary income as the indicator of economic affluence and influence. Initial empirical studies by Nee suggest that under the conditions of incomplete reform the clientelist ties of marketized but state-owned firms and the redistribute powers of bureaucrats and cadres still provide significant advantages in the transition economy (cf. Nee 1991; Nee 1992). Subsequent studies show that the
socioeconomic relevance of party membership, cadre positions, and other political ties were generally declining (Nee and Matthews 1996: 423), lending some empirical support to the theory.

Market transition theory has, however, been criticized for its simplistic conception of economic order and the accompanying plan-market dichotomy. The idea of transition, taken seriously, presupposes that planned socialism and market capitalism present antagonist and mutually exclusive modes of socioeconomic organization (Lin 1995). Market transition, then, is a process by which one form of socioeconomic organization ultimately replaces the other, so that “[...] forms of institutions, property rights, and transaction patterns for the ‘intermediary’ stages, can and, in fact, must be formulated in reference to this assumed end-state” (Lin 1995: 305). Institutions and organizational forms created in the process of transition are thus conceptualized as “hybrids”, that persist as long as they provide a mediatory function for “interactions between the declining redistributive and rising private economies” (Nee 1992: 23). The relatively high transaction costs incurred by hybrid institutions, their inefficiency and “structural incentives for opportunism and malfeasance”, will eventually contribute to their own demise, and, by extension, “erode the effectiveness and legitimacy of the state” (Nee and Matthews 1996: 407). The conceptual foundations of the theory thus not only preclude the persistence of hybrid institutions and organizational forms of socioeconomic and, consequentially, political organization, but also make it difficult to conceptualize any variety in market-economic or capitalist socioeconomic organization. The theory instead projects as the telos of transition the ideal image of a market society.

Nee’s theory thus follows the concept of capitalism as market economy and assumes that actors are primarily interested in pursuing maximally efficient forms of exchange in principally horizontal, equal, and equitable social relations within an institutional setting that facilitates such behavior. This is reflected in Nee’s concept of the “direct producer” (cf. Nee 1989), the beneficiary of marketization, and his antagonist, the bureaucratic “redistributor”. The dichotomy between productive societal actors and unproductive state actors thus construed, which makes for one of the conceptual foundations of market transition theory, at the same time implies that the socioeconomic positions of actors within each group are in principle equal. The term “direct producers”, while not well defined, consequently appears to refer to any economically active individual, be they the member of a rural farm household, a laborer in industry or services, self-employed entrepreneur or factory owner. Nee’s concept of “direct producer” is thus firmly rooted in the assumption that horizontal relations of exchange are the
defining and analytically relevant socioeconomic relations of capitalist market economies (cf. above).

The validity of a dichotomous conception of plan and market is called into question empirically, for example in the work of Margaret Pearson (Pearson 1997) or Bruce Dickson (Chen and Dickson 2010; Dickson 2003; Dickson 2008), who show how private entrepreneurs are closely co-opted or embedded into the political institutions of the party state, making them important supports of a “hybrid” political economy that should not have persisted in light of Nee’s original theory. Similarly, Guthrie (1999) takes a somewhat critical position towards market transition theory in his work on entrepreneurs in Shanghai during the 1990s and instead emphasizes the important role that the state played during the process of economic reform in creating the institutions that shaped the behavior of economic actors.

The societal perspective on market transition has more recently been taken up in different form and under less teleological theoretical pretenses by Nee and Opper (2012), who find that the emergence of “capitalist” economic institutions in China has been the result of micro-level mechanisms revolving around entrepreneurial actors. In consensus with much of the literature on VoC and economic sociology, they view entrepreneurs as “[…] the central agents who drive institutional innovations enabling capitalist economic development” (Nee and Opper 2012: 259). The sociological conception of the market advocated by Nee and Opper is similar to that of Swedberg (2005) in which neoclassical theory is married to a sociological view of the embeddedness of markets. The concept of “capitalism” invoked in the title does not receive critical scrutiny and thus simply refers to “market economy”. The same conflation of the concepts of market economy and capitalism can also be witnessed in more recent work on China from the perspective of economic sociology (e.g. Fligstein and Zhang 2011).

Also based on a sociological view of embedded markets in research on Chinese economic development is the role of family structures (i.e. Whyte 1996), (inter-personal) social networks, government-business networks, and guanxi as a culturally specific social practice. Doug Guthrie argues against the view that guanxi is a relevant cultural phenomenon in business relationships and instead argues that guanxi is rooted in the specific institutional features of China’s transitional economy (Guthrie 1998, also for a discussion of opposing viewpoints). A similar viewpoint has been advanced by Boisot and Child (1996), who propose that a special brand of “networked capitalism” developed in China as a response to the influence of bureaucratic fiefdoms on the emerging private business world. Guthrie, however, later argues that guanxi in its specifically Chinese form of a gift economy and mode of manufacturing of
social obligations has been of declining significance, as both state and business increasingly rely on rational-legal structures for the regulation of the economy.

In summary, the economic sociological literature reviewed here, conceptualizes the transformation of the Chinese socioeconomic order predominantly as the emergence of market relations and market institutions, which is connected to the individual actions and social relations of entrepreneurial actors. The underlying concept of the market as socioeconomic order leads this school of research to emphasize the importance of horizontal social relations. Notably absent then, is the role of vertical social relations in the economy as well as the state’s role in structuring them.

2.2.3 Political science

2.2.3.1 The party state and the market economy

The political science perspective on China and capitalism frequently revolves around the challenges that the process of socioeconomic transformation poses to the party-state. On the one hand the debate asks how authoritarian governance can provide the conditions for capitalist understood as market economic development. On the other hand, it asks how the party-state can adapt to the political challenges associated with this socioeconomic transformation.

At the beginning of the academic debate on the state and economic reform in China stands research that emphasizes the incompatibilities between market economic transition and political authoritarianism (cf. the review in Heberer and Senz 2009). Based on a modernization theoretical perspective, it expects that political democratization will eventually follow economic modernization in China. Gilley (2004), for example, finds that economic privatization, the de-emphasis of ideology, a nascent civil society, and international influence have created all necessary preconditions for democratization in China. Even more forceful in advancing the classical Lipsetian dictum of “[…] the more well-to-do a nation, the greater the chances that it will sustain democracy” (Lipset 1959: 75) is Rowen (2007), who, based on the development of China’s per capita GDP, estimates that political liberalization will likely take place around the year 2025.

Given that more than thirty years have passed since the beginning of reform and opening, newer research questions whether the term ‘transition’ holds much value for the analysis of China’s political and economic transformation (Perry 2007), and instead tries to explain how authoritarianism and one-party rule are made to be compatible with the governance and regulation of a market economic order.
Expectations that China would join a ‘fourth wave’ of democratization due to a fundamental incompatibility between one-party rule and market economy are dispelled, for example, in the authoritarian resilience thesis advanced by Andrew Nathan (2003). In his view, the Chinese party-state is able to meet new socio-political challenges by creating and adapting institutions that bolster its governance capabilities and thus its legitimacy. Similarly, Yang (2004) believes that the “political machinery” of the party-state is a capable instrument in the promotion of governance reform and the creation of a regulatory state that provides the framework within which a market economy can unfold.

Heilmann (2008) finds the sources of adaptability and successful economic policy in the particular mode of policy making of experimentalism: “China’s economic transition has been facilitated by an unusual adaptive capacity that [...] entails an institutional structure that, despite ubiquitous uncertainties, enables it to try out alternative approaches to overcome long-standing impediments to economic development, tackle newly emerging challenges, and grasp opportunities when they open up” (Heilmann 2008: 2).

While Nathan, Yang, and Heilmann emphasize the adaptive capabilities, governance capacities and generally successful management of the socio-economic transformation process by the party-state, other authors emphasize the perils of authoritarian governance of the economy.

Minxin Pei (2006), in his study of the Chinese reform process, shows how rent-seeking interests in the party-state were able to entrench themselves in and through the process of gradual economic reform and to resist political liberalization. Victor Shih demonstrates how policies towards the financial sector were driven more strongly by factional power politics than by concerns about proper regulatory governance (Shih 2008).

Pei believes that the entrenched party-state has moved from developmental to predatory and is losing its ability to adjust to complex governance problems. Likewise, Li (2012) attests that the party-state may soon see “the end of authoritarian resilience” in the face of increasingly formidable challenges connected, among other things, to the socio-economic transformation of China.

Margret Pearson and Barry Naughton both find that, while the Chinese state has endeavored to corporatize its firms and marketize the environment in which they operate, the newly created regulatory institutions that are supposed to lead and supervise this process remain caught in the web of preexisting power structures and are thus frequently unable to exercise their authority (Pearson 2005; Pearson 2007), an exemplary case of this being the State-owned Assets Supervision and Administration Commission (SASAC) (Naughton 2008b).
The debate about the compatibility of party-state and market economy, in our opinion, is one that highlights how a more critical engagement with the concepts of market economy, market transition and capitalism can contribute to a better understanding of the particularities of the Chinese case of socioeconomic transformation. At the core of this debate lies the assumption that a contradiction exists between authoritarian government and socioeconomic liberalization in the form of a transition to the market. Questions thus arise about whether the party-state and its institutions can adapt to overcome the resulting challenges to authoritarian rule, or whether democratic transition will eventually follow market transition.

The basic assumption underlying this debate, one that is share with the sociological market transition theory, is that the market economy as a complex, but economically self-regulating system of decentralized individual actors, works best in unison with a political system that can provide a regulatory framework for the market and provide equal representation for the competing plurality of social interests. The Chinese case posed a research puzzle, because it deviates from these theoretical expectations. The Chinese case, however, may look a lot less puzzling, if the concept of the market was replaced by an analytical concept of socioeconomic order, such as capitalism, that accounts for horizontal and vertical social relations, crises dynamics, and the role that an authoritarian state can play therein.

2.2.3.2 Institutions and growth

Since the 1980s, institutionalist approaches have risen to prominence in China-related research, largely as a response to the deficits of research based on theories of totalitarianism. While the latter viewed China and other socialist societies through a theoretical lens that emphasized the supposedly all-encompassing political and social control at the apex of the Communist party-state, institutionalist approaches opened up wider perspectives on actors on various levels of state and society and on how their actions were embedded in social, political and economic institutions. While earlier research had constructed China as antithetical to the Western model of a liberal, pluralist society, newer approaches sought to apply the same theoretical and methodological approaches to the Chinese case that had been developed in the context of research on Western societies (ten Brink 2013: 35ff.).

Among the first scholars to systematically analyze the role of political institutions in China’s economic reforms was Susan Shirk (1993). Following the, at the time, “unusual idea that we can study policy-making in communist countries much as we would in noncommunist countries” (Shirk 1993: 7), she analyses how the central leadership around Deng Xiaoping used and adapted political institutions without altering the foundations of the political system, for
example, by creating vested interests in reform in the provincial leaderships by creating revenue contracts.

1995; Oi (1992) analyses how fiscal reforms and incentives have created what she calls a “local state corporatism”, in which local government officials coordinate with local state-owned firms, collective, and township and village enterprises to create extra-budgetary revenues for their administrations, leading to a functional merger of state and economy on the local level. Andrew Walder has similarly argued, that shifting the rights to revenue extraction from state-owned enterprises to local governments, created incentives similar to those offered by private property rights, leading local governments to push for reform and profitability of the enterprises under their jurisdiction (Walder 1995; cf. Guthrie 2000). Oi points out how this institutional arrangement has spurred growth and development in local economies precisely without requiring the secure property rights, private initiative and the retreat of the state that theories of market transition advocate. What, according to Oi, has been created instead is a “distinctive form of state-led growth” and a “Chinese model” that in its institutional configuration promotes a specific relationship of state and market (Oi 1995: 1132, 1147).

Building upon research on central-local relations and the role of the local state is research that asks how the development of quasi-federal structures in Chinese politics is supportive of market economic development. Combining the findings of researchers working on central-local relations and local state corporatism to a certain extent is the so-called “market-preserving federalism” approach, primarily advocated by Montinola et al. (1995; for a critical review see 2006). Like others, Montinola et al. (1995) try to explain the theoretical paradox of market reform without political reform, a paradox that in their view is based on the assumption that secure private property rights and protection from arbitrary state intervention vis-à-vis (private) economic actors are required to sustain market economic growth and development (Montinola et al. 1995: 50-51).

To explain this paradox, Montinola et al. argue that decentralization has created institutions that have altered the relationship between central and local governments in such a way, that local governments have gained considerable economic power and autonomy from the center and that the discretionary powers of the central government have been circumscribed in such a way that makes “reversal more costly, if not impossible” (Montinola et al. 1995: 69), thus protecting the new rights of economic agents created in the reform process. Furthermore, they believe that competition between provincial governments within market-preserving federalism favors market-friendly reform policies, which in turn facilitate higher factor mobility and their more effective allocation (Montinola et al. 1995: 73ff.) and thus economic growth. The fiscal
reforms in the second half of the 1990s, in which central-provincial fiscal relations were restructured in favor of the central government, however, suggest that the center has retained the power to overrule the provinces (Yang 2006), though these policy changes were not obviously pro- or anti-market.

Scholarship in the 2000s has been paying closer attention to the mechanisms of governance and regulation that on one hand allow the CPC to create and provide the institutions required for market economic development and, at the same moment, preserve the authoritarian polity in the face of rapid socio-economic change, creating a specific Chinese mix of market-conforming regulatory institutions and frameworks, as well as continued state control, intervention or even interference. In one recent and comprehensive study of “China’s Regulatory State”, Hsueh attests that China has adopted a developmental model that “varies significantly from those of its Communist past, the liberal trading state, and the developmental state” (Hsueh 2011: 5), and does not conform to a “liberal economic model, coordinated market economy, or state-led development” (Hsueh 2011: 251). Hsueh’s inquiry focuses on the relationship of state and business and the political driving forces behind regulatory innovation and change. Compared to earlier research, her perspective is less focused on local institutional arrangements, but instead on the capacity of the party-state for strategic economic policy-making and its connection to the ‘commanding heights’ of the central-state-owned industrial sector.

According to her findings, the Chinese state has, while pursuing overall liberalization of macroeconomic regulation, developed different regulatory strategies with regard to industrial sectors, which it deems strategically relevant before the background of the complex interaction of economic development and political interests, and with regard to nonstrategic industries. The state may find different kinds of strategic value in different sectors of industry. Strategic sectors are those deemed to be vital to political stability or national security, those whose development will contribute to the broadening of the economy’s technology base, and those deemed worthy to be developed for international competitiveness. According to Hsueh, the patterns of localized state-business interaction described in previous research predominantly apply to non-strategic sectors of industry, while strategic sectors remain firmly linked to the central state.

“By liberalizing market entry and strategically utilizing FDI at the sectoral and sub-sectoral level, the Chinese government has modernized domestic infrastructure, maximized the domestic technology base, and promoted the competitiveness of domestic industry. At the same time, it has enhanced control of the most sensitive and strategic assets and restricted the business scope and market share of foreign companies in the most sensitive industrial sectors” (Hsueh 2011: 259).
In summary, Hsueh, like other scholars before her, finds that China’s “capitalism” challenges conventional economic wisdom by its mixed mode of macro liberalization and strategically selective (re-)regulation (Hsueh 2011: 267), concluding that neither “simplistic ideas of the mutual benefits of liberal market and trade and the macro-level economic indicators that measure them”, nor “specifying the optimal relationship between government and business” (Hsueh 2011: 268) may sufficiently explain China’s developmental success.

Even though much of the research reviewed here was done and published well before the Varieties of Capitalism debate emerged, it nevertheless mirrors some of its underlying views on the relationship between polity and economy.

2.2.4 A Chinese model of capitalism?

Faced with the persistence of a particular configuration of economy, state, and society in China that has defied previous expectations of transition, and the combination of rapid growth and development and unorthodox policies and institutions in the Chinese case, recent research on China has begun to ask whether the Chinese case presents a specific socioeconomic model or a specific form of capitalism (i.e. Dirlik 2011; Breslin 2011; Kennedy 2010; Naughton 2010; ten Brink 2013; Peck and Zhang 2013; McNally 2008a).

The empirical heterogeneity of the Chinese case and the variety of theoretical explanations and expectations found in the literature have made it difficult to pinpoint the specific features of the Chinese political economy that would make for a model or allow to subsume China under already existing models such as that of the East Asian developmental state (Howell 2006). Also, the fact that similar examples of successful long-term post-socialist transitions from plan to market do not seem to exist, except maybe in the case of Vietnam, make it difficult for researchers to abstract a model of development from a comparative perspective (McNally 2008b).

The discussion about a China model can be divided, on one hand, into the political discussion pitting the ‘Beijing consensus’ and the ‘Washington consensus’ against one another as two supposedly competing and exclusive rather than complementary models, and, on the other hand, attempts by researchers to determine the salient features of the Chinese socioeconomic order.

As Breslin (2011: 1328) argues, the term China model is more important as a political idea or a metaphor rather than as a transferable developmental model with specified features, which is owed to the “the diversity of developmental trajectories within China itself”. Breslin sees China in the Listian tradition of state-led late development, so that its experience compared
with late industrialization in Europe, the US and East Asia, “does not seem particularly remarkable at all” (Breslin 2011: 1342). Similar sentiments are shared by Naughton (2010) and Kennedy (2010). Kennedy (2010) believes that the divergence of the Chinese case from standard explanations of economic development is overstated and that it is difficult to speak of a model as this implies a coherence and consistence that is actually missing from the Chinese case. Naughton points out that the salient features of the Chinese industrial system have in common a “far larger and more activist role for the government in the economy that is contemplated in the Washington Consensus” (Naughton 2010: 454), but that these features were reminiscent of the developmental consensus of the 1950s and 1960s rather than the mark of a distinct “Beijing consensus”.

In the context of the discussion about a China model, the term capitalism has more frequently been evoked. Usually, however, the concept is poorly defined and “[…] the relationship between China’s current conditions and the political economy of capitalism need to be clarified” (McNally 2008a: 17). In the same contribution McNally (2008a) gives a revealing account of discussions among Chinese and European researchers on the applicability of the term “capitalism” to the Chinese case, in which both parties were apparently more concerned with distancing themselves from the “ideological precepts” of the term than with establishing theoretical and conceptual clarity. “In this respect, one advisor suggested the we just replace the term ‘capitalism’ with ‘market economy,’ therefore avoiding all discussion about whether China can be termed capitalist or not.” (McNally 2008a: 17).

McNally (2008a) himself proceeds to develop a conceptual sketch of capitalism based on a rather eclectic mix of three features, the first being capitalism’s drive to extract and accumulate capital by humans (omitting where capital is extracted from), the structuring role of markets, and the bifurcation of secular authority separating state and economy. McNally argues that China fulfills the first two criteria but not the last one, which he deems to be the most crucial feature of capitalism. In the constrained space available to McNally’s argument, the theoretical foundations of his argument remain necessarily vague.

Witt (2010), Fligstein and Zhang (2011), and Peck and Zhang (2013) consider the applicability of the Varieties of Capitalism framework and its variations to the Chinese case. Witt remains true to the CME-LME dichotomy devised in the original approach and finds that, except for a unique financial system, China’s economy sports all hallmarks of a liberal market economy, of which in the VoC approach the arch type is the United States. On the contrary, Fligstein and Zhang (2011: 51), also citing the ideal types of liberal and organized market economies, make the tentative, and as they admit provocative, proposal that a case bearing
resemblance to China in government control, state-ownership, and with regard to worker organization would be France. Both attempts thus highlight the difficulty of applying the VoC framework to China.

Peck and Zhang (2013) make a more thorough attempt at highlighting the difficulties and shortcomings of the VoC framework in its relation with the Chinese case and seek to compensate for these shortcomings by extending the analysis with a “Polanyian” perspective on dynamics and conflicts. Peck and Zhang (2013: 370) fail, however, to provide clear definitions of their terms when it comes to their discussion of China as an “improbable combination of socialism and capitalism”. Instead, socialism is implicitly linked to the state and capitalism implicitly equated to the market economy. On the basis of this theoretically ungrounded dichotomy the authors then proceed to discuss a number of phenomena of state-involvement in the economy to illustrate the hybrid character of China’s socioeconomic order, thereby showing once more that the “constructive opportunity both to realize and operationalize notions of variegated, polymorphic capitalism” (Peck and Zhang 2013: 385) presented by the Chinese case requires a more thorough elaboration of a theoretical concept of capitalism, if the discussion of such variegated polymorphic forms is not to be reduced to a theoretically unsubstantiated exercise in phenomenology.

One of the most comprehensive works aiming to understand China’s economic order as a form of capitalism has been formulated by ten Brink (2013), who uses the five institutional forms developed by regulation theory to analyze the variegation of the Chinese case. Ten Brink thus not only investigates the horizontal social relations of capitalism, i.e. its market dimension and competition, but also incorporates the growing body of work on labor and industrial relations in China into his work to analyze the vertical dimension of capitalist social relations, which together with the institutions regulating finance and credit, the state and world market integration make for a dynamic and contradictory ensemble. Ten Brink finally characterizes China’s socioeconomic order as a form of competition-driven, state-permeated capitalism (ten Brink 2013: 312).

Anticipating critique from more empirically-minded research that has emphasized the heterogeneity of the Chinese case, ten Brink argues that his generalization is permissible as it is theoretically argued and addresses the dominant features of China’s development. National capitalist systems, says ten Brink, are always an incompletely integrated institutional bricolage, within which the researcher must identify dominant features (ten Brink 2013: 312). Ten Brink concludes that future work needs to attempt to identify the causalities and effects between the institutions of China’s capitalism.
Our discussion about a Chinese model of capitalism thus reveals two problems in the literature. The first problem is the heterogeneity of the Chinese case, which is thought to make it difficult to generalize about China’s socioeconomic order. This is of course a problem that can be solved by abstraction based on a theory. The second and related problem is that theorization about capitalism has not been sufficiently developed in research about China, so that arguments about the relationship of institutions and capitalist development often remain unfounded. We will in the following chapters thus develop a theoretical approach and apply it to the Chinese case so that on the basis of a conceptual definition of capitalism, we can analyze and determine the relationship of institutional forms and capitalist accumulation. Researching this relationship that will allow us to identify the relevant and dominant features of China’s capitalism.

2.3 Summary

The previous review of current research in the social sciences on capitalism has shown how its theoretical foundations make it difficult to arrive at a political economy of capitalism that can make theoretically informed statements about the relationship of capitalist development and the phenomenon of capitalist variety, i.e. institutional variety. The core problem appears to be that the various theoretical approaches deal with the problem of capitalist diversity more or less exclusively within the boundaries of their disciplines, but accept uncritically the notion of capitalism as market economy, which is, however, precisely the concept from which the research puzzle of capitalist diversity has arisen in the first place.

While neo-institutionalist political science claims to research the relationship of social and political institutions with the economy, its foundational ontology actually constitutes political economy as the study of the separate spheres of society, polity and economy. The research done in the Varieties of Capitalism is thus conducted by assuming the economic theory of neoclassical economics, which is then criticized for its failure to address the problem of capitalist diversity and subsequently ameliorated and supplemented with political and sociological theory. This approach to capitalist diversity, however, serves to conserve the theoretical assumptions made about capitalism as market economic orders, which have posed the problem of not being able to explain capitalist diversity in the first place. A more productive approach would have been to criticize the theoretical assumptions which pose the problem in the first place.
In practice, VoC research thus studies capitalist diversity as a unilateral causal relationship of institutions on the economy. This is facilitated by referencing the neo-classical concept of market economy, which, as a closed and contradiction-free model, directs the researcher to supposedly non-economic, external phenomena to explain discrepancies between real-world developments and modeled expectations.

The Economic Sociology of the Granovetterian tradition similarly reconstructs political economy as the inter-relationship of social and economic structures, actors, and their networks. Recent work in this field has criticized this separation. Instead of attempting a theoretical re-integration to overcome the disciplinary divide, however, it appears to abandon the concept of the economic altogether, based on a sociological universalism that ironically presupposes the disciplinary separation that is at least in part at fault for frustrating a theoretically integrated political economy of capitalism.

The concepts of the economic, the social and the political as separate spheres thus frustrates attempts at the creation of an integrated theoretical perspective on capitalism. What we find instead are research perspectives where the theories and methods of politics and sociology are consulted to address actual or perceived shortcomings of neo-classical economics in accounting for observable real world developments. While neo-classical economics focuses on the market and seeks to exclude other explanatory variables from its models, politics and sociology step in in order to provide supplementary explanations where those of neo-classical economics fall short.

The foundational theoretical concepts of neo-classical economics, however, which provide the basis for the conceptual and disciplinary division of sociology, politics and economics, is never fundamentally criticized with regard to the question of whether it provides an appropriate concept of the economy or capitalism. Instead, the concept of capitalism is equated with the concept of the market and thus eliminated, so that current research on “capitalism” is actually research on the politics, sociology and economics of the market rather than research on the political economy of capitalism.

These fundamental theoretical and ontological problems also frustrate attempts to understand the socioeconomic order and development of China as a case of capitalist order and development. Research on China should not refrain from making generalized statements about the dominant features of its development due to the heterogeneity of empirical phenomena encountered in the field. It is precisely the task of the social sciences to make such generalized statements so that we can explain and understand our world despite its empirical complexity.
To mediate between the real empirical complexity of our world and our understanding of it is the task of theory and abstraction.
3 Theoretical Framework

3.1 Introduction

The previous discussion of research on capitalism in the social sciences has highlighted the need re-engage theoretically with capitalism as a form of socioeconomic development and order in general, so that we may arrive at an appropriate understanding of the development of China as capitalist development. We believe that it may be fruitful to re-engage with Marx’s theory of Capital precisely because it combines fundamental insights about the commonalities of capitalism and its inherent contradictions and dynamics, which are the ultimate source of capitalism’s historical variety. Marx’s value theory furthermore treats the economic and the social as inseparable aspects, making it in principle well suited for social scientific inquiry.

Marxian theory has frequently been charged with economic determinism or reductionism, in the sense that the economic “laws of tendencies” developed by Marx are thought to be immediately applicable to and determinate of the reproduction of social relations in capitalism. The method by which Marx arrives at his abstract theory of capital accumulation is not one of removing ‘extra-economic’ social relations from a model, as for example in neoclassical equilibrium theory, but rather one that in thought completely subordinates social relations to the logic of capitalist reproduction. The aim of this method is to arrive at a theory of the abstract reproductive logic capital itself.

Thus follows that, when moving from the abstract theory of capital to the investigation of concrete capitalist social formations, more concrete analytical concepts need to be deployed to capture the historical relationship of the social and the economic that develops out of the concrete way in which social relations in capitalism are reproduced. Given such concepts, analysis can avoid the economic determinism that would result from an unmediated application of the theory of Capital to an investigation of concrete social formations.

The task of the researcher is not to demonstrate how the abstract laws of theory determine the totality of a social formation, but rather, how the capitalist accumulation process is reproduced concretely in contradictory social relationships and thus how its general properties are given a specific, historical form. In the study of a concrete case of capitalist development such as China, the task is to move from the abstract to the concrete theoretically and analytically and not to reduce the concrete to the abstract.
One suitable approach for such a task is provided by early representatives of the French régulation school, which, based on Marx’s theory of capitalism as a mode of production, develops certain intermediary concepts for an analysis of historical capitalist social formations.

The purpose of this chapter then is to discuss the Marxian labor theory of value (LTV) and to show how, in connection with intermediary analytical concepts provided by regulation theory, it can provide the theoretical framework for a comparative political economy of capitalism and the analysis of concrete cases of capitalist development, such as China.

Section 3.2 discusses Marx’s theory of capitalism, which can be divided into his analysis of capitalist surplus value production, accumulation, and profits, which he discusses in books 1 & 3 of Capital, and his analysis of the circulation and uneven development of capital. Accumulation and circulation in their combined development form the process of capitalist reproduction as a process of the reproduction of contradictions and their tendency to crisis.

Section 3.3 discusses how Marx’s theory of capitalism and its general properties relates to other, intermediary theories of capitalist development with a focus on regulation theory and its analytical concepts, which will provide the foundations for our case study of China.

3.2 Marx’s theory of capitalism

3.2.1 Labor value and its relation to the economic, social, and political

Labor value has since the Physiocrats been a fundamental concept in all economic theories before it was abandoned by neo-classical economics. Labor value is a concept seeking to answer the question of why and how value is created by human economic activity and how this activity and its products relate to other such activity and products within the context of a social division of labor. This allows for a discussion of the larger question of how individual human activity contributes to the complex affair of the communally organized economic reproduction of society.

With the relation of human labor to social reproduction at the center of attention, the study of the relations of production is as important as the study of the relations of exchange. The relation between production and exchange raises the problem of the double character of products of human labor as having value in use (use value) and value in exchange (exchange value), the former arising from their ability to satisfy individual needs, the latter arising from their property of representing a share of the total product of the social division of labor, in which the reproduction of human life and society is organized as a communal activity.
The exchange of products of private labors as commodities establishes a relation of equivalence, “in which private labour appears simply as a fraction of the overall labour of society” (Aglietta 1979: 38). The fact that in principle all products of private labor are exchangeable for one another, establishes their uniformity as abstract labor within the social division of labor. This property makes them commensurable (Aglietta 1979: 39). They are exchangeable in certain quantities because they are the products of certain amounts of abstract labor.

The abandonment of the concept of labor value by neo-classical economics has been an essential precondition for the constitution of economics as the largely self-enclosed field we know today. In contemporary economic thought the concept of objective value as the value of labor in its relation to the problem of social reproduction has been abandoned and replaced by that of subjective valuations of the utility of a commodity and the expression of that subjective valuation in prices. The neo-classical abandonment of an objective concept of value in favor of a subjective concept of price lends parsimony and universality to the theory, which in daily life and to some extent in the social sciences has allowed it to ascend to the status of a self-evident truth and facilitates its ongoing application to all areas of life and research. And indeed the subjective determination of prices and their equation with value is not only easily comprehensible but at first glance can solve the problem of the relation of individual labor and social reproduction quite easily, that is through the mechanism of market prices, supply and demand.

Discarding an objective theory of value, however, requires the theory to make axiomatic assumptions to explain the relation between individual labor and social reproduction: one is that of the rational self-interested actor (homo economicus), and the other that of a general supply and demand equilibrium. The concept of homo economicus may be understood as an abstraction from the behavior of concrete human subjects under the conditions of market exchange. The concept of general equilibrium, however, appears as an axiomatic model that casts away the necessity to analyze any given economy as the totality of a historically specific organization of the relations of production and exchange in a given society and the associated questions of social structure and political rule. What the concept of general equilibrium also discards is any endogenous notion of contradiction and crisis, as well as the idea of history per se, and that the past may be different from the future, spanned by a period of development. All this is sacrificed in the theory of a “pure economics” (i.e. Walras 1874). In contrast, labor value, which together with the concept of surplus value is fundamental to the following discussion of a Marxian perspective on the political economy of capitalism, is a concept arrived at by
abstraction from concrete social relations, which have an economic purpose, meaning these relations serve to provide the material requirements for the reproduction of society and its members.¹

Even before we will proceed to talk about capitalism as a specific form of socioeconomic organization, the concept of labor value already includes the concept of contradiction and the possibilities of crisis, instead of excluding them with the help of an axiomatic and closed harmonious equilibrium model, as will be exemplified in the following. The LTV presupposes a society with an economic division of labor. In such a society the labor of private producers creates commodities (goods and services) for consumption by society in general. The social character of these private labors is only confirmed by the successful exchange of their products as commodities.

In the case of an isolated and simple bargain, two individuals meet to exchange commodities that they have produced, it is in the case of this isolated and simple bargain conceivable that two goods are exchanged for their respective use values and with little regard for their exchange values. Assuming a developed social division of labor, however, commodities will pass through a number of hands before reaching the consumer. It would be difficult to imagine that an individual private producer of a specific commodity could exchange, without intermediation by third parties, the specific use value of his product for a range of commodities embodying the many use values he requires: „Die gesellschaftliche Teilung der Arbeit macht seine Arbeit ebenso einseitig als seine Bedürfnisse vielseitig. Ebendeswegen dient ihm sein Produkt nur als Tauschwert“ (Marx 1962c: 120)².

In a society with a division of labor, commodities are thus not produced for their use value, but instead for their exchange value. The equivalence of commodities as products of abstract labor, expressed in their exchange value, is confirmed and their exchange facilitated by the emergence of a common money commodity, the medium of general equivalence. The private producer in a society with a developed division of labor exchanges his commodity for money (C–M) and in turn exchanges money for a commodity (M–C), taking the roles of seller and buyer respectively. Commodity–Money–Commodity (C–M–C short for C–M–C–M…C) here is the complete sequence of exchange from the perspective of the producer (Marx 1962a: 120ff.).

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¹ What these material requirements are, is, of course, socially determined by how its members actually provide for their needs. For example, we may not, in the last instance, require music to live, but many people live off of the production and marketing of music to provide for a living.

² The social division of labor makes his work just as one-sided as it makes his needs many-sided. This is why his product can only serve him as an exchange value.
Already at this fundamental level, the contradictory character of the commodity as bearer of exchange value and use value, which opens the possibility of the separation of the acts of buying and selling in trade, gives hint to the possibilities of interruptions and crises, as it points to the uncertainties associated with decentralized commodity production in a developed social division of labor, on which the social validation of the individual producer’s labor and thus her economic well-being crucially depends. This is in stark contrast to general equilibrium-based neo-classical economics, in which such uncertainties and thus the possibility of crisis has been removed from its models, enticing the social sciences to shore up for these shortcomings, in the face of real developments (cf. Marx 1962a: 127f.).

Furthermore, the LTV does not presuppose an economic organization of individual, private producers based on an egalitarian social structure, as do neo-classical economics, even though such an example was used above. Labor value is always produced in concrete and historical relations of production and exchange within a specific division of labor of society—the theory leaves ample space for and even requires the consideration of social structure and hierarchy and the role of political rule.

In summary, while it is necessary for a commodity to have some kind of use value to be consumed, use value does not serve as a measure of value in exchange, because it designates the specific quality of a commodity, which is only realized in its consumption. Use value as the quality specific to a particular commodity does not make it commensurable in comparison with other commodities, because each particular commodity serves to satisfy individual and not general needs. The exchange value of one commodity in relation to another is therefore found in their common element, the amount of abstract labor necessary for their production (or provision in the case of a service rendered), or, to be more specific, the average time-amount of abstract labor necessary to create a commodity at a given social level of productivity.

The labor theory of value establishes certain concepts, such as those of value, commodity, and abstract labor, as abstractions from concrete social relations. It thus provides a theoretical understanding of the economic with concepts that always refer to an analysis of concrete social relations. It is thus fundamentally different from that of neo-classical economics, which replaces the necessity to analyze social relations with the axiom of general equilibrium. From this perspective, the requirement of Beckert and Streeck (2008: 24-25) that “economic action in contemporary capitalist societies is to be treated as a special sort of social action” in current social scientific research on capitalism is already satisfied by the labor theory of value.
3.2.2 Capitalist accumulation, surplus value and profit

3.2.2.1 The production of surplus value

In the previous discussion, Commodity–Money–Commodity (C–M–C) was presented as the form in which producers exchange commodities for their exchange value with the ultimate aim to acquire certain use values. The form C–M–C represents economic exchange between independent, individual, private producers in a society with a developed division of labor and in which each producer acquires a share of the social product equal to the amount of abstract labor that she has invested to produce here goods. We could call this fictional scenario a market economy of independent producers.

Capitalism and the movement of capital, however, appear in stark contrast to the social conditions portrayed above. The ultimate aim of capital accumulation is not the acquisition of particular use values but of exchange value in general, the accumulation of its general equivalent, money. The movement of capital can thus be described in the form M–C–M (Money–Commodity–Money). At the end stands money and not a commodity as in C–M–C. Capital accumulation appears to be a process of self-valorization of money in the sphere of circulation. Money is exchanged for commodities, which are exchanged for more money, or systematically, M–C–M', where M' is M+ΔM, the original investment plus its increment, a surplus value (Marx 1962a: 171). While M–C–M' describes capital in the sphere of circulation, the systematic propagation of surplus value that it describes requires an explanation.

If we accept that value is the product of abstract labor, then M–C–M' cannot be explained from the exchange of commodities and money in the sphere of circulation. It was already established that the exchange value of a commodity is determined by abstract labor, mere exchange does not add value to them. M–C–M' can be explained, however, when the production process is accounted for:

“M–C–M' can only make sense when it subsumes the labour and production process, and it is only the commodity labour-power that can systematically produce more value than it costs. In other words, C must be expanded into commodity inputs (including labour-power), a labour and production process, and commodity outputs containing surplus value or profits that derive from the exploitation of labour-power” (Albritton 2007: 31).

The systematic creation of surplus value, which only appears as a process of the self-valorization of capital in the sphere of circulation, actually takes place in the sphere of production, which must be included in this movement for it to work systematically.
It is the property of labor as the purposeful expenditure of human physical and mental power to create new value. In the form of wage labor, labor power is the only commodity in the capitalist production process that can create new value, of which its amount is variably determined by the extent of the working day and the intensity of work. All other commodities that enter the production process are already the products of previous labor and their use in the production process thus transfers existing value onto the new product, but does not create new value. Its value content is therefore constant. The basic inputs of the production process can thus be described as \( C = c \) (constant capital, i.e. machines, materials) + \( v \) (variable capital, i.e. labor power), while its output is \( C' = c + v + s \) (\( s \) = surplus value) (Marx 1962a: chapter 5).

The inputs of constant capital transfer their value to the product when they are consumed in the production process. They do not, however, create value in this process. A cell phone (\( C' \)), for example requires for its production a number of inputs (\( c_i \)), like a screen (\( c_1 \)), a circuit board (\( c_2 \)), and a case (\( c_3 \)), which in the production process need to be soldered (solder iron, \( c_4 \) and tin, \( c_5 \)) and glued (glue gun, \( c_6 \) and glue, \( c_7 \)) together. The value of the cellphone includes the value of the components it is being assembled from (\( c_1 + c_2 + c_3 + c_5 + c_7 \)) as well as a fraction of the value of the tools or machines that are used to assemble the components, provided they lose a fraction of their value through deterioration in the production process (\( c_4/x + c_6/y \)).

The previously isolated inputs of constant capital are transformed to create a cell phone, but the inputs of constant capital add value to the product only insofar as they themselves are utterly or partially consumed in the process. What has made the cell phone a more valuable object than its isolated components was the purposefully directed human work spent in its assembly. Consequently, \( C = c_1 + c_... = C' \) is a zero-sum formula and \( v \) needs to be brought into the equation to allow for \( C' > C \) (cf. Marx 1962a: chapters 6, 7). If \( c = 0 \) then the formula \( C' = c + v + s \) may as well be shortened to \( C' = v + s \).

Labor power enters the production process as a commodity. Its bearer is the wageworker. Analogous to other commodities, the value of labor power is determined by the amount of abstract labor socially necessary for her reproduction, i.e. the value of commodities consumed in the reproduction of the worker’s social and biological existence (food, clothes, rent, etc.). The worker is compensated for the value of her labor by a money wage, by which she can acquire the abstract labor necessary for her reproduction in the form of commodities. In other words, it is the necessary labor of the worker whose value is compensated in the form of a wage. This value enters production in the form of variable capital \( v \).

As labor is the source of all value, surplus value \( (s) \) now presents itself as an increment of \( v \), or more specifically, as the labor expended in the production process in excess of what is
necessary to provide for the reproduction of the worker. Therefore, \( s = \Delta v \) and \( C = v + \Delta v \), which is the value of necessary plus the value surplus labor spent by the worker in the production process.

Surplus labor is labor spent in excess of what is necessary to produce the exchange value required to procure the commodities for her own reproduction, the equivalent of which she receives as a money wage. Surplus labor is thus unpaid extra labor time and the surplus value created during that time is as a value increment to the commodities produced appropriated by the capitalist.

3.2.2.2 The fundamental social relation of capitalism

The concept of surplus value explains economically the phenomenon of the selfvalorization of capital, the production of value from value and the miraculous multiplication of money, expressed in \( M \rightarrow C \rightarrow M' \). At the same time, it shows how capitalism is not founded on equal exchange relationships, as the concept of market economy suggests. This allows for an initial theoretically grounded distinction between the two concepts of “market economy” and “capitalism”.

\( C \rightarrow M \rightarrow C \) represents the exchange of commodities on the market for their exchange value with the purpose to finally acquire commodities for their use value. Any society in which a social division of labor is dominant, that is, where subsistence is not, necessitates \( C \rightarrow M \rightarrow C \). Any such society could therefore be labeled a market economy. If we follow Marx’ argument, then capitalism is indeed something different than a social relationship of individual producers linked by market exchange. While market exchange is \( C \rightarrow M \rightarrow C \), capital accumulation takes the form of \( M \rightarrow C \rightarrow M' \). Its end is not to provide for use values, but to accumulate (exchange) value. The driving force of capitalism is not the satisfaction of needs but the creation of profit.

If we focus on the sphere of circulation alone (the market) then capitalism can indeed appear as a relationship of free subjects who voluntarily exchange commodities (including their labor) with the ultimate goal of satisfying individual needs. And neither is this just an illusion: Capitalism presupposes the existence of free subjects as consumers, workers, entrepreneurs, etc. and therefore has had historically, as it may have today, revolutionary and potentially emancipatory impact in the societies in which it unfolds.

The matter looks differently once we shift our viewpoint to the capitalist relations of production, in which the relationship of worker and capitalist is defined in the production of surplus value and where their relation is defined by the struggle over the distribution of the value product \( v + s \). It is in the relations of production where the capital-labor relationship
becomes one that is not characterized by equal exchange, but by the systematic exploitation of unpaid labor.

The concept of surplus value also sheds new light on the relations of exchange between capital and labor, which are equal relations only in form. The capitalist is legally entitled to the product of the worker’s labor, because he has previously purchased it by contract, just like he would purchase other commodities. It is however, the commodity form and the commodification of labor in capitalism, which in turn enables the appropriation of surplus labor as commodities produced and which perpetuates the unequal capital-labor relationship even in the sphere of exchange:

“In the pure case, owners of private property have absolute control over their property including the right to sell it and the right to the total income that accrues from its sale. In a society where all production is the capitalistic production of commodities, ownership of the means of production entitles owners (capitalists) to appropriate the total product as their private property, even though the means of production only contribute a fraction the value of the total output, and even though the value of the means of production is the result of previous labour. It follows that in a capitalist society, the commodity form, by virtue of its being a form of private property gives enormous structural power to the positionalities inhabited by capitalists.” (Albritton 2007: 32-33)

The labor theory of value illustrated here shows how capitalism creates and is itself created in the capital-labor relationship, as capital accumulation can only work as the systematic appropriation of the value of workers’ surplus labor throughout and across the entire social organization of production. The commodification of labor in exchange and the exploitation of labor in production thus on a societal scale constitutes the capital-labor relationship as that of a dominant versus a subjugated class and thus also the political as inseparable from the economic in the capitalist mode of production.

Capitalism is based on the division of society into a class of wage laborers and a class that controls the means of production between which the product of abstract labor is divided into the value of labor and surplus value. Capital should thus not be understood in terms of money or commodities or machines, but rather in terms of its character as a social relation, which merits use of the following definition:

“Capital is the social relation of appropriation, as commodities, of products of labour and labour-power sold by free individuals” (Aglietta 1979: 46, original emphasis)
3.2.2.3 The rate of surplus value

The economic and political struggle over the distribution of the value product is reflected in the rate of surplus value \((e')\) - also called the rate of exploitation:

\[
e' = \frac{s}{v}
\]

The rate of surplus value expresses the relation between the value of socially necessary labor versus surplus labor expended in the social production of commodities as the relationship of the value of variable capital \((v)\) and surplus value \((s)\). It is important to note that the concept of surplus value, with value here understood as the social relation of abstract labors, denotes the division of the total social value product between the classes that constitute and are constituted in the capitalist production process: the producers in the form of the working class and the owners of the means of production in the form of the capitalist class.

Exchange value is the quantitative denominator of abstract labor, meaning labor that was socially validated in commodity exchange against other labor as a part of the abstract labor spent by society as a whole. While the conditions of production of commodities may vary between branches of production and even between individual enterprises to a certain degree, the realization of commodity value as exchange value only takes place as the social validation of the labor expended in their production as a share of abstract social labor. This is because in the exchange of commodities the special conditions of production of a particular commodity are not accounted for, and the measure of the exchange value of a commodity is abstract labor, which, as we have seen, is determined by the social conditions of reproduction of the working class.

Thus, if value is the expression of the underlying social relation of abstract labor then the rate of surplus value when applied as a measurement of the division of the social product, expresses certain general norms of production that effect the division of the value product between the classes and are thus object of the class struggle. At the same time, these norms lie at the root of capitalist competition, because any individual capital will have to converge on these general norms of production if it wishes to realize an appropriate share in the total value produced and thus sustain its profitability.

Based on this and following Aglietta (1979: 47), the rate of surplus value can thus be defined as a global concept based on the homogenization of labor value by the universalization of capitalist commodity production and consumption. Vice-versa, capital and thus its value relation to labor is always the product of social labor.
For our analysis of Chinese capitalism this means that in principle value can be measured on a macro level as it is the product of abstract labor validated against the general norms of production.

The methods by which the rate of surplus value can be analytically separated, and called the production of *absolute* and *relative surplus value* (Marx 1962a: 331ff., 531ff.).

In the first sense, given that the productivity of labor remains constant between cycles of accumulation, extending the working day, which will lead to an increase in the amount of surplus labor spent, while the amount of necessary labor remains constant, raises the amount of surplus value produced. This is called the production of absolute surplus value.

Relative surplus value refers to the processes by which the division of the working day into necessary and surplus labor is affected. This can be achieved either by increasing the intensity of work or the productive power (*Produktivkraft*)/productivity of labor or a combination of both.

Changing the intensity of work means greater expansion of labor power in a given amount of time, which causes a decline in the amount of labor time in which commodities equal in value to what is necessarily required for the reproduction of labor are produced, therefore relatively extending the amount of labor time in which surplus value is produced. “An increase in labor intensity is obtained chiefly by subordinating labor-power to the continuous and uniform movement of the machine system and increasing the system’s speed of operation” (Aglietta 1979: 51). Given that no technical innovation takes place, this method has certain limits. The volume and pace at which given machinery can be set in motion is limited, as is the endurance of the human worker.

Sustained increases in relative surplus value thus depend on technical innovation that increases the productive power of labor even as the intensity of work remains constant. This requires changes in the organization of production or the means of production or both, affecting production of relatively greater amounts of commodities in a relatively shorter amount of time (Marx 1962a: 333).

In any case, such changes need to be generalized in a way that causes a revolution in the mode of production on a societal scale for it to affect the average rate of surplus value. In particular, this revolution has to be extended to those parts of industry that produce the means of consumption of the working class (the department producing the means of consumption, elaborated in section 3.2.3), or those industries that in turn supply the producers of the means of consumption. This will cause a decline in the value of commodities consumed by the working class, thus lowering the costs of reproduction and the value of their labor. The result is this:
Whereas previously workers spent 2 hours of a 10 hour-workday producing commodities in value equivalent to what they consume, they will now spend only 1½ hours doing the same. During the average working day, workers now spend an additional ½ hour of surplus labor, producing surplus value and raising its rate.

Changes in the productive power of labor are generalized by the mechanism of competition. If an individual capital, i.e. in a factory, raises the productive power of the labor it employs, it will now produce an above average amount of commodities while paying the average wage. Thus, the—as of yet—potential profits increase. Let us say the average price of the commodity produced is 1.20$ as is the going rate for a day’s wage. But whereas before a worker produced five commodities in 10 hours, yielding a profit of 4.80$ for the capitalist, they now produce six commodities yielding a potential profit of 6.00$. There is no guarantee, however, that all commodities will sell if offered at their average price. Seizing the opportunity afforded by the increase in productive power, the capitalist decides to sell at 1.10$ apiece, underbidding his competitors thus guaranteeing the sale, but still making a larger total profit than before, 5.40$. Stung by competition, the competitors now rush to implement changes in production to make up for their disadvantage. It is thus in every capitalists best interest to decrease the costs of the commodities he produces by increasing the productive power of labor, so that the mechanism of competition will soon affect a generalization of any changes in the methods of production enhancing the productive power of labor (Marx 1962a: 336).

“Der Wert der Waren steht in umgekehrtem Verhältnis zur Produktivkraft der Arbeit. Ebenso, weil durch Warenwerte bestimmt, der Wert der Arbeitskraft. Dagegen steht der relative Mehrwert in direktem Verhältnis zur Produktivkraft der Arbeit. Er steigt mit steigender und fällt mit fallender Produktivkraft. […] Es ist daher der immanente Trieb und die beständige Tendenz des Kapitals, die Produktivkraft der Arbeit zu steigern, um die Ware und durch die Verwohlfeilerung der Ware den Arbeiter selbst zu verwohlfeilern” (Marx 1962a: 338)

A systematic increase in the production of relative surplus value thus depends on a decline in the value of abstract labor, which is caused by technical innovation and its effect on

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3 “The value of commodities is in inverse ratio to the productiveness of labor. And so, too, is the value of labor-power, because it depends on the values of commodities. Relative surplus value is, on the contrary, directly proportional to that productiveness. It rises with rising and falls with falling productiveness. […] Hence there is immanent in capital an inclination and constant tendency, to heighten the productiveness of labor, in order to cheapen commodities, and by such cheapening to cheapen the laborer himself.” Source of translation: https://www.marxists.org/archive/marx/works/1867-c1/
productivity, which will cause a decline in the value of commodities consumed by the working class and thus a decline in the value of labor itself. When pertaining to an individual capital, these methods cause it to earn greater share of total value product (lower costs of production and greater profits), however, when generalized throughout society by way of competition, these methods will cause a general decline in the value of labor and thus and increase in the rate of surplus value.

More abstractly, changes in the value of labor power, which are ultimately caused by changes in productivity, are generalized by and expressed in changes in the social norms of consumption that affect the working class. Whereas these changes in early stages of capitalist development mean that autonomous means of subsistence are at first gradually and finally completely replaced by commodity consumption to supply the necessities of life, in the course of capitalist development this develops into mass consumption of the working class, the consumer society.

The phenomenon of mass consumption may in first view put in to question the concepts of necessary labor and surplus labor. But these concepts have nothing to do with what is necessary in terms of bare subsistence (as in the above example). The general norms of consumption rather reflect what is necessary in terms of capitalist reproduction. Changes in the generalized social norms of consumption are not merely changes in fashion, but arise out of changes in the productivity of capital. As this productivity increases, and with it the mass of commodities produced, changes in the consumption norms are needed to open new sufficiently large avenues for the reproduction of capital: increases in the productivity of labor thus also require adequate changes to consumption. We will discuss the relation of capitalist reproduction and consumption in more detail below.

The concepts of absolute and relative surplus value also reveal the political character of the social division between capital and labor as the struggle over the distribution of the value product, which expresses itself as the struggle over the extent and intensity of the working day, and the share of time spent working for the production of surplus value (the latter usually in the form of struggles over wages). In other words, the role of consumption in the course of capitalist development is not automatically determined by technological progress, but is instead the result of the political confrontation of capital and labor.

3.2.2.4 The organic composition of capital and the rate of profit

Rising productivity of labor means that, as a result of technical innovation, a greater mass of constant capital can be set in motion by a given amount of labor. Technical innovation causing a rising productivity of labor therefore goes hand-in-hand with changes in the organic
composition of capital, the relation of the value of variable and constant capital (or: living and dead and thus organic capital). I.e., while under earlier circumstances a given capital may have been composed of 50% constant capital (means of production) and 50% variable capital (labor), the relationship will now have changed to, say, 80% constant capital and 20% variable capital (cf. Marx 1962a: 651). The organic composition of capital \((k)\) can be expressed as:

\[
k = \frac{c}{v}
\]

As was demonstrated earlier, the value of a commodity is determined by the amount of labor that was applied in its production and the value of previous labor inherent in the commodities consumed in its production. Furthermore, the surplus value created in the production of a commodity is the result of surplus labor, that is the time where the worker works not for her own reproduction, but for the capitalist. As the composition of capital changes and the amount of variable capital declines in favor of the amount of constant capital, the amount of value newly created in the production process for each unit of commodity also declines.

Driven by competition, new technology will eventually diffuse within and across branches, causing economy-wide changes in the average composition of capital (Marx 1962c: 222). The changing composition of capital, and with it the rise in the average social productivity of labor, causes the value of commodities to fall. Accordingly, the costs for the reproduction of labor also fall. As a result, during an average working day, workers spend less time working for their subsistence and spend more time producing surplus value. That means that, as the social productivity of labor rises (and given that the working day and the intensity of work remain constant), the rate of surplus value also rises.

The rate of profit \(p'\) is derived from the mass of surplus value created \((s)\) relative to the mass of constant and variable capital invested in by the capitalist and consumed in the production process \((c + v)\) (Marx 1962c: 59)

\[
p' = \frac{s}{c + v}
\]

The rate of profit is generally affected by what Marx called the “law of the tendency of the rate of profit to fall” (Marx 1962c: 221ff.), which is set in motion by the changing organic composition of capital. As Marx describes it,

“Die progressive Tendenz der allgemeinen Profitrate zum Sinken ist also nur ein der kapitalistischen Produktionsweise eigentümlicher Ausdruck für die fortschreitende
Entwicklung der gesellschaftlichen Produktivkraft der Arbeit” (Marx 1962c: 223 original emphasis).⁴

It might at first sight seem paradoxical then, that the changing value composition of capital, which is constantly driven by attempts to increase the rate of surplus value, should have a negative effect on the rate of profit. No wonder then, that the “law of the tendency of the rate of profit to fall” is indeed one of the most controversial theorems discussed in Capital.⁵ The apparent paradox, however, is actually a real contradiction created in the accumulation process, and one of the causes of capital accumulation’s tendency to create periodic crises.

The tendency of the rate of profit to fall becomes comprehensible if we remember that in the production process human labor power (v) is the only component that adds newly created value to the product, while the means of production (c) only transfer the value of past labor onto the product. The changing value composition of capital in favor of constant capital requires ever-greater investments into the means of production and inputs, while the share of variable capital declines in relation. The changing value composition of capital thus leads to a decline in the overall portion of invested capital that produces a surplus value. The rate of profit as a relationship between rate of surplus value and the value composition of capital can thus also be expressed as (cf. Aglietta 1979: 54):

\[ p' = \frac{e'}{k + 1} \]

Consequently, when, as described above, the composition of capital changes in favor of constant capital, the rate of profit falls as the investments necessary in constant capital rise against a relative decline in surplus value. This tendency of the accumulation process has certain consequences that may become manifest in periodical crises, but may be counteracted in different ways.

One, the rate of surplus value can be raised and with it the tendency for the rate of profit to fall can be curbed by raising the average productivity of labor, that is, lowering the time necessary for the reproduction of labor and expanding the amount of surplus labor. This process, however, requires the devaluation of already existing capital, i.e. replacing old means of production with new ones. And this again will lower the amount of variable capital vis-a-vis

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⁴ “The progressive tendency of the general rate of profit to fall is, therefore, just an expression peculiar to the capitalist mode of production of the progressive development of the social productivity of labour.” Source of translation: https://www.marxists.org/archive/marx/works/1894-c3/

⁵ For an extensive discussion of the topic see, for example, (Kliman 2007)
constant capital. The process that temporarily curbs the tendency of the rate of profit to fall therefore also causes the tendency itself. This is a contradictory process that on a societal scale of production manifests itself in periodic crises. Here, large-scale crises of accumulation, which occur as a result of declining profitability throughout a branch of industry or the economy as a whole will result in the large-scale devaluation of capital stock (Marx 1962c: 258-260), which, however, may restore profitability:

“In this way … increases in productivity tend to eventually produce economic crises. Yet, since the advanced capital value is the denominator of the rate of profit [c + v, cf. above], the annihilation of existing capital value acts to raise the rate of profit and thus helps to bring the economy out of crisis.” (Kliman 2007: 37)

Two, the decline in the rate of profit does not necessarily imply a decline in the mass of profit. As the accumulation process proceeds, thanks to the growing value composition of capital, an absolutely growing amount of wage labor can be put to work so that with the mass of capital invested the mass of surplus value and thus the mass of profits grows. In other words, the progressively growing amount of capital invested will lead to an absolutely growing and relatively declining amount of surplus value produced. Consequently, the volume of production and the mass of profits grow, while the share of surplus value in each commodity, and consequently the profit that can be accrued from its sale declines. The growth in the absolute mass of capital going hand-in-hand with a changing composition in favor of the constant part promotes the centralization and concentration of capital in the hands of fewer organizational units (enterprises, companies, conglomerates) as a consequence of competition in the course of the development of branches of industry, as ever greater masses of capital need to be invested to sustain profitably. The centralization and concentration of capital thus results from the crisis tendencies inherent in the accumulation process and causes changes in the forms of intra-capitalist competition. This leads to the emergence of monopoly and state-capitalism as discussed in the 1960s.

In summary, the “law of the tendency of the rate of profit to fall” demonstrates less the inevitable end of the profitability of capital in general, but rather that crises are a normal and recurrent result of the accumulation process itself. Crises in capitalism are not the result of some or another form of exogenous disturbance. Indeed, crises may restore profitability and allow the accumulation process to continue on a new scale (the devaluation and renewal of constant capital, the changing composition of capital). The recurrence of crises also means that there cannot be a permanent equilibrium in the capital-labor relation, in the sense that a modus vivendi of exploitation can be arrived at and sustained indefinitely. As accumulation progresses,
each crisis requires that the class relationship between capital and labor is re-negotiated. The relationship of capital and labor as a class- and therefore inherently political relationship is therefore recurrently set in motion through crises. All this leads to the necessity to integrate crises and change into our analytical framework for capitalism in China.

3.2.2.5 Unemployment and the industrial reserve army

The absolute growth of capital over time and its expansion into new branches will at times cause an absolute growth in the working population (meaning the population of wage laborers), but in the same movement it will create a relative surplus population of workers due to the cyclical nature of the accumulation process and the regular contractions caused by crises. Periods of mass new employment – or industrialization of the work force – are thus necessarily followed by periods of demobilization of industrial workforces.

The periods in which a mere quantitative expansion takes place on the basis of a given level of technological innovation shorten with each cycle of accumulation. Therefore, the qualitative restructuring of capital and with it the accelerated rate of capital accumulation appear, on the one hand, as the condition under which additional workers can be absorbed in the production process – or even under which the existing workforce can continue to be employed – while the technological revolution of old capital stock continues. On the other hand, the same tendency of the rate of accumulation to rise leads to an accelerated restructuring in the composition of capital in which its constant capital will expand progressively quicker and the growth rate of variable capital will progressively decline in relation to it.

The persistent capital cycle of expansion and contraction and of changes in the composition of capital result in periodical fluctuations in which workers are attracted and again repelled. In each phase of contraction and restructuring the pool of surplus workers fills up. The relative growth of constant capital and the accelerated decline of variable capital means that the amplitudes created in this process grow bigger; and the ever accelerating accumulation process means that the wave periods grow shorter. As capital diversifies into more and different branches of industry with their own growth cycles offset against each other, the existence of a surplus working population becomes a persistent phenomenon. In fact, however, this phenomenon is nothing but the result of the normal operation of the accumulation process, which persistently produces a surplus working population of unemployed. The “industrial reserve army” thus created becomes a necessary element in the operation of capital because it supplies the buffer of readily available labor power necessary for the revolution of the accumulation cycle (Marx 1962a: 658, 661ff.).
3.2.3 The circulation of capital and disproportionate development

In the previous discussion of surplus value, we have seen how the changing composition of capital affects the rate of surplus value, which on a societal scale reflects the development of the dominant norms of production and consumption, a development driven by capitalist competition and by class struggle. Changes in the rate of surplus value and the organic composition of capital thus signal transformations in the relations of production. The process by which this transformation of the relations of production is achieved is called the extended reproduction of capital and it demands that a part of the value accumulated is invested in the means of production so that the organic composition of capital is changed in favor of constant capital. Extended reproduction is the normal process of capitalist reproduction. It takes place on the scale of individual capitals and, mediated by competition, effects the transformation of social capital as a whole. To understand the complexity of the extended reproduction of social capital, we need to analyze it as the relation of the reproduction of individual capitals.

The reproduction of capital can formally be analyzed in its simple and its extended form. The analysis of the simple reproduction of capital describes the conditions under which the valorization of value, the production of surplus value, can be successfully repeated (reproduced). Such reproduction of capital takes place through a number of transformations in which value passes through the forms productive, commodity and money capital. Simple reproduction happens under the assumption that the original value of capital is preserved and that all surplus value produced goes into personal consumption. Extended reproduction takes place when only a part of surplus value produced goes to personal consumption, while another part is reinvested and accumulated to increase the value of capital so that a transformation in the means and conditions of production and reproduction takes place.

3.2.3.1 Circuits of reproduction

The discussion of the circuits of reproduction demonstrates how the reproduction of individuals is always integrated with the reproduction of other capitals, which allows us to speak of social capital in the first place. On the level of the individual capital, a transformation of the conditions of production is achieved by the accumulation of capital, a process that comprises the production of surplus value, the sale of commodities, the accumulation of money from profit and its reinvestment in more and/or improved means of production. From the perspective of an individual capital the process of reproduction can formally be divided into three circuits of capital:
• M–C…P…C'–M', describes the circulation of money capital, where money buys commodity inputs, which enter production as productive capital ($c + v$), commodities containing a surplus value are produced and sold for a profit.

• P…C'–M'–C…P/P' describes the process of the circulation of productive capital ($c + v$), at the end of which the composition of capital ($c + v$) remains unchanged (P), meaning that a simple reproduction of capital has taken place, or its composition has increased in favor of the constant part (P'), meaning that an extended reproduction of capital has taken place. (cf. Marx 1962b: passim)

• C'–M'–C…P…C', describes the circulation of commodity capital. Capitalistically produced commodities (C'), containing a share of surplus value, are sold for money which then buys commodity inputs. These are transformed into productive capital to again produce commodities that contain surplus value.

At any given time, a part of an enterprise’s total capital will be bound up in the forms of money, commodities and in production. From the standpoint of individual capital, the different forms of circulation of capital thus appear simply as one of three possible points of origin from which the process of reproduction can be analyzed. The analytical relevance of the three circuits of reproduction is revealed when we observe them as interlocking circuits describing the relations of different capitals. Each transformation in one of the circuits of capital pictured above entails a relation of exchange with another capital. Thus, viewed from another angle, each transformation in one circuit represents the point of origin for another circuit. What they show is that the successful transformation of one capital in each part of the reproduction cycle is at the same time precondition and result for another capital’s successful reproduction: the regular reproduction of one capital’s production cycle depends on its timely intersection with the commodity and money cycles of others and vice versa. The reproduction of any individual capital is thus always social reproduction and capital is thus always socialized capital. It is through the circuits of reproduction that changes in individual capitals are generalized as changes in the relations of social capital and changes in the relations of social capital affect individual capitals. It is thus not sufficient to conceive of the relations between individual capitals as relations of isolated entities in competition. It would be more correct to perceive of competition as the form in which individual capitals relate to one another as a part of social capital.

The network of intra-capitalist relations that is at the same time condition for and result of the reproduction of individual capitals already indicates the complexity and difficulties associated with capitalist reproduction if we remember that we are dealing with a decentralized
and essentially uncoordinated mode of production. An additional layer of complexity is added if we consider that the value of an individual capital will never only appear in one form (money capital, commodity capital, productive capital), but that instead a share of total value is always bound up in a certain stage of reproduction. At any given point of time in the reproduction process, a share of an individual capital’s value will take the form of money capital, commodity capital and productive capital and thus depends on the transformation of its other parts so that itself may continue the cycle of reproduction.

A crucial factor here is time: the duration of the production process, the turnover period of commodities produced, and the time invested for the acquisition of commodities for production all contribute to the duration of the reproduction cycle and any delay will interrupt the valorization of capital. Again, the difficulties associated with individual reproduction are only exacerbated when we consider that each transformation of capital represents a relation of exchange whose potential realization depends on stages of transformation and circuits of reproduction that vary in period in-between individual capitals. Any transformation in the reproductive circuit thus bears the risk of non-realization or failure, causing delays in reproduction or its breakdown.

3.2.3.1.1 Circulation of money capital M...M’

The circuit of money capital M–C…P…C’–M’, short M…M’, begins with the exchange of money for commodities to be used in production, the transformation of money capital into commodity capital, which is composed of a certain relation of variable (wage labor) and constant capital (fixed capital and inputs). As it enters the production process, commodity capital is transformed into productive capital P, a certain relation of variable and constant capital, which is determined by the overall development of the forces of production, and in which surplus value is produced. The result of the production process is capital in its commodity form C’, its value now enlarged by a certain amount of surplus value. Each commodity thus produced can be said to contain a share of value and surplus value, though this value cannot in its specific commodity form begin anew the reproductive process of an individual capital. The commodities produced need to be sold and transformed into money capital M’, the original amount invested plus a profit, which now reveals the total amount of surplus value produced, but only under the condition that all commodities are successfully sold.

The initial transformation of money capital, M–C, includes the transformation of a share of money capital into the labor commodity. Capitalist reproduction as such thus presupposes the existence of a working class, which is separated from the means of production.
“Daß der Verkauf der eigenen Arbeitskraft (in der Form des Verkaufs der eigenen Arbeit oder des Arbeitslohn) nicht als isolierte Erscheinung, sondern als gesellschaftlich maßgebliche Voraussetzung der Produktion von Waren sich darstelle […] dies unterstellt historische Prozesse, infolge deren die Masse des Volks, die Arbeiter, als Nichteigentümer und die Nichtarbeiter als Eigentümer dieser Produktionsmittel sich gegenüberstehen.” (Marx 1962b: 38)

We are here reminded of what Marx calls the original accumulation of capital (Marx 1962a: 741), the process by which traditional social relations are initially dissolved and transformed into capitalist social relations, as accumulation crucially depends on the availability of free, unbound labor. Whatever forms such “traditional” social relations may take, their dissolution involves various forms of more or less overt political violence and implicates the role of the state in capitalist development, whose role is not only to uproot but also control the mass of individualized workers, who have been separated from their means of production.

The commodities mass-produced by the wageworker are not her property and could not satisfy her needs if they were. The reproduction of capital consequently does not account for the individual consumption of the worker, but includes only the purchase of his labor in the initial transformation M–C, furthermore the productive consumption of labor and commodities, and finally the accumulation of money capital. How the worker spends her wage and which use values she acquires in the process is, however, of no concern for the reproduction of any individual capital.

It also becomes apparent in the wage relation between workers and capitalists that capital can take the form of money, but that not all money is capital. While money is one form that capital assumes in the circuit of reproduction, it would be wrong to assume that the wage paid to the worker represents a share of capital. In fact, when capitalist and worker enter a wage contract, the worker’s labor is exchanged for money. The worker’s labor now assumes the commodity form of capital whereas the money paid as wages ceases to function as capital. In the hands of the worker, the wage is nothing but a consumption voucher for a share of the social product of commodities equal to the value of her labor, bare of any entitlement to a share of the surplus product, and void of any productive capacity.

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6 “In order that the sale of one’s own labour-power (in the form of the sale of one’s own labour or in the form of wages) may constitute not an isolated phenomenon but a socially decisive premise for the production of commodities […] historical processes are assumed by which the original connection of the means of production with labour-power was dissolved — processes in consequence of which the mass of the people, the labourers, have, as non-owners, come face to face with non-labourers as the owners of these means of production.” Source of translation: https://www.marxists.org/archive/marx/works/1885-c2/
M…M' again shows that the purpose of capitalist production is exchange value and not the use value of the commodities produced. The use value of the commodities produced by an individual capital makes them unsuitable to immediately reenter its reproduction as commodity capital. It is only their exchange value that figures in the final transformation C′–M' and it is only money as the general equivalent of exchange value, that can then again be transformed into adequate shares of capitalist consumption, wages, commodity inputs, machines, etc. Money thus appears to be the alpha and omega, the source and purpose of capitalist enrichment, and tempts us to overlook the fact that the production process and the social relations that produce surplus value are essential for its reproduction.


3.2.3.1.2 Reproduction of productive capital P…P'

P…C′–M′–C…P', or short P…P', describes the circulation of productive capital. The circulation of capital following production, C′–M′–C, and with it money, now only appear as the mediator and thus a potential obstacle to the reproduction of the productive process.

P…P' can end with the simple (P…P) or extended (P…P') reproduction of capital, depending on whether or not a share of surplus value has been invested to increase productive capital. Assuming simple reproduction, the reproduction of productive capital (or simply the reproduction of production) requires that constant and variable capital at a certain amount and composition of value re-enter production at the end of each cycle. For example, in the case that the total value of capital is 200 and the value composition is 1:1, 100v and 100c will be required to recommence production at a given scale.

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7 “Just because the money-form of value is the independent, tangible form in which value appears, the form of circulation M ... M', the initial and terminal points of which are real money, expresses most graphically the compelling motive of capitalist production — money-making. The process of production appears merely as an unavoidable intermediate link, as a necessary evil for the sake of money-making. All nations with a capitalist mode of production are therefore seized periodically by a feverish attempt to make money without the intervention of the process of production.” Source of translation: https://www.marxists.org/archive/marx/works/1885-c2
C’–M’, the transformation of commodity capital containing value and surplus value into money capital, hinges on the specific properties of the commodities produced. Properties such as piece goods or bulk, durable or fast moving goods, consumer or investment goods, affect turnover periods, available channels of distribution, warehousing, etc. In other words, they determine the periods within which the value produced can and must be transformed into money capital and whether this process can and must take place promptly and completely or gradually and partially.

In case the value product has been successfully sold, money capital, which earlier appeared as the origin and purpose of capitalist reproduction, needs to be reinvested and transformed into wage labor and production goods as quickly as possible, as in the form of money, capital is idle and unproductive (M’–C). The possibility that production and investment goods or labor are not always available when needed at the right price or quantity is always a given, and does not need to be discussed further. It is in precisely such periods, where capital in the form of money turns to objects of speculation, as the regular pathways of reproduction appear barred. Speculation can thus be understood as a particular expression of an underlying crisis in the regular reproduction of capital.

While a part of constant capital must be replaced in each production period, durable investment goods such as machines transfer a part of their value onto the product over multiple production periods until they reach their end of life. The replacement of such fixed capital is financed for example through amortization funds. With regard to the extended reproduction of capital, for the acquisition of additional investment goods, a capitalist may be required to accumulate (save) surplus value out of multiple production periods in the form of money capital before a large enough sum is acquired to pay for new machines so that extended reproduction can take place. In any case, money capital needs to be horded over extended periods of time, slowing down and delaying the (extended) reproduction of a given capital. This also temporarily withdraws money from circulation, thus impacting the reproductive process of other capitals. It is especially true for investment goods with longer periods of amortization that changes in the average social value composition of capital may render these investment goods prematurely obsolete.

If we consider again that each transformation of capital represents the point of origin of another capital’s reproduction cycle, we can imagine how the difficulties encountered in the reproduction of productive capital may easily lead to the spread of crises. More important, however, than the difficulties that individual capitals face in reproduction discussed above, is
the general tendency to overproduction that becomes apparent when we analyze the reproduction from the perspective of \( P \ldots P' \).

If we would assume that capitalist production is ideally determined by a supply and demand equilibrium of use values, then deviations from this equilibrium may either be explained as combinations of oversupply and shortage of demand or undersupply and surplus demand, which are caused by imperfect markets and price signals. From the perspective of reproduction adopted by Marx, however, overproduction is a problem intrinsic to the extended reproduction of any individual capital and furthermore one, which is removed from considerations of social demand. The expansion of production is rather determined by the value composition of any given individual capital and its expansion in extended reproduction.

Let us again assume that the value composition of a given capital is 1:1 and that this value composition is representative of the social development of productive forces. 100\( v \) and 100\( c \) are required to commence production. Let us further assume that the rate of surplus value is 100\%, so that 100\( v \) produce a surplus value of 100s. The commodities produced are thus valued at 100\( c \) + 100\( v \) + 100s = 300. Commodities valued at 200 will have to be sold and their value reinvested in constant and variable capital to guarantee even simple reproduction (100\( v \) + 100\( c \) must be replaced to commence production).

Furthermore, commodities worth 100 have to be sold so that, on the one hand, the individual consumption of the capitalist is funded according to the dominant consumption norms (let us say 50), and on the other hand, investments have to be made to expand production, to invest in more and/or more productive machines to persist in the face of capitalist competition and the social development of productive forces (also 50).

The 50 have partially been invested in more and more productive machines (30) and the additional labor required for operating them. The next production cycle now starts with 130\( c \) + 120\( v \). Thanks to increased productivity the rate of surplus value may have increased to 110\%, so that the product is 130\( c \) + 120\( v \) + 132s = 382. The value of commodities required to recommence production on a given scale has increased, and so has the need to successfully push a greater value product through the circulation phase of \( C'\)–\( M'\)–\( C \). This requirement to acquire a given amount of exchange value, so that constant and variable capital can be replaced, exists independently of any actual social demand for the use values produced. What is crucial here is once more that capitalist production is geared towards the production of exchange value, the valorization of value, and not towards the production of any specific use values attuned to social demand. There is thus no inherent balancing mechanism in the accumulation of capital.
as the expansion of capital is not determined by market demand and supply, but instead by the pre-existing structure upon which capital expands.

Accordingly, as in M…M', if and how the commodities produced by an individual capital are consumed by society, is irrelevant in the circuit of reproduction P…P', as final consumption does not need to be accounted for to complete the reproductive cycle. With each following cycle of reproduction, the tendency to overproduction is thus reinforced, a tendency that will eventually collide with real social demand. As will be discussed later in more detail, the tendency to overproduction may be temporarily or spatially compensated for, for example through stockpiling, warehousing, wholesale trade, sub-contracting, exporting, credit, etc. Eventually, however, as the value of all commodities fails to be socially validated, crisis will ensue (cf. Marx 1962b: 80-81).

3.2.3.1.3 Circulation of commodity capital C'…C'

The difficulties of reproduction become even more apparent, if we view the reproduction process through the frame of the circulation of commodity capital, C'–M'–C…P…C', or short C'…C'. Viewed from the perspective M…M' and P…P, the reproduction of capital may primarily be understood as the reproductive movement of an individual capital in which the two extremes potentially are initial and/or final movements. The circulation of commodity capital, however, a) presupposes previous capitalist production, as it is opened by the commodity C', which contains a share of surplus value, and b) necessitates additional considerations of the particular characteristics of the commodities produced, their specific use values, and how the contradiction of use value and exchange value present difficulties to the continued valorization of value and the movement of exchange value in capitalist reproduction.

a) The commodity product C' contains, as the product of previous capitalist production, value equal to the constant and variable capital that went into its production and a share of surplus value. The commodity capital thus produced is transformed into money capital, C'–M'. M', containing a profit, will be split, so that its original value plus possibly a share of the profits made will be reinvested (M–C), while another part of the profits will be individually consumed (consumed unproductively), m–c.

\[
C' - M' \begin{cases} M - C & \text{M} \leftarrow P \leftarrow C' \\ m - c & \end{cases}
\]

From the perspective of the reproduction of an individual capital, C'…C' does not present a new problem when compared to the other perspectives of M…M' or P…P. A part of the value produced is reinvested. The value of commodities is productively consumed and thus preserved.
and new surplus value is produced. At least a part of the surplus value in the original C' is individually consumed and thus destroyed, the value product is fed to productive consumption on the one hand and individual consumption on the other. The consideration of consumption, however, now also leads us to consider the use value of the commodity that opens the reproductive cycle.

b) The original commodity C' is of a certain type. It can either be a means of production (a machine or a tool, raw materials) or a means of individual consumption (foodstuffs, clothing, consumer electronics), which predestines the circle of buyers that it can appeal to. Capitals that produce goods of consumption will find their market in the consumption of workers and capitalists (where we may again discern items of necessary and luxury consumption), capitals that produce means of production will find their market with other capitals. From the perspective of individual capital this now extends the problem of reproduction from the successful transformation of value to the problem of demand and supply of certain categories of goods. This again brings up the problem of the contradiction of exchange value and use value inherent in capitalist commodity production. From the standpoint of production exchange value is the only concern for any individual capital, but successful reproduction requires that within the volume of commodities produced by all capitals any individual capital can find use values of sufficient quantity and quality to continue reproduction.

From the perspective of the reproduction of social capital, the individual capitals must in sum contribute to social production adequate shares of means of production and goods of consumption that guarantee the reproduction of capital, the capitalist class and the working class. The propensity of individual capitals to overproduce in the face of competition so that they may fully realize the exchange value produced thus stands in contradiction to the overall needs of the social reproduction of capital. The overproduction of individual capitals will thus tend to create overproduction of certain types of commodities (i.e. for productive or individual consumption) and the disproportionate development of the respective branches of capital in an economy, which will be discussed in section 3.2.3.2.

3.2.3.1.4 Summary: circuits of reproduction

The analysis of the circuits of reproduction M…M', P…P' and C'…C' has allowed us to chisel out the fundamental contradictions that capital creates in its own reproduction.

In the ideal case, and as the sum total of the reproduction of individual capitals, the reproduction of social capital forms a continuous circuit, where each transformation in the value form of capital is condition and result of other transformations. Each transformation takes place
in exchange with other capitals and within the total structure of social capital and the structure of its total commodity product.

The reproduction of an individual capital in connection with the structure of social capital emphasizes the capitalist contradiction of use value and exchange value in the context of social supply and demand. The valorization of value in extended reproduction will for any individual capital only be successful if on average the value of commodities produced is greater in each successive cycle of reproduction and thus if commodities of greater value have been thrown into circulation than had been initially removed from it. Extensive reproduction thus does not follow social demand for specific use values, but instead always extends supply over existing demand with each completed reproductive cycle. Theoretically, the extended supply may then be absorbed by the extended demand for reproduction on a higher scale. The difficulty, however, lies in integrating the extended supply with its circulation and productive and individual consumption, given the fact that extensive reproduction happens in a decentralized and uncoordinated fashion, so that no guarantee exists that the extended value product actually reflects social demand for the specific types of use values produced.

Furthermore, time is of the essence. Every bottleneck causing delay and holdup in reproduction thus threatens disarray and crisis. For the transformations of value to proceed smoothly and without delay, various organizational and institutional innovations have been made in the historical development of capitalism.

The development of money and credit certainly figures most prominently here. The historical developments first of token and then of fiat money, for example, have generally eased restraints on exchange imposed by the limited availability of commodity money (i.e. gold). Bank credit provides liquidity for large investments on the promise of future earnings, easing restraints on the reproduction especially of productive capital. The improvements that the increased liquidity of money capital has provided in facilitating the speedy reproduction of capital, however, do not liberate capital from the general constraints imposed by the value relation. This is why money and credit figure so prominently in the event of crises as they may postpone and at the same time amplify contradictions in value relations created by overproduction and disproportionate development.

The ever proceeding acceleration of work dictated by the ever increasing productivity of machines have made necessary innovations in the organization of production such as shift work, Taylorist, Fordist and Toyotaist organizations of the shop floor, that can handle the requirements of an accelerated reproductive rhythm of productive capital. The growing organizational complexity of the firm and the requirement to divest of an ever-growing mass
of commodities in an ever-quickening pace has led to the differentiations of the work force into white-collar and blue-collar workers, as well as the professionalization of such fields as marketing and management.

The three perspectives on the reproduction of capital outlined above also point to historical shifts in the economic and political relevance and even dominance of factions of money, productive and merchant capital. While the post-war capitalist world was dominated by capital-intensive productive industry to whose needs national and international economic policies were tuned, the phenomenon of globalization has in recent decades led to a greater importance of finance and merchant capital in the core countries. The recent financial crisis of 2008ff. has made this obvious for financial capital, and trading companies like Wal-Mart and Metro control production of suppliers on a global scale. Apple, known worldwide as a maker of computers and handhelds, does not own a single factory and instead commands global supply chains, including the world’s largest OEM, the Taiwanese Foxconn company. Despite their great economic and certainly also political power, these companies ultimately rely on their suppliers’ ability to produce surplus value for them.

These historical developments cannot be considered in detail in a general theory of capitalist reproduction, but must instead be the subject of research into the concrete configuration of capitalist economies. It is the general theory, however, which establishes the relevance and relationship of concrete empirical phenomena of capitalist development. Our analysis of the Chinese case can thus also reveal how in the social reproduction of capital certain circuits of reproduction are emphasized over others, how this produces certain patterns of reproduction visible in the accumulation regime, with related tendencies to disproportionality and crisis, as will be discussed in the following.

3.2.3.2 The social reproduction of capital

Marx’s analysis of the social reproduction of capital rotates around two central questions: 1) What is the relation of production (productive consumption) and consumption (individual consumption) in the social reproduction of capital, and 2) how does this relation create the possibility of disproportionate development and crisis? The real world phenomenon that Marx here addresses theoretically is that of overproduction in capitalism. Marx follows a counterfactual method of exposition to discuss these questions, meaning that he shows the theoretical possibility of the successful and proportionate reproduction of capital, while at the same time implying its practical impossibility, as will become clearer in the following. It will be shown how the normal reproduction of capital depends on a number of relationships that
cannot satisfactorily be described within the boundaries of a general supply and demand equilibrium model.

The reproduction of social capital comprises the production and circulation of commodities intended for productive consumption, meaning their valorization in the production process, and for individual consumption, meaning the personal consumption of the working class of a share of the commodity product equal to total wages paid as well as personal consumption of a share of surplus value by the capitalist class. From this follows that an analysis of the reproduction of social capital requires us to distinguish between commodities produced and circulated for productive consumption and commodities produced and circulated for individual, unproductive consumption. We can thus distinguish between two departments of capitalist production: department I producing the means of production and department II producing the goods of consumption (cf. Marx 1962b: 351ff.).

As the analysis requires a distinction and indeed consideration of the contradiction between use values and exchange values produced, the reproduction of social capital is best analyzed through the frame of the reproductive cycle of commodity capital, in which the value product is divided into productive and individual consumption (M–C, m–c), and C parts into means of production and labor power (Mp, Lp), thus including the consumption of the working class.

\[ C' - M' \begin{cases} M-C \\ Lp \end{cases} \begin{cases} Mp \\ m-c \end{cases} \]

The fundamental questions for an analysis of the reproduction of social capital are: 1) How is the value of capital, which is consumed in production, replaced out of the total product of a certain time period, meaning: under which conditions is it possible that an individual capital finds in the social product the use values required for its own reproduction in sufficient quality and quantity? And 2) how does this reproduction of capital relate to the unproductive consumption of surplus value of the capitalist class and the unproductive consumption of wages by the working class (Marx 1962b: 392)? In other words, what is the relation of the combined reproduction of all capitals and their productive consumption and the unproductive consumption of capitalists and workers?

It should be kept in mind that Marx’s analysis assumes a perfect capitalist society and abstracts from any additional real conditions that may have positive or negative influence on the process of reproduction. The advantage of this method is, as always, that the relations, dynamics and contradictions of the capitalist mode of production are presented in their pure form. As such, Marx’s analysis of the reproduction of social capital aims to elaborate on the conditions under which reproduction is possible, assuming perfect dominance of the capitalist
mode of production, but from this he always infers the real and concrete impossibility of what seems possible in the theoretical and abstract. It will in effect be shown how the relations of production and consumption in capitalism do not develop proportionally and thus produce certain tendencies to crisis.

3.2.3.2.1 Simple reproduction

The total annual product of each department is divided into $c$, $v$ and $s$. If we assume that simple reproduction takes place, then the capitalist class consumes commodities equal in value to the whole surplus product ($s$) unproductively and no accumulation takes place. The working class consumes commodities equal in value to variable capital ($v$), which represents their wages’ share. The value of constant capital ($c$), to the extent that it appears as a part of the value of the annual commodity product, is equal to the value of the means of production, which have been consumed in production (commodity inputs, usage) and must be replaced.

For the purpose of illustration we will use the same numbers and ratios used by Marx in his schemas of reproduction in volume II of Capital (cf. Marx 1962b: 396ff., passim). The numbers present points of departure for the illustration of the relations of value in the reproduction of capital and their subsequent development, which have been chosen so that their relations initially satisfy the needs for reproduction, which in reality, they may not do.

The value of the annual commodity product of department I, producing means of production, is 6000, composed of 4000 constant capital, 1000 variable capital and 1000 surplus value. The value of the annual commodity product of department II, producing goods of consumption, is 3000, composed of 2000 constant capital, 500 variable capital and 500 surplus value.

Department I: $4000c + 1000v + 1000s = 6000$ means of production
Department II: $2000c + 500v + 500s = 3000$ goods of consumption

For both departments the rate of surplus value is assumed to be 100%, meaning that the workers spend as much time working for themselves as they spend working for the capitalist, so that the ratio of $v : s$ is 1:1. This is an abstraction, of course, as the real case is likely to be more complex, with a possibly varying composition of capital and thus diverging value rations between the two departments.

Both departments have to replace the value of the means of production consumed. Department I has consumed constant capital valued at $4000c$ and produced commodities that may serve as future means of production valued at 6000. This means that commodities produced in department I valued at 4000 replace the constant capital consumed in their production. Assuming that all commodities produced in department I are not only of the general type of use
value required (means of production) but also of the specific use values required (the actual machines and inputs required) commodities and money exchange hands between the capitals of department I until each capital has sold its product and acquired commodities of a value equal to the value of means of production originally expended. Department I also expends 1000 money in wages to its workers (equal to 1000v), its workers, however, do not buy commodities from department I, because they are not of the right use value. For now, department I is thus short on money worth 1000.

Department II has produced consumption goods worth 3000. Of these 3000, 500 exchanges for the wages paid to the workers of department II for their individual consumption, and the money originally expended in wages thus flows back to the capitalists of department II while the commodities produced are unproductively consumed. Another 500 are exchanged among the capitalists of department II by the revenue acquired from surplus value and again commodities worth 500 are unproductively consumed.

Thus far commodities in value equal to the constant capital productively consumed have been exchanged within department I and commodities individually consumed, which are in value equal to variable capital and surplus value, have been exchanged within department II. What now needs to be accounted for is the disposition of commodities of value equal to 1000v + 1000s in department I and commodities equal 2000c in department II.

Department II has consumed constant capital valued at 2000c but has not produced any commodities that may serve as future means of production to make up for its productive consumption. Instead it must buy means of production valued at 2000 from department I. Thus commodities worth 2000 from department I exchange with money worth 2000 from department II. Department I now has sold all of its commodities and acquired surplus money worth 2000. Department II now has acquired the means of production required to open the next production cycle, but is short on money by 2000.

The capitalists of department I now expend 1000 money for consumption goods from department II and use the remaining 1000 money to equalize their balance, which had been negative due to the wages paid to their workers. The workers of department I, unable to buy commodities from their own department, spend their wages worth 1000 on the remaining commodities in department II worth 1000.

All commodities produced have now been successfully exchanged for money and all money has been successfully exchanged for commodities destined to productive and individual consumption. Production can now begin anew and simple reproduction is complete.
What this example shows is that the value product in department I \((v + s)\) must be exchangeable for an amount of commodities equal in value of the constant capital in department II, \(v_1 + s_1 = c_{II}\). This relationship does not depend on the actual numbers used to illustrate the case here. Under conditions of simple reproduction, the value product of department I, representing the wages of the workers and the consumption funds of the capitalists, must be exchangeable for means of consumption. The same is true of course also for the value product of department II. In the case of department II the workers’ wages and the capitalists’ consumption fund are simply exchanged for the products of their own department. In the case of department I, however, this operation is not possible, because all it produces are means of production. The workers’ wages and capitalists’ consumption funds of department I must therefore be exchanged for means of consumption produced in department II. As the workers and capitalists in department II consume a share of the total product equal to the value product \(v + s\), the value of the means of consumption acquired by workers and capitalists in department I must therefore be equal to the value of constant capital in department II.

“Es ergibt sich, daß bei einfacher Reproduktion die Wertsumme \(v + m\) des Warenkapitals I (also auch ein entsprechender proportioneller Teil des Gesamtwarenprodukts I) gleich sein muß dem ebenfalls als proportioneller Teil des gesamten Warenprodukts der Klasse II ausgeschiedenen konstanten Kapital IIc; oder \(I_{(v+m)} = IIc\).” (Marx 1962b: 401)

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8 “It follows that, on the basis of simple reproduction, the sum of the values of \(v + s\) of the commodity-capital of I (and therefore a corresponding proportional part of the total commodity-product of I) must be equal to the constant capital IIc, which is likewise taken as a proportional
Furthermore, the case of simple reproduction also points to the role of working class consumption in capitalist reproduction. The money required in department II to acquire new means of production from department I is only acquired by way of the personal consumption of the working class belonging to department I, because the commodities produced in department II cannot replace the constant capital of department I.

From the standpoint of consumption, and in an additional demonstration of the complexity of capitalist reproduction, the product of department II can again be divided into necessary means of consumption (department IIa), that is the means of consumption that are habitually/by social convention/according to the dominant norms of consumption part of working class consumption, as well as luxury means of consumption (department IIb) that can regularly only be bought with the surplus product appropriated by the capitalist class. As the product equivalent to the value of constant capital is exchanged with department I, we can in a first step simply look at the exchange of the value product \( v + s \) here.

Department IIa: \( 400v + 400s \)
Department IIb: \( 100v + 100s \)

IIa’s \( 400v \) will be exchanged against workers’ wages from the same department; this share of commodities produced has therefore successfully been exchanged for money by the capitalist and is therefore removed from the equation. The workers in IIb will exchange their wages \( 100v \) against an equal share of commodities from IIa. This leaves money equivalent in value to \( 100s \) in the hands of the capitalists from IIa and commodities of \( 300s \) in department IIa and \( 100v + 100s \) in department IIb to be consumed by the capitalist class.

Depending on the norm of consumption, it can be assumed that the capitalist class consumes a certain share of surplus value in the form of necessary means of consumption and another share in the form of luxury means of consumption. Given a share of \( 3/5 \) necessary consumption and \( 2/5 \) luxury consumption, the capitalists in IIa would consume own commodities worth \( 240s \). The capitalists in department IIb would consume commodities from department IIa worth \( 60s \). This leaves \( 160s \) in the hands of department IIa to consume commodities from department IIb and \( 40s \) in the hands of department IIb to consume its own commodities.

The division of department II into the sub-departments IIa and IIb also has consequences for the reproduction of department I. A certain share of the product of department I must be exchangeable for means of production of necessary consumer goods, and another must be part of the total commodity-product of department II; or \( I_v + I_s = II_c \).” Source of translation: https://www.marxists.org/archive/marx/works/1885-c2
exchangeable for means of production of luxury consumer goods (though these may in reality be identical to a certain extent). The relationships established so far allow to make the following statements:

1. $v_1$ must equal $c_{IIa+b}$ in value and, additionally, appear in appropriate amounts in the form of means of production for luxuries and necessary commodities. If this is not the case, then this will either prevent reproduction in department II or cause overproduction in department I.

2. $v_{IIb} < s_{IIa}$, so that workers in department IIb can exchange their wages for necessary commodities, and capitalists in IIa can exchange the money thus earned with luxury goods, so that capitalists IIb can sell commodities equal to wages expended. (Marx 1962b: 406-407)

We can see here that already under simple reproduction, meaning when no accumulation takes place, the normal reproduction of capital depends on a number of relationships that cannot satisfactorily be described within the boundaries of a general supply and demand equilibrium model that lacks any such specific determinations of economic relationships. Instead it is necessary to consider the division of the total value product into means of consumption and means of production to understand the social reproduction of capital. But exactly herein, and unrecognized by neoclassical economics, lies the contradiction of decentralized, private production and social reproduction in capitalism and its tendency to crisis, even under simple reproduction, as will be elaborated in the following. We may here add that in the mediation of this contradiction politics do matter as they determine the relation of classes and of different types of capital in the process of reproduction.

From the standpoint of an individual capital, not only would it be impossible to be fully informed about the social demand and supply situation with regard to means of consumption. One could argue now that the coordination between individual capitals does take place through the price signals on the market or other non-market means of coordination, which have, for example, been researched by the Varieties of Capitalism School. This is certainly true but misses the point, as supply and demand are not simply determined by the sum total of the use value requirements of individual consumers and producers, but rather by the value composition of social capital, which determines how the shares of goods of consumption and means of production are to be divided if even the simple social reproduction of capital is to be successful. Any research of Chinese capitalism thus needs to take into account not only the micro-level on which individual capitals may coordinate by market or non-market means, but also the social
The share of means of production produced must be equal the share of constant capital in the social value composition of capital, because the productively consumed capital, whose value is now part of the commodities produced, needs to be replaced. The share of means of consumption produced must be equal to variable capital and surplus value produced, because, assuming simple reproduction, all new value produced must fall to individual consumption of workers and capitalists alike (cf. Marx 1962b: 423-435). These strict boundaries of the value relation give way to crisis, as soon as we consider that the reproduction of social capital is subject to the sum of reproduction of individual capitals in the more or less anarchic environment of capitalist competition. This is the actual strongpoint of Capital that by mapping out the abstract relations of reproduction, it always brings in crisis as the result of the real and concrete conditions of reproduction. With a view to the empirical analysis of the Chinese economy, the task then is to show how concrete structure of reproduction gives way to concrete tendencies to disproportionality and crisis.

3.2.3.2.2 The problem of fixed and circulating capital and varying periods of reproduction

Another case that adds complexity to reproduction emerges when we consider that the replacement of fixed capital (i.e. machines) and circulating capital (i.e. expendables) as a share of constant capital are actually subject to varying periods of reproduction. We have already established that $v_I + s_I = c_{II}$ is the necessary condition under which simple reproduction can take place. The equation signifies that, on the one hand, workers and capitalists in department I must buy their means of consumption form department II and, on the other hand, that constant capital expended in department II for the production of means of consumption must be replaced with means of production produced in department I. For this equation to solve, department II must exchange the complete value of commodities $c_{II}$ for commodities $v_I + s_I$ within a given period, for example a year, as it is used by Marx for his reproduction schemas.

In reality, however, the constant capital to be replaced in both departments consists of circulating capital, i.e. piece goods, which are continuously replaced over the course of a year, but also fixed capital, i.e. machines and buildings, which is subject to extended periods of use as its value is only gradually transferred to the commodities produced. This presents an additional problem for reproduction in so far as periods of production of commodities of varying extend collide with diverging periods of reproduction/replacement of capital of varying extent.
From the perspective of individual capital, a certain share of the value product being allocated to an amortization fund to cover for extended periods of reproduction. In the fund a share of capital is saved unproductively in the form of money, so that after certain, usually perennial periods that match the life cycle of capital-intensive tools and machines or even buildings, these can be replaced out of that fund.\(^9\) Amortization extends over different periods between branches of capital or even individual capitals, so that on average a certain share of the product of each department is always withheld as amortization funds, so that not all value produced can immediately re-enter the cycle of reproduction. Amortization thus requires that money capital is removed from circulation and hoarded. It becomes dead, unproductive capital to its owners and its absence in circulation presents and obstacle to the reproduction of social capital (cf. Marx 1962b: 450ff.).

We may solve this problem for department I if we assume that the value of fixed capital replaced out of the amortization fund within a given reproduction period is equal to the value of commodities produced suitable to replace said fixed means of production in that same period, meaning that a share of accumulated money capital that has previously been saved is thrown back into circulation always in an amount that is equal to the value of money capital removed from circulation and added to the amortization fund each year within department I. Given the anarchic character of capitalist reproduction, this is a possible, but highly unlikely scenario. In reality, it is much more likely that the amounts saved and spent out of the amortization fund vary in proportion and that supply and demand for fixed and circulating capital fluctuate with each reproduction period. And this does not even consider extended reproduction and changing value compositions of capital, which will have additional effects on the amount and proportions of amortization savings and expenditures as well as the replacement periods for fixed capital.

Even if we accept this as a likely solution for department I, we still need to view the problem within the framework of exchange relations between the two departments, as department II cannot produce its own means of production. If we assume that workers and capitalists in both departments fully consume the value product \(v + s\), then the value share for the amortization fund must come out of the constant part of capital. In the exchange of \(v_I + s_I\) and \(c_{II}\) the problem thus arises that the share of \(c_{II}\) withheld in the amortization fund will regularly not be exchangeable for \(v_I + s_I\) and vice-versa, so that part of the means of consumption produced in department II will not be exchanged for means of production of department I, because a certain amount of money representing the share of value saved is

\(^9\) We leave aside the role of money and credit in this regard for now.
withheld from circulation, creating interruptions in commodity circulation between departments I and II. If we allow department II to withhold capital from circulation in this way, then department I would have to finance the amortization fund of department II by buying its means of consumption, without, however, in turn selling its complete product in means of production back to department II.

This dilemma is again theoretically solvable in a similar manner as above, if we assume, on the one hand, that each year a part of department II accumulates money for the amortization fund, while another part of department II spends an equal share of its amortization fund to buy fixed capital from department I; and on the other hand, that in department I the proportions between fixed and circulating means of production produced remains constant to reflect the value of capital available for investment in fixed and circulating capital in department II (Marx 1962b: 461).

This assumption does not hold, however, if, as above, we bring in the realistic assumption that the proportion of fixed vs. circulating capital that needs to be replaced in department II fluctuates yearly. Given that the total product remains constant (conditions of simple reproduction), if the share of fixed constant capital to be replaced in department II increased (machines need to be replaced), but the demand for circulating constant capital remained the same (production continues as before) the reproduction of department II would be interrupted if department I did not expand its total production. The shortage in department II might be averted by a total expansion of production in department I, which, however, would again bring up the problem of insufficient cash flow from department II. Or in the opposite case, where the share of fixed capital to be reproduced in department II declined (i.e. the life cycle of a majority of machines is in full swing), while the demand for circulating constant capital remains the same (production continues as before), department I would either have to reduce its production or would be left with unsellable product (cf. Marx 1962b: 463-464). In either case crisis ensues because capital in departments I or II can’t reproduce, so that workers are laid off and capitalists go bankrupt.

“Soweit aber bloß einseitig Umsätze stattfinden, Masse bloßer Käufe einerseits, Masse bloßer Verkäufe andererseits […], ist das Gleichgewicht nur vorhanden unter der Annahme, daß der Wertbetrag der einseitigen Käufe und der Wertbetrag der einseitigen Verkäufe sich decken. Die Tatsache, daß die Warenproduktion die allgemeine Form der kapitalistischen Produktion ist, schließt bereits die Rolle ein, die Geld, nicht nur als Zirkulationsmittel, sondern als Geldkapital in derselben spielt, und erzeugt gewisse, dieser Produktionsweise eigentümliche Bedingungen des normalen Umsatzes, also des normalen Verlaufs der Reproduktion […], die in ebenso viele Bedingungen des anormalen Verlaufs, Möglichkeiten

The problem of varying periods of reproduction is thus one of the factors that may lead to disproportionate growth between the departments, subsequent overproduction and, eventually, crisis. These contradictions of reproduction now point us directly to the significance of the credit system for capitalist reproduction, which Marx has abstracted from in his discussion of reproduction. Money saved to acquire means of production is unproductive, dead capital and an obstacle to capitalist reproduction. This is why such savings are transformed into credit and bonds, a form in which money capital may be used to smooth over the problems arising from diverging periods of reproduction, disproportions and even overproduction.

Credit, however, does not solve the problem that commodities must ultimately be produced and exchanged in certain proportions for capitalist reproduction to proceed smoothly. Instead, it may even serve to postpone the immediate resolution of disproportionate development through crisis, exacerbating the development of contradictions. This is also the reason why in advanced capitalist economies with a well-developed financial system, finance seems to be more often than not at the origin of such crises, while their actual roots in disproportionate development remain buried.

3.2.3.2.3 Accumulation and extended reproduction

The discussion so far has focused on the reproduction of capitalism under the hypothetical assumption that no accumulation of capital takes place and that instead the complete value product \((v + s)\) goes to individual consumption. This illustrated how the social reproduction of capital depends on the successful circulation of money capital and commodity capital as well as certain relations of exchange between the departments producing means of production and means of consumption, which are determined by the proportions of variable capital, constant

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10"But inasmuch as only one-sided exchanges are made, a number of mere purchases on the one hand, a number of mere sales on the other […] the balance can be maintained only on the assumption that in amount the value of the one-sided purchases and that of the one-sided sales tally. The fact that the production of commodities is the general form of capitalist production implies the role which money is playing in it not only as a medium of circulation, but also as money-capital, and engenders certain conditions of normal exchange peculiar to this mode of production and therefore of the normal course of reproduction, […] conditions which change into so many conditions of abnormal movement, into so many possibilities of crises, since a balance is itself an accident owing to the spontaneous nature of this production.” Source of translation: https://www.marxists.org/archive/marx/works/1885-c2
capital, and surplus value in the social product and in part mediated by working class consumption.

The analysis of extended reproduction presents us with two additional problems. On the one hand we have to account for the fact that investments in the expansion of the means of production requires previous accumulation of capital, usually in the form of money capital, a problem that has already been discussed in relation to diverging periods of reproduction and amortization. On the other hand, extended reproduction requires that the proportions between the departments be maintained even after their productive capacities have grown.

As with the case of amortization, the problem of accumulation of capital for the sake of investments in a first step presents itself as a problem of capital withheld from circulation. A certain share of capitalists will only sell during a given period, but not buy and individually or productively consume commodities that represent a part of the surplus value produced. They thus remove money from circulation and create hoards of only potential money capital, which will remain idle until a large enough amount has been accumulated. This, in turn, will create problems for the circulation of social capital as a whole, which can only be avoided if other capitalists buy commodities of equal value from previously hoarded money. Banking and credit thus play a crucial role in capitalist reproduction.

In the context of the schemata of reproduction, the value of commodities of capitalists A in department I (A₁), who only sell, must be equal to the value of commodities acquired by capitalists B₁, who only buy in a given period. The value of commodities of capitalists A₁, who only sell, must be equal to the value of commodities, acquired by capitalists B₁, who only buy within the same period. Furthermore, to allow the unobstructed exchange of commodities between departments I and II, the selling of I₁ to capitalists B₁ must be equal to department I’s acquisition of II₁ from B₁ (Marx 1962b: 490).

The strict requirements of proportionality for accumulation and investment within the departments as well as for exchange between the departments demonstrates the difficulties that the unproductive accumulation of money capital, a precondition for extended reproduction, causes in real world economies. Marx once more abstracts from the functions that credit has here, which at the same time allows him to emphasize its actual relevance:

"Man begreift das Vergnügen, wenn innerhalb des Kreditwesens alle diese potentiellen Kapitale durch ihre Konzentration in den Händen von Banken usw. zu disponiblem Kapitel, "loanable capital", Geldkapital werden, und zwar nicht mehr zu passivem und als
Now we can turn to the actual expansion of production on a greater scale, to illustrate how the process of reproduction combined with accumulation, the actual process of capitalist development, presents additional problems. The production of the material means for the expansion of production does not require investments of the capitalists of department I beyond what is required to reproduce their capital. The surplus value produced by the workers of department I produced on a given scale of production already contains the material means required, as their product are commodities in the form of means of production. Even simple capitalist reproduction therefore produces at any given time in quality and quantity the material means required for extended reproduction, the expansion of production on a greater scale, simply because capitalist production is production of surplus value, the exploitation of one class by another. Accumulation, extended reproduction, does not depend on the advancement of money (advancement in the sense of additional value that does not originate from the production process), this is an illusion created by the money form of capital. Rather it is an element of the production process itself, the production of surplus value. The advancement of money in the form of credit, however, can facilitate the circulation of commodity capital between and within the departments and defer the imbalances created therein.

In the case of simple reproduction, we have assumed that all surplus value produced is consumed. This has allowed the exchange of Iₗ, the surplus value produced in department I, for IIₑ, goods of consumption produced in department II. Extended reproduction now necessitates that department I produces more means of production for department I (means of production of means of production) than it produces for department II (means of production of means of consumption). Accordingly, a part of surplus value produced in department I now cannot be exchanged anymore with department II – the material form of a share of the surplus product now makes this impossible.

The expended reproduction of capital thus requires shifts in the proportions of exchange between the two departments, which may by itself create problems for reproduction. As accumulation of money in department I takes place, the one-sided accumulation of capital as money by capitalists A₁ may render a share of B₁’s commodities unsalable, causing deficit in

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11“One can understand the pleasure experienced when all these potential capitals within the credit system, by their concentration in the hands of banks, etc., become disposable, ‘loanable capital,’ money-capital, which indeed is no longer passive and music of the future, but active capital growing rank.” Source of translation: https://www.marxists.org/archive/marx/works/1885-c2
reproduction in department II. The accumulation in department I may thus initially present itself as a demand deficit to, respectively overproduction in department II.

When actual expansion of reproduction takes place, the repurposing of a share of I\textsubscript{s} to provide means of production for department II instead of means of production for department II makes a share of II\textsubscript{c} not exchangeable for commodities I\textsubscript{s}. In this case, not only is a share of II\textsubscript{c} left on the shelf, but the commodities required to replace a share of department II’s constant capital are not available on the market. As department I’s reproduction depends on the circulation of commodities and money between its own workers and the capitalists of department II, the crisis in department II may fall back on department I. The expansion of reproduction may thus not only cause disproportionalities in the development of the two departments after it has been completed, but instead the process of expansion may already cause imbalances (Marx 1962b: 498-499).

Let us now turn to the problem of proportionate exchange between the two departments under the conditions of expended reproduction. We have established previously that simple reproduction can only proceed smoothly if certain proportions are heeded, which satisfy the requirement \( v_1 + s_1 = c_{II} \). In the case of extended reproduction, however, department I, producing the means of production, must produce a surplus of means of production that serve to expand constant capital in the next reproduction cycle.

In his schema for extended reproduction, Marx therefore introduces new proportionalities within and between the value compositions of the two departments (cf. for the following Marx 1962b: 505-509).

\begin{align*}
\text{Department I:} & \quad 4000c + 1000v + 1000s = 6000 \\
\text{Department II:} & \quad 1500c + 750v + 750s = 3000
\end{align*}

The rate of surplus value remains at an identical 100% in both departments, the composition of capital and thus productivity in department I (4:1), however, is higher than in department II (2:1). The restraints imposed by \( v_1 + s_1 = c_{II} \) on simple reproduction no longer hold in the case of extended reproduction, instead we have overproduction of means of production and underproduction of goods of consumption. After all exchanges between the two departments have been made, we are thus left with a surplus product of commodity means of production representing 500\textsubscript{s} in the hands of the capitalists in department I. These 500\textsubscript{s} could be consumed at the expense of the share of consumption of the workers in both departments or the capitalists in department II. Were this the case, even simple reproduction would fail. Instead we will assume that the extra means of production are used to extend production. Instead of consuming all of surplus value, capitalists in department I annex means of production valued
at 400 to their constant capital. The capitalists in department II acquire the remaining 100 means of production in exchange for 100 means of consumption. The use of all commodities is now accounted for and the next reproduction cycle opens with:

Department I: \[4400c + 1100v + 1100s = 6600\]
Department II: \[1600c + 800v + 800s = 3200\]

Note that the expansion of constant capital requires an expansion of variable capital proportionate to the development of productivity in each department—the workforce has been enlarged. The capital required to hire the additional workers is also initially diverted from the consumption fund of capitalists I & II.

Assuming that reproduction proceeds in the same fashion and proportion, the following year will yield:

Department I: \[4840c + 1210v + 1210s = 7260\]
Department II: \[1760c + 880v + 880s = 3520\] [etc…]

Given that productivity remains constant, the expansion of constant capital in department I, for which it produces its own means of production, also necessitates an expansion of variable capital, and enlargement of the work force, and thus the requires that an adequate amount of commodities for personal consumption by the working class is produced in department II. The expansion of constant capital in department I thus also necessitates an expansion of constant capital in department II to the extent that this will enable department II to enlarge its own work force and produce the additional goods of consumption required by the working class of both departments (cf. Marx 1962b: 512).

The capitalist expansion of the means of production is always also an expansion of the capitalist relations of production, the capital-labor relationship, and causes an expansion of consumer demand (demand by wage workers for commodities that can be consumed). Nevertheless, the demiurge, so to speak, of capitalist expansion, lies in the ability of department I to produce more means of production than it consumes. This is the only possibility within the strict and abstract relations presented in Marx’s schemas of reproduction, but it also should not matter whether the impulse for expansion originates from departments I or II if we assume less abstract conditions, as in the following:

Let us assume that for one reason or another, the demand for expansion originates in department II, because, for example, technological innovation in the consumer sector, wage hikes, labor shortages, or easy access to consumer credit, have created an adequate impulse. The growing demand for more and improved means of production in department II will immediately spur activity in department I, where capitals will vie with one another for a bigger
But working class consumption may not only be affected quantitatively, but also qualitatively as a result of extended reproduction. If we assume changes in productivity, which indeed Marx left out from his discussion of reproduction, then the productivity-driven expansion of the production of surplus value in both departments may effect qualitative changes in working class consumption.

What Marx apparently demonstrates in this scheme of extended reproduction, which could be continued probably in infinite iterations, is that under the restraint of conditions of proportionality of the value composition of the capital of the two departments, equally restraint consumption and adequate exchange between the capitalists I & II as well as proportionate investment, even extended capitalist reproduction can potentially work. The restraints are expressed in the formula \( c_{II} + \Delta c_{II} = v_I + \Delta v_I + so_I \), where \( so_I \) denominates the residual consumption of capitalists I (Harvey 2013: 367; cf. Marx 1962b: 512).

3.2.3.2.4 Summary: the social reproduction capital

The salient point of Marx’s discussion of simple and extended reproduction, that we would like to make with regard to our further discussion, is this: the reproduction of capital, as demonstrated by Marx, can at best only proceed smoothly within a limited span of time, before disproportionalities and uneven development give way to a crisis of reproduction. This conclusion may appear surprising at first, given that Marx has gone to great lengths to demonstrate that, at least mathematically, even extended reproduction can proceed smoothly. We would assume here, however, that Marx’s demonstration is intended to be proof in a counterfactual argument, which has not fully been developed within the often fragmented manuscripts that make up vol. 2 of Capital. The outline of this argument is, however, quite clear, as the assumptions made depend on a number of factors that are unlikely ever to be sufficiently fulfilled in the real world. “The schemas show what capital would need to do to achieve harmonious and balanced growth at the same time as they set the stage for understanding the sheer impossibility of doing so.” (Harvey 2013: 373)

First of all, remember that the division of production into two departments is in itself an abstraction from the plethora of use values produced and required. Secondly, the technical development of the means of production and associated changes in the value composition of capital, which would add an additional layer of complexity to the problem of reproduction, are
bracketed out. Finally, all the imponderabilities discussed in section 3.2.3.1.4 and previous come into play.

In real economies, the continued reproduction of capital between two crises, in spite of the difficulties associated with reproduction, is supported by a number of mechanisms. Disproportionate developments between the departments of production can be evened out by the tendency of the members of each department to overproduction or simply by reduced capacity utilization, so that an uneven structure of supply and demand may be temporarily sustained. Of course overproduction and underutilization means the non-valorization of a share of social capital, which will eventually have its own impact on reproduction. In any such case credit and debt and speculation play important roles in deferring the inevitable devalorization of a share of social capital, the point of crisis, into the future. The value relations of reproduction as illustrated by Marx in abstraction from the credit system impose strict material boundaries to the development of disproportionalities. These boundaries are expanded by the credit system, which thus allows disproportionate development to proceed.

Similarly, problems of disproportionality and uneven development may be temporarily overcome by foreign trade, which together with the import and export of commodities always entails the import and export of contradictory capital relations. Even a superficial glance at the political economy of China around the global financial crisis 2008 reveals the salience of the concept of disproportionate development and credit and exports to defer a crisis.

3.2.4 Summary: Capitalism, crises of accumulation and crises of circulation

This chapter has outlined the fundamental elements of Marx’s political economy of capitalism based on his labor theory of value. Our discussion of capital as analyzed in Marx’s critique of political economy has revolved around two major topics: Capitalist accumulation, surplus value and profit, as well as The circulation of capital and disproportionate development. While both topics have been analyzed separately, they are of course intrinsic and interrelated parts of any real world scenario of capitalist reproduction and development. Before we proceed to outline what this means for the analysis of empirical cases of capitalist development, we summarize the most salient features of capitalism according to Marx’ Capital and thereby also address the first fundamental shortcoming of existing literature, i.e. the lack of a clear definition of ‘capitalism’.

We had already established that capital “is the social relation of appropriation, as commodities, of products of labour and labour-power sold by free individuals” (Aglietta 1979: 46, original emphasis)). We need to be careful to correctly understand this definition. Free labor
means: free of the means of production and subsistence, and free to choose its employer. It is not the products of labor and labor power that are sold to capital by free individuals, but their labor power itself. This labor power produces commodities, which are appropriated by the owners of the means of production. The difference in the value of labor power sold for a wage and the value of commodities appropriated is surplus value, which can be turned into profits and can be accumulated.

With a view to the case of China, we should emphasize the role of property in this relation of appropriation: For it to work, it does not matter what judicial form the ownership of the means of production takes, whether they are state-owned or privately owned. What matters is that labor power is freely sold and that the buyer of that labor power is entitled in full to its product.

Capital is a “social relation”. It is generalized in society by way of expansion of the commodity relation, the process of commodification. The generalization of capitalist commodity production and consumption is at the same time condition and result of the expanding reproduction of capital. Capital reproduces in circulation. Any individual capital depends on generalized commodity production as the source for its own reproduction by way of their productive consumption.

It is also the commodity relation by which technological progress and associated changes in the value relation are generalized throughout society. It is before this background that actions to this effect by any individual capital aimed at increasing its share in surplus value take the form of competitive pressures towards all others. This makes competition a general condition of capitalist reproduction.

Commodification is also the process by which labor power is made available to capital, on the one hand, because labor power is itself traded as a commodity, but also, because the consumption of commodities provides the means of reproduction for labor, which is separated from the means of production and subsistence. The consumption of labor thus also becomes an important channel for the reproduction of capital. It is also the generalization of the capital as a social relation by way of commodification that turns the relations of exploitation (appropriation) of capitalist production into relations of social classes.

Both the analyses of accumulation and of the circulation and reproduction of capital have revealed particular contradictions that even under normal conditions develop certain tendencies of crisis. The accumulation of capital, which from the perspective of individual capitals may provide a temporary leap in competitiveness, causes generalized changes in the value composition of capital in favor of the constant part, exerting downward pressure on profits, the
so-called law of the tendency of the rate of profit to fall. The sustained reproduction of capital on a societal scale requires that certain proportionate restraints imposed by the structure of production and consumption and that the use value requirements of the reproduction of labor and of capital are observed. Because capitalist production is decentralized (read: uncoordinated) production and because capitalist production purposed towards the production of exchange value cannot take into account actual social demand, the social reproduction of capital inevitable produces disproportionalities in its development.

These two fundamental tendencies can be said to produce two distinct moments of crisis: on the one hand a crisis of overaccumulation where declining profitability interrupts the reproduction of capital, and on the other hand a crisis of overproduction where commodities produced meet insufficient demand as a result of the disproportionate development of the departments of production. In reality, the contradictions of the capitalist mode of development, here analytically separated, combine to unfold in crisis.

“The capitalist mode of production is both generalized commodity production and production for profit of firms operating independently of one another. It cannot be one without the other. It is both a system oriented towards the production of a growing mass of surplus value (of surplus-labour) and a system in which the real appropriation of this surplus value is dependent on the possibility of actually selling commodities […].” (Mandel 1989: 30-31).

What this means is that changes in the conditions of the production of surplus value and accumulation will create new restraints for the social reproduction of capital and vice-versa. For example, during a boom phase, any individual capital will aim to expand surplus-labor time by one method or another (usually by methods increasing relative surplus value) to at least sustain and at best increase the expected rate of profit, which is always threatened by competition. Such measures will immediately lead to an increase in the mass of commodities produced and at the same time a decline in the share of workers’ wages in total exchange value.

Assume this development is generalized in department I, the department producing the means of production, and we can understand how it will at the same time cause an acceleration of accumulation in both departments, owed to the decrease of the cost of investment goods, and a relative decline in working class consumption, so that the increased productive capacity of department II, producing the means of consumption, will soon meet with declining effective demand (over-production). The relative decline in demand spurs competition in department II and a further investment boom ensues, credit fuels investment in the face of competition, accumulation accelerates, temporarily sustaining the expansion also of department I. While the
mass of workers grows, sustaining demand for department II’s products, the mass of capital grows even quicker, causing the organic composition of capital to grow.

At the height of the boom the expansion of capital has caused an exhaustion of the industrial reserve army, labor’s weight in the class struggle increases and so do wages. The subsequent decline in the rate of surplus value now causes the growing organic composition of capital to affect the rate of profit. While firms in department I begin to struggle, and to rely on greater amounts of credit to sustain their profits while their production capacities remain underutilized (over-accumulation), the increase in workers’ wages of both departments helps department II to sustain their profits for now. Eventually, however, the crisis in department I leads to bankruptcies and mass layoffs. Demand for consumer goods suddenly declines, companies of department II follow in bankruptcy, demand falls in both departments. Credits are not repaid, banks fail, the reproduction of capital grinds to a halt on a social scale. Eventually, devaluation of idle capital and the unemployment created by mass layoffs will restore profitability.

Mandel (1989: 37-38) summarizes the relation of overaccumulation and overproduction as follows:

a) The rise in the rate of surplus value is not proportional to the rise in the organic composition of capital, due to intensification of the class struggle: the rate of profit declines (cf. our discussion in 3.2.2).

b) Increases in the relation of constant and variable capital in the social composition of capital cannot become proportional to increases in the relation of the capacity for production of means of production in department I and the capacity for the production of consumer goods in department II: overproduction/insufficient demand in one or both departments, disproportionality (cf. our discussion in 3.2.3)

Any real crisis of capital will be a concrete ensemble of both contradictions, whose weight and influence will be determined by the historically specific circumstances of capitalist development in any given case, but also a number of factors that are not immediately connected to capital. To understand the development and the inherent contradictions of China’s political economy, thus requires for us to venture from the abstract analysis of capitalism in its pure form into the concrete. The intermediate theoretical concepts required for such an analysis will be discussed in the next chapter.
3.3 Theorizing concrete forms of capitalism

3.3.1 Capital in the abstract and capitalism in the concrete

The previous discussion of *Capital* encompassed the fundamental social relations and tendencies of development and crisis of capitalism as a mode of production. The points discussed represented some aspects of Marx's analysis of capitalism in abstract form that at this point seem to be relevant for an analysis of labor, capital, and crisis in a more concrete form in China.

The discussion has shown, on the one hand, how accumulation and development of capitalism is motivated by the capital relation itself, which thus appears to constitute itself as an “automatic subject” (Marx 1962a) vis-à-vis the individual capitalist and worker and in a sense even vis-à-vis society as a whole (thus the fetishized discourse about “what the economy needs”). On the other hand, the discussion has also shown how capital accumulation necessarily runs into contradictions, which gives multiple indications as to the variety of interventions and supports, which are required so that the reproductive process of capital can be sustained.

Moreover, and on a more fundamental level, the political itself is constituted in capitalist production relations: The capital-labor relationship, the relationship in which surplus value is produced and appropriated, constitutes two opposing classes and embodies the fundamental social contradiction of capitalism as a mode of production. The state and class politics are necessarily already present at the historic inception of capitalism in any given society, and remain continually present in the mediation of contradictions that unfold in capitalist reproduction. While Marx did not devise a theory of capitalist class politics or the state in *Capital*, other works, like the *18th Brumaire*, deal extensively with this matter, but a coherent theory hasn’t been formulated in them either. Furthermore, early or classical Marxist texts neither feature theories of the state, even though some recurrent general ideas and conceptions are articulated.

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What Marx analyses, however, is capital in its most abstract form. As a consequence, the political is constantly implied in Marx's analysis of capitalism (as are the possibilities to crisis), but it is never subject of analysis in its own right. Neither was it Marx’s aim nor would it be feasibly to analyze the concrete politics of capitalism at the abstract level of analysis that Marx has chosen. Therefore, in the following we need to discuss how we can arrive form the abstract of Capital at a more concrete level of analysis.

It has become clearer now how the distinction of the economic and the political in capitalism does not entail their separation. Labor in capitalism is free, so that in principle it can be subsumed under the production process as needed and by economic means alone as is the case with other commodities. But it is this very process of commodification that invites the resistance of labor as a living, breathing subject against its economic subjugation and exploitation. This struggle between capitalist and worker has its origin in the nature of the production process, but it is not carried out in the economic sphere alone, because if an individual worker and an individual capitalist do not come to an agreement about the terms of employment, then the simple result is that no contract is made. The struggle between capital and labor is political, because it involves collective organization and articulation of interests, which to an extent takes place in a political sphere distinct from the economic sphere. This is what Poulantzas (2002: 47) means when he says that the separation between the political and economic is just the particular form in which the political is constituted within the capitalist relations of production.

If we take it as a given that the accumulation and reproduction of capital is per se unsustainable then Marx’s Capital with its most abstract level of analysis cannot immediately be applied as a framework for analysis of concrete historical cases of capitalism. The difference between the concepts of “capital” as developed in chapter 3.2 and “capitalism” then is this, that, while we can describe certain general norms guiding and restraining the accumulation and development of “capital”, the concept of “capitalism” must always refer to the concrete historical socio-economic order that shapes and is shaped by the generalization of the capital relation.

So, while the abstract analysis of capital points us to the location where the political is constituted in capitalist production relations in its analysis of the class-relation and of crises (and other points not discussed here), at the same time, it cannot (and does not want to) deliver any more concrete answers to the question of politics in capitalism. An analysis of the concrete forms of capitalist development in a given society must therefore take into account that the
abstract level of analysis found in *Capital* cannot simply be applied to an analysis of more concrete social or political phenomena without adjusting its theoretical framework accordingly.

For example, the basic class-relation that is analyzed in the labor theory of value is one of homogenous capital vis-à-vis homogenous labor. However, at any juncture of history in a given society the concrete class structure is more complex than that. For one thing, the expansion of capitalist social relations is a historical process that takes time and meets with various obstacles and forms of resistance. The concrete class-structure of a given capitalist society will therefore always contain certain remnants of previous social formations, which will often need to be taken into consideration to explain the more concrete relationships that shape and are shaped by capitalist development. Thus, while wage labor as an abstract category in *Capital* is firmly and squarely located as the value-creating agent in the production process, at a more concrete level of analysis, the internal differentiation of the working class would play an important role in any analysis of class relations: “As a result, the dominant patterns of class struggle specific to a particular phase of capitalist development may be complex and not directly derivable or fully understandable by a simple deduction from the two-class dynamic of pure capitalism” (Albritton 2007: 138). In the case of China, one of the major issues here is the formation of a work force split along rural and urban lines, and the role of the party-state in industrial relations and as an owner of capital.

Economic crises, which on the abstract level of analysis of capital are normal occurrences that resolve certain contradictions created during the accumulation process and therefore allow that process to continue, have historically proven again and again to be the critical junctures in time where political struggles, especially the class struggle, become most virulent. Factions of capital will struggle against each other for dominance by more than economic means alone and labor will resist intensified exploitation or mass layoffs. Also, crises may not only be the result of the development of capital per se, but may as well be induced developments that do not have any immediate connection to capital.

### 3.3.2 Capital-logic and class-logic approaches

In Marxist theory, two strains of theoretical reasoning can be identified, the so-called ‘capital-logic’ and ‘class-logic’ approaches (Jessop 1990). These two approaches serve to highlight some of the problems associated with the question of how to reconcile the abstract theory of Capital with a necessarily more concrete theory of that is suitable to analyze specific cases of capitalist development without resorting to economic determinism or political voluntarism.
The capital-logic approach originated with Marxist scholars in West-Berlin, notably Elmar Altvater, amongst others. The capital-logic school explained the capitalist state by deriving its general form from the basic functions and necessities associated with the capitalist mode of production the abstract theory of Capital. The capital-logic school argues that the formal separation of politics and economy in capitalist societies is not only a possibility emerging from the free relations of production and free forms of commodity exchange, but is also necessary to sustain capitalism, because the state as a formally independent institution provides the general conditions necessary for the continued accumulation of capital Jessop (1990: 35). The role of the state thus construed could be described as that of an ideal collective capitalist.

The role and tasks of the state thus derived at cover various aspects. For example, at a very general level, a monetary system needs to be provided, the equality of subjects established and protected, and the reproduction of labor must be ensured. The state has to provide a system of banking and currency, laws and courts protecting and enforcing free contract and exchange relations, and it needs to provide some form of general education, social welfare, factory legislation, etc. Furthermore the states needs at times to regulate capitalist competition, or to provide those commodities as public goods which are necessary in the accumulation process but unprofitable to produce (Jessop 1990: 35).

The role of the state unfolds and develops with the continued development of capitalism. The capital-logic school particularly refers to the law of the tendency of profits to fall to arrive at the conclusion that state intervention will necessarily expand in quality and quantity as the progressive concentration of capital encroaches on its profitability. While state intervention may divert or postpone crises, the state remains unable to transcend the contradictions of the capitalist accumulation process. The contradictory dynamics of capitalist development will thus on the one hand lead to an ever-expanding role of the state and simultaneously reveal its impotence. The state’s role in the economy will thus inevitably becomes politicized as the subject of intensifying class struggles. “It would therefore seem that the capitalist state is trapped within the capitalist mode of production and cannot escape from its contradictions and crises” (Jessop 1990: 36).

What the capital-logic debate reveals is that the state in capitalism has to provide certain functions to enable capitalist reproduction and that to fulfill these functions, it has to intervene against the interests of particular capitals as well as those of labor. At the same time, however, the state cannot transcend the general contradictions of capitalism as a mode of production, but ultimately helps to reproduce them in particular ways. This view invalidates the instrumentalist view of the state as a simple instrument of class domination. At the same time it criticizes
reformist views that hope to use the state to solve the contradictions of capitalism (Jessop 1990: 37).

Jessop criticizes the capital-logic school as “complex reductionist”, because in the end it arrives at a concept of the political that is, even if in complex ways, determined by the economic, resulting in the “unsatisfactory argument that everything that happens in a capitalist society necessarily corresponds to the need of capital accumulation” (Jessop 1990: 37). The theoretical argument is ultimately a functionalist one based on the requirements of the accumulation process.

In part as a response to the shortcomings of the capital-logic school mentioned above, other authors, notably Joachim Hirsch and others from Frankfurt University, have tried to introduce elements of class struggle into the capital-logic equation. These authors accept the basic assumptions of the capital-logic school, that is, the state has to fulfill certain, necessary functions, but seek to extend these findings by looking into the question of how class struggles relate to forms of state in the course of capitalist development. Much of related analyses focus on the historical development of forms of state and appropriate these forms to specific phases of capitalist development. For example, the role of absolutist states in original accumulation, the correspondence of the representative state to free trade and laissez-faire capitalism, the ‘executivization’ and bureaucratization of politics in monopoly stages of capitalist development.

Jessop identifies four major contributions of these authors to the state-theory debate: 1) The feasibility of continued accumulation depends on the ability of capital to secure the necessary conditions through political (class-) struggles. 2) State intervention does not correspond to the objective needs of capital but must be interpreted in the light of the political repercussions of accumulation crises. 3) Crises play a decisive role in shaping the state’s interventionist role as they openly reveal the specific contradictions of the accumulation process at a given point in time. 4) Crises affect different classes and class factions in different ways. Responses to crises are therefore politically contested and the balance of political forces determines the countermeasures adopted by the state.

Jessop’s main critique of this extended capital-logic approach is that while it successfully introduces more historical specificity to the analysis of the role of the state in capitalism by introducing class struggle into the equation, it does so by reducing the concept of class to the capital-labor antagonism. Historically specific forms of class struggle or other crosscutting social cleavages are thus not accounted for.
Contrary to the capital-logic school, Antonio Gramsci and ‘neo-Gramscian’ authors like Nicos Poulantzas and others have approached the problem of politics and the state in capitalism from a dedicated class-analytical perspective. In the view of this ‘class-logic’ approach, class may be objectively constituted in capitalist production relations, but this is not in itself a sufficient condition for class to become socially, economically or politically relevant. This to a certain extent mirrors Marx’s own position that the working class constitutes itself vis-à-vis capital in the relations of production, but only becomes class “for itself” as political class struggles unfold (Marx 1972: 181). If classes are to come to some sense of common unity and purpose, then this can only happen as the result of forms of common organization and representation and through common political struggles.

In the view of the neo-Gramscian class-logic theorists, the state plays an important role in the organization and disorganization of classes and class interests and the organization of political and ideological domination of some classes over others. In capitalism, the unity of the capitalist class is constantly threatened by internal competition, while the working classes find common ground for political organization through their common economic position vis-a-vis capital. The feasibility of the capitalist mode of production in a given society therefore rests on the state that through its particular form of ideological hegemony needs to secure that the common interest of capital prevails in the face of capitalist competition and working class resistance (Jessop 1990: 42).

One theoretical concept that elaborates the idea of ideological domination based on “hegemony armored with coercion” (Gramsci) is that of the “power bloc” (Poulantzas 1977; Poulantzas 2002). A power bloc can be defined as an alliance of class forces united through a certain common political and ideological outlook that has managed to assert its hegemony over a society. The assertion of hegemony cannot rest on force alone, but is rather owed to a dominant ideology that incorporates at least some of the interests of the dominated classes.

The forms of state can play an important role in enabling the hegemony of the dominant power bloc. The liberal-democratic representative state, which endows its citizens with individual rights and at the same time disregards any class affiliations, encourages the individualization and atomization of political interests and the prevalence of issue-based politics over class-based politics. At the same time, representative politics require that the power bloc take the interests and demands of the dominated classes into consideration, buttressing its hegemonic position. The nation state implies the existence of a common popular interest, which transcends particular interests, so that in the name of national unity the state may (even if only superficially) reconcile antagonistic class interests.
The liberal-democratic representative national state thus appears to be the ideal form of state in a society dominated by capitalism. This, of course, means that other forms of state need to be explained as exceptions - thus Poulantzas coined the term of the ‘exceptional state’ as a general term for forms of dictatorship and fascism in his analysis of European authoritarian regimes. Poulantzas analyzes the crises of these regimes during the nineteen-sixties and seventies, when their societies integrate into the capitalist world economy and the regimes subsequently fail to reconcile the emerging social contradiction emerging in this process (Poulantzas 1977). The role that the exceptional state has to play in capitalism is thus historically limited. On the one hand, it will emerge as the result of crises in which a power bloc needs to assert its dominance predominantly through means of force rather than through hegemony alone so that capitalist production can be reorganized against resistance. On the other hand, the exceptional state appears for similar reasons to be a form of state that is associated with societies in transition to capitalism.

The neo-Gramscian or class-logic school of state theory has successfully extended analysis of the capitalist state beyond its immediate relationship to capitalism as a mode of production. It allows for much more sophisticated analysis of social relations of power than the capital-logic school does, allows the analysis to be historically more specific and delivers explanations for particular forms of states. This approach does, however, come at the cost of a great neglect of the constraints visited on the state by capitalism as a mode of production.

The different approaches to the politics of capitalism chosen by the class-logic and capital-logic schools help illustrate some of the problems associated with the analysis of concrete cases of capitalist development.

What is important about both theories is that they establish that politics and the state have a central role in capitalism, be it one that relates to the inner logic of capitalism as a mode of production or to the class-relations that develop out of it and the struggles that are fought about it. The questions that both approaches ask is what role the state and state power play in the reproduction of capitalist production relations—and they do this while recognizing that the state is not removed from the contradictions of capitalist development, whether they are located in the sphere of capitalist accumulation itself or the wider social relations that it produces.

The problematic aspect of both theoretical approaches is that they tend to one-sidedly emphasize either the economic logic of capitalist reproduction, as can be seen in the emphasis on the conditions of accumulation in the capital-logic approach, or the political logic of capitalist reproduction, as can be seen in the emphasis on class relations and the class struggle in the class-logic approach. The former approach’s emphasis on the functionalist logic of the
capitalist state entails a form of economic reductionism that removes political struggles from view and fails to explicate historical forms of state or class struggle; Vice versa the latter approach’s concentration on the concrete modalities of the class struggle tends to ignore the economic restraints of capitalist reproduction (cf. Jessop 1990: 254).

The difficulty in any analysis of capitalist development therefore lies in recognizing economic and political factors in capitalist reproduction and to integrate in the analysis the concrete relationship of the economic and political logic of capitalist reproduction in the analysis. This would require suitable concepts of analysis, which are in part provided by the French regulation theory, as will be discussed in the following.

3.3.3 Regulation theory

3.3.3.1 General introduction

A theoretical approach to the analysis of concrete cases of capitalist development should account for the problematic relationship of Capital in the abstract and concrete capitalism on the one hand, as well as for the relationship of the dynamics of capitalist accumulation and politics in capitalism on the other hand. The review in this section serves to introduce the théorie de la régulation, to give an overview of its development and divisions and to discuss in how far it is an important element in putting Marxian theory to work on real cases. It is important to note, however, that the RT should not be regarded as a coherent and closed theoretical paradigm. Since its inception in the works of French economists in the 1970s, notably Aglietta’s Theory of Capitalist Accumulation (Aglietta 1979), the regulation approach has branched out to create a number of distinguishable sub-schools or approaches.

The concept of régulation is not to be confused with the concept of regulation in the sense of rule-making and governance. Writes Robert Boyer:

“Régulation theory has encountered two main obstacles to achieving wide-spread international recognition. The first is a purely semantic difficulty: in British and American texts, written in English, the French term régulation is confused with ‘regulation’ (réglementation in French); furthermore, as a result of conservative deregulation strategies, English usage of the term ‘regulation’ has experienced a revival. However, régulation theory is not concerned with this area of investigation at all. While régulation theory originated in France, it was subsequently enriched by studies of many other countries, and was then faced with a major difficulty in the translation of its founding concept. In the words of Michel Aglietta, one of the founding fathers of régulation theory, it involves ‘the analysis of the way in which transformations of social relations create new economic and non-economic forms,
organised in structures that reproduce a determining structure, the mode of production’. In short, régulation theory offers an analysis of capitalism and its transformations, which is entirely the opposite of the purely microeconomic approach of regulation (in the English sense), concerned with the optimum type of control for natural monopolies and collective services by public authorities.” (Boyer 2002: 1)

The general and common research interest of the RT is closely connected to its critique and extensive rejection of the theoretical concepts of neo-classical economics and of the orthodox Marxist political economy of the post-war years.

Michel Aglietta’s “Theory of Capitalist Regulation” arguably is the foundational work of the approach. He saw the concept of regulation as a critique of neo-classical economics and as a “complete alternative to a theory of general equilibrium. Neo-classical economics, in his view, was “an idealist philosophy of abstract man”, where “any human action is economic as long as it is governed by the principle of rationality”. It is this fundamental view of neo-classical economics in which it becomes “detached from any social conditions” and is “altogether foreign to history” (Aglietta 1979: 14).

Instead, the object of research cannot be to seek and expose universal and axiomatic principles in empirical phenomena, but it is instead to produce theoretical statements that are rooted in an analysis of social relations and the specific historical conditions in which they are reproduced. Capitalism denotes a mode of production, meaning a historically specific form of social organization of the production and distribution of the material means of human existence. The social relations through which it reproduces, however, take both economic and non-economic form. This is one reason why the arbitrary disciplinary divisions in the social sciences are so problematic. Not only do they ignore the concrete interrelatedness of economic and non-economic social relations. They also ignore that these social relations do not exist in static configurations but are always in transformation, so that the forms they take may at any time move across and beyond the methodological and theoretical boundaries established by the disciplines (cf. Aglietta 1979: 16).

Likewise, RT distances themselves from structuralist readings of Capital that were dominant in academia, for example in Althusser’s work, or in the political programs of Western communist parties, which strongly emphasized the invariant and universal properties of capitalism at the expense of a thorough analysis of its historical forms.

It was in the light of the protracted and creeping crisis of capitalism that followed the end of the Golden Age of the fifties and sixties, that the previous extended period of successful reproduction presented in the eyes of RT a problem that required explanation. The regulationists
thus focused their attention to investigate the dynamics and variability of capitalist reproduction based on research into the concrete historical conditions under which capitalist social relations were reproduced. Even though critical of structural and other orthodox readings of Marx, the proponents of the French *régulation* school in the nineteen-seventies and eighties took Marx’s analysis as a starting point to theorize the reproduction of capitalist social relations as a problem in itself before the background of Marx’s analysis of the basic contradictions of capitalism as a mode of production.

As RT developed over the past decades, the approach has distanced itself from, though it does not reject, its Marxian origins (cf. Nadel 2002). However, while the original works of the *régulation* school relies on and makes use of Marxian theory and concepts, more recent work has abandoned much of it. “These influences are rarely evident in the current work of the early regulationists and this is reflected in a surprising collective amnesia about their role in earlier work” (Jessop and Sum 2006: 36). This shift in its theoretical foundations has also caused a shift in the research interests pursued by RT. While early regulationist research was concerned with the problematic of reproduction of capitalism and the contradictions inherit in the value form, newer research has taken a turn toward comparative institutionalist research that is quite similar to the Varieties of Capitalism approach.

In the ‘original’ RT’s view, capitalist reproduction, especially where it takes place in a temporarily stable and regularized fashion, presents a problem that needs to be explained by an analysis of the concrete form of social relations that mediate and sustain the process of reproduction. The analysis of capitalist reproduction, and herein lies the RT’s critique of orthodox Marxist approaches, cannot be understood exclusively in terms of its most general laws and tendencies of accumulation and social relations, but must always consider and incorporate the analysis of the historically specific forms in which capitalist social relations and the accumulation process are reproduced. This then also allows explaining the specificity of capitalist crises, which are still understood to be the normal and inevitable results of the contradictory dynamics of capitalist reproduction, but unfold in specific ways related to the specific forms under which its preceding phase of temporarily regularized and sustained capitalist reproduction took place and in which the specific conditions for the following crisis were already included. Thus, the *régulation* approach sets out to tackle the problem of the relation of capital in the abstract and capitalism in the concrete formulated earlier.

With its emphasis on the problem of the reproduction of social relations, the regulation school provides an avenue from the abstract analysis of capitalism in Marx’s *Capital* to an analysis of the historically concrete reproduction of capitalist societies. When moving from the
abstract theory of capital accumulation to the investigation of concrete capitalist social formations, more concrete analytical concepts need to be developed and deployed to capture the historical relationship of the social and the economic that develops out of the concrete—and theoretically problematic—way in which social relations in capitalism are reproduced. Given such concepts, analysis can avoid the economic determinism that would result from a direct application of the theory of Capital ‘as structure’ to an investigation of concrete social formations. The task of the researcher then is not to demonstrate how the abstract laws of theory are immediately determinate of the concrete totality of a social formation, but much rather, to theorize on how the capitalist accumulation process is articulated through contradictory social relations and their concrete historical configuration.

Since the end of the 1990s some research in the regulation approach has started to converge with institutionalist and comparative research on capitalism (Amable 2003; Amable et al. 1997; Boyer 2000b; Boyer 2005; Théret 1997; Théret 1999) The research interest now shifted from explaining the success and crisis of Fordism to explain the institutional diversity of capitalisms that had been observable in earlier research already under predominantly Fordist forms of accumulation, but which became even more obvious as capitalist societies developed divergent approaches to deal with the crisis of Fordism since the nineteen-eighties or so.

This research was also concerned to develop theoretical concepts that could explain the apparent coherence of institutional forms in a given mode of regulation, explanations that then would to devise reasoned typologies or taxonomies. Théret, for example, criticizes previous regulationist research for understanding institutional forms as embodying divergent logics of action, which are then simply juxtaposed to analyze their individual regulatory impact, while in fact they should be understood according to their real interdependence (Théret 1997: 190-191). Théret then proceeds to create complex, albeit static models of national configurations of the relation of social security systems to political, economic and domestic (i.e. family) orders (Théret 1997). These studies offer an important link between the abstract definition of capital and capitalism and the concrete analysis of institutions and institutional change in a specific capitalist order.

Amable et al. (1997) differentiate four systems of national innovation and production, the meso-corporatist Japanese system, the market-regulated Anglo-Saxon system, the social democratic Scandinavian system and an integrated European system, which includes Germany, the Netherlands, France and Italy. Amable (2003: 102) distinguishes market-based economies, social-democratic economies, Continental European capitalism, Asian capitalism, and South European capitalism. Both works invoke the concepts of complementarity and hierarchy to
explain the outer coherence of nationally divergent modes of regulation. The concept of complementarity that is used considers the interdependence of institutions as one of reinforcing effects they project onto their object of regulation. “Institutional complementarity is present when the existence or the particular form taken by an institution in one area reinforces the presence, functioning, or efficiency of another institution in another area” (Amable 2003: 60). The concept by which the persistence of complementarities is explained is that of institutional hierarchy. Institutions are the result of political compromises by actors in certain areas of the economy. But the creation and modification of institutions bears different political costs depending on their importance to dominant political groups. Institutions of high importance to the dominant bloc will thus have greater resilience. “The institutional hierarchy will thus be such that the institutions on top are those that are most crucial for the socio-political groups that constitute the dominant bloc, i.e. those where change is likely to modify substantially the distribution of income for individuals behind the socio-political groups” (Amable 2003: 69).

In Boyer’s view, the hierarchical dominance of a certain institutional form thus allows it to impose its own operational logic on the other structural forms and to create a degree of coherence among them. For example, the wage-relation, which was based on a strong capital-labor compromise hierarchically dominant among the institutional forms making up the mode of regulation of Fordism, because “it imposed structural constraints on the configuration of other institutional forms” Boyer (2000b: 291), implying that it imposes a certain degree of complementarity among the other institutional forms in this mode of regulation. Here, institutional complementarity is “… a configuration in which the viability of an institutional form is strongly or entirely conditioned by the existence of several other institutional forms, such that their conjunction offers greater resilience and better performance compared with alternative configurations” (Boyer and Saillard 2002b: 335).

An alternative definition of institutional hierarchy is advanced by Boyer, which introduces a dynamic element: “An institutional form may be said to be hierarchically superior to another if its development implies a transformation of this other form, in its configuration and its logic” Boyer (2000b: 291, original emphasis)). How (i.e. through which actions and mechanisms) this transformation is effected, however, remains unspecified.

The concepts of institutional coherence, complementarity and hierarchy, which invoke notions of equilibrium and order, stand in stark contrast to earlier regulationist approaches to institutions, as for example in expressed in Lipietz’ interest “to study how the ‘windfall’ or historical assemblage of institutional forms in the end contributes with particular felicity to the regulation of a regime of accumulation …” (Lipietz 1988: 25). The marked shift in
Erkennnisinteresse between the two is based on the shift away from a Marxist perspective, which emphasizes the problematic of capitalist reproduction, to a more orthodox perspective, where the economic per se seems to be less problematic and attention thus shifts to institutional configurations (cf. the discussion in chapter 2). This brings us back to the original problem discussed with regard to Varieties of Capitalism approach. The research conducted tells us a lot about institutions and helps to theorize their relationships, but it tells us very little about capitalist development, its dynamics and crises, to which we need now return. We will thus focus on regulationist work compatible with the problems posed by the Marxian analysis of capital in the following discussion.

3.3.3.2 Analytical concepts

Despite these divergences, a number of analytical concepts have emerged from the regulation approach that are of great help in moving from the abstract of theory to the analysis of concrete social relations, the mode of production, the accumulation regime, and the mode of regulation (Boyer 1990: 31ff.; Jessop and Sum 2006: 42).

3.3.3.2.1 Mode of production

The mode of production theoretically specifies the basic social relations of a society’s economic organization of production and exchange at a high level of abstraction. Marx’s analysis of capitalism as a mode of production represents a corresponding level of abstraction, which can only be applied to an analysis of concrete social formations with the help of less abstract intermediary concepts. In this vein Robert Boyer strikes a cautionary note about the relationship of abstract theory and social reality:

“[T]he domination of the capitalist mode of production makes accumulation the essential imperative. It becomes a “coercive law” which imposes itself on the whole system (Lipietz 1997). Is it possible to deduce from this principle a series of laws and tendencies that describe the inevitable, or at least probable, dynamics of the system? This would suppose a simple and reciprocal correspondence between a general form of social relations and the medium-or long-term dynamics that manifest themselves in the usual categories of economic analysis. However, the debates over historical materialism, the controversies over the tendency of the rate of profit to fall, or the problem of the transformation of value into price clearly indicate the dangers of moving too rapidly from the qualitative to the quantitative, from the esoteric to the exoteric, and more generally from one level of abstraction to another. In this respect, if accumulation does indeed constitute a tendency inherent to capitalism, it is still necessary to analyze the exact forms that it may take and the disequilibria and contradictions that they engender.” (Boyer 1990: 34)
3.3.3.2.2 Regime of accumulation

Building on the concepts developed by Marx in *Capital*, especially the schemas of reproduction in volume II, the concept of accumulation regime has arguably first been developed by Aglietta (1979) to serve as an intermediary concept for the analysis of historically concrete forms capitalist accumulation:

“Accumulation reproduces the relations of production by constantly transforming their operation. In order to achieve a precise analysis of the forms of regulation under capitalism, it is necessary to define an intermediate concept, less abstract than the principle of accumulation so far introduced. This is the concept of the *regime of accumulation*” (Aglietta 1979: 68).

The regime of accumulation, Aglietta proceeds, is a theoretical object, referring to “a form of social transformation that increases relative surplus value under the stable constraints of the most general norms that define absolute surplus value”, of which its explicit content, he emphasizes, needs to be defined in the course of empirical analysis (Aglietta 1979: 68).

Nevertheless, some further explanation and specification is in order to make the analytical content of the concept more explicit. An accumulation regime is a process of social transformation constrained by the general norms of absolute surplus value. In relation to the basic features of social transformation affected by the generalization of the capital relation, the process of individualization and separation from the means of production that produces the wage earner as the bearer of labor in general vis-à-vis capital, these norms, “the extent of whose application depends on the organization of political and judicial powers, but is in any case delimited by a national territory” partially contractual and partially coercive, regulate access to wage labor and thus determine absolute surplus value (Aglietta 1979: 69). They include the regulation of working time, legal provisions for the work contract and trade union organization and practice; the regulation of the determination of wages; provision and access to social security systems.

At the core of the social transformation affected under an accumulation regime is the increase of relative surplus value production, what Aglietta (1979: 70) refers to as “the unity of the relations which structure the concrete organization of the production and reproduction of the wage-earners”, meaning changes in the social organization of production and the productive forces affecting stratifications and differentiations in the working class, as well as changes of and differentiation within the general norms of consumption.

What we once again encounter in Aglietta’s careful and preliminary definition of the accumulation regime is the problem of the relationship of capital in general and historically
concrete forms of capitalism. What we should take away from this, is that it cannot be the purpose of the development of intermediate concepts of analysis, which are supposed to guide us from the abstract to the historically concrete, to a priori define the content of our object of research. In other words: there is no accumulation regime in general.

Alain Lipietz delivers a similar definition as Aglietta: “The regime of accumulation is a mode of systematic distribution and reallocation of the social product which over a prolonged period is able to coordinate transformations in the conditions of production (volume of capital invested and its distribution among the branches and norms of production) with transformations in the conditions of final consumption (consumption norms of wage-earners and other social classes, collective spending, etc.)” (Lipietz 1988: 23). It is important to note that Lipietz’ choice of words (‘systematic’, ‘coordination’) resonates well with functionalist understandings of the term accumulation regime, an understanding that can be said to be already implicitly present in Aglietta’s analysis of the accumulation regime in the US.

It is important then to explain here, how this is to be understood in Lipietz’s terms: the term ‘regulation’ or régulation of a social relation refers to “the way in which this relation is reproduced despite and through its conflictual and contradictory character. Thus the notion of regulation can be understood within a particular schema: relation-reproduction-contradiction-crisis” (Lipietz 1988: 11). We assume here that it is in the same sense that an accumulation regime should be understood. It temporarily sustains in a coordinated and systematic fashion the reproduction of social relations, which, however, reproduces the contradictions of these relations in specific ways that will eventually make further systematic and coordinated reproduction impossible as contradiction gives way to crisis. The coordinated and systematic nature of accumulation regimes should thus in no way be confused with a blueprint for the contradiction-free reproduction of capital—it remains an analytical concept.

Boyer and Saillard give a somewhat complementary definition that refers not so much to its substantial but rather to the phenomenal properties of an accumulation regime: “[…] régulation theory describes the social and economic patterns that enable accumulation to occur in the long term between two structural crises. These regular patterns as a whole are summarized by the notion of an accumulation regime. […] Identifying regular patterns does not require the exclusion of crises: the description of accumulation regimes includes their evolution and potential crises” (Boyer and Saillard 2002a: 38).

Note how the definitions given emphasize the role of accumulation regimes in the on-going transformation of social relations and their crisis. It is crucial to recognize that the concept of accumulation regime does not describe a static configuration, but rather a dynamic, although
regular and continuous, patterns of capital accumulation. It is precisely the process of accumulation by which capitalist social relations are transformed, a process of transformation that can analytically be separated, as is the case in Marx’s discussion of the production of surplus value on the one hand, and his discussion of the reproduction of capital on the other.

On the one hand, we can analyze changes in the composition of capital, increases in the rate of surplus value, and so forth, in other words, changes in the forms and intensity of the exploitation of wage labor in capitalist production relations. On the other hand we have the reproduction of capital; for example in the circuit of commodity capital, where the contradiction inherent in the commodity form between use value and exchange value presents a general constraint for the realization of value, as the realization of the exchange value of commodities must coincide with the specific needs of productive and individual consumption; and, by extension, in the reproduction schemas which illuminate how these contradictions almost inevitably create disproportionalities in the course of the social reproduction of capital.

It is clear that empirical research into concrete forms of capitalist accumulation requires that the transformation in the relations of production and the reproduction of capital be analyzed together. We cannot assume certain variables to hold constant in the concrete case, which, at a higher level of abstraction, allowed Marx to theorize relations of production and reproduction in separation. In any real-world case, the accumulation process will cause changes in the relations of production and in the patterns observable in the social reproduction of capital, which are interrelated and must be analyzed as a combined transformation. This is the purpose of the concept of accumulation regime and of other ‘intermediary’ analytical concepts developed in the regulation approach, as far as they originally stood in relation to Marx’ analysis of capitalism.

As accumulation proceeds, it affects the transformation of the relations of production, and we will be able to observe regular patterns of reproduction over time, patterns of which their analysis can reveal tendencies in the production of surplus value, and the gearing of production towards productive and individual consumption. This process of transformation of which we observe regular patterns, at the same time creates and exacerbates the contradictions inherent in capitalist accumulation and reproduction, such as changes in the composition if capital and the profit rate, disproportionalities between the departments of production and associated demand and supply imbalances.

At a certain point in time and space these contradictions will impede reproduction and give way to crisis. In this sense, every accumulation regime, in the same movement in which it describes the regular patterns of its operation, also produces the conditions that will eventually
cause for it to break down in crisis. The regularities and patterns of capitalist reproduction should thus never mislead the observer to confuse them with a state of equilibrium.

The regulation approach usually discerns two types of accumulation regime, according to the form of the transformation of production relations and the relation of the two departments of production, the predominantly extensive accumulation regime and the predominantly intensive accumulation regime (Aglietta 1979: 71ff.; cf. Lipietz 1988: 23f.; Boyer 1990: passim; Jessop and Sum 2006: 71ff.).

According to Aglietta, in an extensive regime of accumulation the production of relative surplus value is obtained and increased simply by a capitalist transformation of the organization of labor. On the one hand, we see the generalization of wage labor and commodity production, that is the generalization of capitalist production relations in a given territory and society and, going along with that, changes in the organization of production, such as the concentration of wage labor in certain localities, the sequentialization and de-skilling of work, the extension of the working day, simple mechanization, etc. Extensive accumulation is marked by the spread of capitalist social relations into areas of society or into societies where previously there were none, a process often creating hybrid forms of social reproduction, in which the reproduction of wage labor is supported by non-capitalist traditional social relations, especially in agriculture. “The combined development of the two departments of production is achieved only with difficulty, the pace of accumulation encountering recurrent obstacles”, as Aglietta (1979: 71) writes with a view to the historical experience of extensive accumulation in American frontier capitalism.

The extensive regime of accumulation is thus characterized by a spatial and social expansion of capitalism than by a progressive development in the means of production, which in contrast would be marked by rising productivity and an increase in the composition of capital.

The predominantly intensive regime of accumulation is marked by growth of relative surplus value driven by increases in the productivity of capital on the basis of technological change. This can happen in two ways: Intensive accumulation without and with mass consumption (Lipietz 1988: 23). In the former case, intensive accumulation takes place predominantly in department I. In this case, the value product of department I is validated primarily against itself, as the mass of constant capital in reproduction increases steadily. The composition of capital in department II, however, increases only slowly, as does working class consumption. Increases in the work force of department II rather than increases in productivity satisfy the slow increase in demand from working class consumption. Generally, additional demand for labor can be satisfied by a growth in numbers of the working class. This regime of
accumulation is prone to overproduction in department I and profit slumps due to a rapidly rising organic composition of capital.

The predominantly intensive regime of accumulation with mass consumption presupposes the complete diffusion of capitalist production throughout society and thus the almost exclusive dominance of the commodity form (commodity consumption) for the reproduction of individuals, including those of the working class. The normalization of commodity consumption in the working class and the simultaneous diffusion of productivity gains to department II enable the rise of mass consumption. Similar gains in productivity in both departments allows for a stronger integration of their development. The latter regime of intensive accumulation is usually associated with *Fordism*, a term originally coined by Antonio Gramsci, and the Golden Age of Capitalism in the 1950s and 1960s. Fordism was marked by a particular labor-capital compromise that allowed for the coordinated adjustment of productivity and wage gains, which enabled high rates of accumulation over protracted periods of time. The crisis of this accumulation regime from the late 1960s and 1970s on has been the initial focal point of regulationist research.

To summarize in more conventional terms, accumulation regimes have usually been characterized by a combination of two features by the regulation school. On the one hand, the mode by which accumulation proceeds, that is by spatial and social expansion or technological development, which makes for extensive or intensive accumulation regimes. On the other hand whether demand is created predominantly by consumption or investment, or in Marxian terms, by individual consumption or by productive consumption. The former makes for a wage-led accumulation regime, while the latter makes for a profit-led accumulation regime (cf. Boyer 2005: 521).

An accumulation regime is confined by the temporal and spatial boundaries within which the transformation of capitalist social relations takes place. One can very reasonably argue that the ultimate spatial boundary of an accumulation regime is the world market. This is certainly true, as capital always strives towards geographical expansion and ultimately global integration. Just as the social reproduction of capital can be understood as the relationship of individual capitals, branches, and departments of production, the reproduction of capital on a global scale may be understood as the relationship of a number of temporally and spatially bounded accumulation regimes. These regimes can exist only in relation with one another. While at any given time one should thus assume the existence of a global accumulation regime, the fact that capitalist accumulation exhibits temporally and spatially linked patterns is what allows us to observe and analyze accumulation regimes within such boundaries.
One could certainly argue the question whether or not these boundaries are adequately described by the national state and whether or not the national state represents an adequate level of analysis. To choose a national level of analysis, a method often charged with ‘methodological nationalism’, may not warranted in every case, but can be argued for simply by the fact that the capital-labor relation is governed by norms, laws and regulations enacted within national frameworks. Even in times of globalization, the reproduction of capital is in many respects, especially regarding the labor-capital relation, still subject to national forms of politics, rule, and regulation, causing capitalist reproduction to be patterned within the boundaries of the nation state, a phenomenon theorized in detail for example by Poulantzas (2002). And this also leads Aglietta (1979: 69) to state: “Access to wage-labour … derives from general norms, the extent of whose application depends on the organization of political and judicial powers, but is in any case delimited by a national territory”. Also, the role of the state in so-called late or catch-up development has long been recognized (i.e. in the seminal work of Gerschenkron (1962) or in the debate on the developmental state). The question of the adequacy of the national state as a frame of analysis thus depends on the concrete historical conditions of capitalist reproduction and thus must itself be answered in the course of empirical research.

If we accept that the adequate level of analysis for a given accumulation regime is the nation state, this does not release us from considering how it is integrated with the world market and connected to other accumulation regimes, as this will have an impact on the viability of specific relationships of investment and consumption and may help to displace disproportionalities created in the process of accumulation.

One of the central questions that emerges from the analysis of a given accumulation regime is this: How do social agents come to act in line with the general patterns of accumulation observable? Or, how are the decentralized massive actions of individuals mediated to create these patterned outcomes? The regulation approach finds the answer to this question in the analysis of institutional forms and the mode of regulation that they support.

3.3.3.2.3 Institutional forms

Institutional forms (sometimes also called structural forms, e.g. Aglietta (1979)) comprise the norms and rules that shape the reproduction of capitalist social relations. Mediated by the institutional form, the reproduction of capitalist social relations and their contradictions thus take a specific, historical form. Institutional forms emerge from the class struggle and thus represent a political compromise. How this is understood here will be shortly elaborated, before we proceed to discuss the different institutional forms and their relation.
The class struggle is historically conditioned in the sense that it is always embedded in specific political, economic, social and cultural conditions. This is the reason why it has no generic content or form, except for the fact that it is a political struggle over the relation of classes in a given social formation/society. Thus, the capitalist class struggle has historically never taken the form of a conflict between a homogenous working class on one side and a homogenous capitalist class on the other. Instead class divisions within any given capitalist society are always crossed by other social cleavages, and affected by the economic stratification and differentiation within classes. The political manifestation of class is mediated by different forms of political organization and not least by the role of the state in such struggles.

Analytically, we may speak of the class struggle for any case of political struggle that intentionally or unintentionally, explicitly or implicitly has as its content the negotiation of class positions or whose outcome will affect the relative class positions within a capitalist society. A compromise in the class struggle must by no means be arrived at democratically, it must not even be explicitly agreed upon by the parties affected, and can even be imposed unilaterally. It is a compromise only in the sense that it presents a form of (temporary) mediation of a given social contradiction between classes.

The *régulation* approach has over time come to discern five institutional forms in capitalism. They are the wage-relation, forms of competition, money and credit, the position of a country within the international regime, and forms of state (cf. Boyer 1990: 37ff.).

The wage-relation as an institutional form comprises the rules and norms under which the transformation of the conditions of existence of the working class takes place as capitalist accumulation progresses. The societal generalization of commodity production and the separation of producers and means of production serve as its foundational elements and establish the working class’s relation to capital and its role in the production of surplus value. Its concrete content concerns the organization of work as well as the organization of the labor market, the working class’s role in consumption as well as extra-economic modalities of its reproduction. From the standpoint of a labor theory of value, the wage-relation is indeed the central institutional form of capitalism. These elements of the wage-relation determine how and how much surplus value is produced and influence decisively the social reproduction of capital.

The original focus of the regulation approach was on the wage-relation in Fordism, where collective bargaining and stable forms of employment in certain sectors of industry were the basis of the co-development of norms of production and consumption, enabling rapid accumulation over an extended period. Such forms in the wage relation are historically tied to monopolistic forms of competition (see below). Other forms of the wage-relation elaborated in
regulationist research “…include the competitive form, characterized by the limited role that workers’ consumption plays in capitalist production itself; Taylorism, in which the labor process is considerably reorganized, without an equivalent change in worker life-styles; …” (Boyer 1990: 39).

The institutional forms of competition concern the changing characteristics of intra-capitalist relations within a given political economy. This pertains to forms of enterprise organization (capital structure, ownership and control) and the organization and relations of sectors and branches, the main sources of profits, the market structure in which enterprises operate (i.e. competitive or monopolistic) and the associated time horizon for the validation of capital (cf. Boyer 1990; Jessop and Sum 2006). All these factors can influence the concrete modalities of the social reproduction of capital. This also concerns the question of whether specific forms of capital dominate others, i.e. productive, financial or merchant capital.

The forms of money and credit, of course, can have a massive influence on capital-labor and intra-capitalist relations. While the scarcity of metal currencies or even those tied to precious metals can at times severely limit the means of circulation in the reproduction of capital, the nowadays dominant credit money solves on one hand many of those problems, but on the other helps to perpetuate contradictions and imbalances. The ready availability of credit extents the time horizon for the validation of capital, as it helps to overcome temporary impasses in the circulation of commodities and allows capital investments without prior savings (the validation of investment happens ex-post, not ex-ante). The extended time horizon for the validation for capital can also support more stable employment relations. But, of course, the extension of periods of validation also allows for the postponement of the resolution of contradictions and disproportionalities, which may exacerbate the crisis that follows. The institutional configuration of the financial system also plays an important role here. Whether the sources of investment are predominantly controlled by banks or institutional investors, for example, again has a great impact on the time horizon of the validation of capital and the relationship of the circuits of reproduction, as the literature on the phenomenon of financialization shows (i.e. Aglietta 2000; Aglietta and Breton 2001; Boyer 2000a; Engelen 2008; Krippner 2005; Milberg 2008; Orhangazi 2008; Khor 1992).

Aglietta’s analysis of Fordism in the US, for example, reveals how the over-accumulation of capital, which is precondition to the integrated development of departments I and II, is mediated by a continuous process of creeping inflation, requiring in its precondition the existence of a national credit money and corresponding monetary policies (Aglietta 1979: 365ff.). It can be inferred from this relationship that the changes in the relation of productive
and financial capital, which have taken place over the past decades in the advanced capitalist economies and which have led to a growing emphasis of profit payouts over investment-driven productivity growth, have been accompanied by a shift to more restrictive monetary policies that give priority to stability and help to preserve the value of capital while it circulates as money. In a different scenario, it would be imaginable how competitive relations among individual capitals can be spurred by policies of financial suppression and credit restraint, which, given the right circumstances, may channel profits into productivity-oriented investments.

The form of state concerns on the one hand forms of taxation, state interventions in the economy, for example the role of public spending and public debt in the accumulation process, or state support for certain industries or for certain types of consumption or consumption in general. More fundamentally, the state’s role is also essential in the provision of the so-called fictitious commodities, land, labor and money (Polanyi 2001: 71ff.), and in the provision of infrastructure and commodities, which cannot be profitably produced, but are nevertheless required by capital. Labor, land, and money are called fictitious commodities, because they are subsumed as commodities in the capitalist production process, but cannot be produced like commodities. They are therefore subject to extra-economic reproduction, which is usually subject to control or strong regulation by the state. This is obvious in the case of money, which in almost all advanced capitalist countries is provided by state-owned or state-controlled national banks. The labor commodity is of course also subject to regulation by the state. The state’s role does not only concern the regulation of the immediate capital-labor relationship by employment and work-safety laws or its involvement in class organizations or collective bargaining arrangements. It also includes, for example, the provision of social security, of education, and even encroaches into the most intimate spheres of human reproduction.

A country’s position within the international regime comprises its economy’s relation to the world market and other economies integrated therein as well as the international norms, rules and regulations that shape the terms of this integration. Of special importance here are the degree of openness of international trade and finance flows.

It should be emphasized here that the emphasis of the five institutional forms we find in the RA today has not been there from the beginning. Aglietta’s early work does not yet know of such a formalized categorization of institutional forms and basically revolves around the wage relation and forms of competition. Indeed, as he puts it: “The theory we shall seek to elaborate here is in reality a theory of the development of the wage relation” (Aglietta 1979: 72). In a similar vein, Lipietz (1988: 25) warns of „a new dogmatism, a new scholasticism, or
attempt to comprehend all particular forms on the basis of the general character of the mode of regulation, or even a formal combination of elements […]. It will be much more useful to study how the “windfall” or historical assemblage of institutional forms in the end contributes with particular felicity to the regulation of a regime of accumulation, in a case where the persistence of earlier forms had led the preceding regime of accumulation into a major crisis.”

One possibility of studying the role of institutions in the mediation of contradictions are the concepts of spatiotemporal and institutional fixes. This discussion mainly builds on Bob Jessop’s introduction of the concepts of spatiotemporal fix and institutional fix into his discussions and development of the regulations approach (e.g. Jessop 2013a; Jessop and Sum 2006). These concepts provide a way to assess the relation and relevance of institutional forms for a mode of regulation in relation. The concept of the spatiotemporal fix has originally been developed by Harvey (1975; 1982; cf. 2001; 2003), whose work as a geographer has especially emphasized the role of spatial fixes in capitalist development. The concept has also received significant attention from Bob Jessop (Jessop 2001; Jessop 2002; Jessop 2006; Jessop 2013b; Jessop and Sum 2006). David Harvey gives the following definition of a spatiotemporal fix:

“The basic idea of the spatio-temporal fix is simple enough. Overaccumulation within a given territorial system means a condition of surpluses of labour (rising unemployment) and surpluses of capital (registered as a glut of commodities on the market that cannot be disposed of without a loss, as idle productive capacity and/or as surpluses of money capital lacking outlets for productive and profitable investment). Such surpluses can be potentially absorbed by (a) temporal displacement through investment in long-term capital projects or social expenditures (such as education and research) that defer the re-entry of capital values into circulation into the future, (b) spatial displacements through opening up new markets, new production capacities, and new resource, social, and labour possibilities elsewhere, or (c) some combination of (a) and (b).” (Harvey 2003: 109)

The word “fix” carries a double meaning. On the one hand it means to securely fasten something in space, on the other hand it refers to a temporary, provisional solution to a problem.

The first meaning points us to a contradiction of capital that has already been discussed with regard to the circuits of capital reproduction, namely that capital is transformed through different forms, those in which it is mobile and in circulation, as in the form of commodity and money capital, and those where it is tied to certain locations over extended periods of time, as in the form of productive capital. The expansion of capital always requires capital in its mobile form, in which it can overcome spatial barriers, as well as the creation of new spaces wherein fixed capital can operate. Similarly, certain forms of capital are better suited to preserve the
value of capital over extended periods of time than others. Space and time thus represent important factors in the reproduction of capital. Indeed the whole notion of ‘dynamic’ refers to a spatiotemporal movement (cf. Harvey 2001).

Just as capitalist reproduction does, the contradictions it entails unfold in a given confinement of space and time, and it is at the limits of these confinements where contradictions turn in to crises. In the second sense of the word, a spatiotemporal fix (or a spatial fix or a temporal fix) thus represents a provisional solution in which the spatial and temporal boundaries within which a given contradiction can unfold are expanded. As described in the quote above, this can happen, e.g., by way of opening new markets or by seeking out long-term investment opportunities. A contradiction can thus be deferred in time and space. A spatiotemporal fix is linked to an institutional form or a specific configuration of institutional forms, so that the term ‘institutional fix’ denotes a specific institutional configuration that contributes to the emergence and sustainment of a spatiotemporal fix.

The concepts of spatiotemporal and institutional fix can thus offer a route to come to analyze the relationship of institutional forms within a mode of regulation in relation to capitalist accumulation and its contradictory dynamics and dynamic contradictions. This would allow us to speak of a coherent institutional ensemble in the sense that its institutions are not coherent by design, but rather by their common relation to the same contradiction. They can be considered to be complementary in the sense that these institutions relate to different aspects of a given contradiction. We could also attempt a hierarchization of institutional forms within a mode of regulation according to their relevance to, on the one hand, creating observable patterns of accumulation, and on the other hand by their role in mediating contradictions or even producing crises. In the Chinese case the role of exports, and, more recently, debt provide relevant examples.

Jessop proposes that a given contradiction should be analyzed according to the priority that is afforded to its aspects in regulation (Jessop 2013a: 10). For example, the wage in capitalism is at the same time a source of demand and a factor in the costs of production. Under the Fordist mode of regulation this contradiction was mediated in favor of its aspect of being a domestic source of demand. The other aspect of the wage contradiction, production costs, was suppressed by monopolistic or oligopolistic forms of competition on the domestic market, and by monetary and exchange rate policies that attempted to balance against international cost-price competition. The breakdown of Fordism has led to the emergence of new ‘post-Fordist’ modes of regulation, in which the regulation of the cost of production aspect of the wage contradiction
has gained importance over its demand aspect in the face of internationalized capitalist competition.

3.3.3.2.4 Mode of regulation

The mode of regulation is comprised of the various institutional forms, which together form an ensemble of norms, institutions, organizational forms, networks and conduct that enable the regular reproduction of capitalist social relations (but also extra-capitalist social relations insofar as they affect or intersect with capitalist accumulation) despite their contradictory character, and which together shape the patterns or regularities observable in the accumulation regime (Jessop and Sum 2006: 42). Together with an accumulation regime, a mode of regulation forms a mode of development.

“In effect, every mode of regulation describes how the existing combination of institutional forms fashions, guides, and in certain cases constraint individual behavior. It also predetermines the workings of adjustment mechanisms operating through the market, which usually derive from a set of rules and organizational principles without which they could not function. In this conception, it is impossible to establish a dichotomy between the purely economic on one side and the social on the other. Even perfectly competitive pure markets derive from the organization of social space; they are constructed on the basis of power relations and legal rules.” (Boyer 1990: 43).

Original regulationist research was concerned with the analysis of the mode of development of Fordism, as, for example, Aglietta in his seminal work on capitalism in the US (Aglietta 1979). Aglietta’s analysis revealed an accumulation regime that was characterized by the coordinated development of departments I and II, meaning that productivity gains originating from department I eventually translated into rises in mass consumption and thus expansion of department II. This was made possible by changes in the wage-relation, which was marked by a capital-labor compromise in which productivity gains were partially apportioned to wage-increases mediated by collective bargaining, a concentration of capital creating oligopolistic or monopolistic forms of competition. One of the specific contradictions created in the Fordist accumulation regime was the overaccumulation of capital, meaning that the synchronous development of productivity and wages, which allowed for the proportional development of the two departments, at the same time accelerated depreciation and thus caused the premature devaluation of fixed capital to become a permanent phenomenon.

This contradiction was mediated through a monetary regime in which the premature devaluation of capital was expressed as a creeping process of inflation. Overall, this specific combination of accumulation regime and mode of regulation in Fordism created a virtuous
cycle of accumulation that lasted from the post-war years until the end of the nineteen-sixties. The crisis of Fordism, according to Aglietta, was due to the fact that further gains in productivity could not be achieved under the regime of intensive accumulation for technological, organizational and political reasons (Aglietta 1979: 384).

A more strongly Marxist interpretation would suggest that the rapidly changing organic composition of capital had severely undermined the profitability of production (cf. section 3.2.2.4 on the rate of profit). Attempts to mitigate this crisis frequently resulted in open inflation. From this resulted the breakdown of the capital-labor compromise and a renewal in the class struggle.

With the regulation approach, we can also classify different types of crises, according to the effect they have on the overall mode of regulation. All crises are an expression of the failure of reproduction of social relations under the conditions of capital accumulation and their character and effect is shaped by the mode of regulation under which they take place. Cyclical crises are regular occurrences in which contradictions in the accumulation process can be temporarily resolved within the existing mode of regulation and its institutional forms, for example through the limited devaluation of capital and the restoration of ‘labour discipline’, for example through an increase in unemployment. Cyclical crises can also be understood in terms of ‘business cycles’. Structural crises, on the other hand, occur when under the prevailing mode of regulation and its institutional forms the contradictions in the reproduction of social relations cannot be temporarily resolved, leading to a serious breakdown of the accumulation process, which can only be restored after a reformed or new mode of regulation has been established. Such crises not only result from accumulation per se, but are usually also accompanied by social and political struggles (Boyer 1990: 49ff.; Jessop and Sum 2006: 35).

Subsequent regulationist research into modes of development has revealed that a simple correspondence between accumulation regime and mode of regulation does not exist. Regulationist research has pointed this out for the cases of the post-war USA and France. While the economies in both countries featured two quite similar Fordist accumulation regimes of intensive accumulation with mass consumption, market competition remained a dominant feature of the US mode of regulation, while in France various forms of state intervention played important roles. Likewise, the institutional configurations of the wage-relation between economies with predominantly Fordist patterns in their regimes of accumulation could be quite different on a case-by-case basis. Employment relations in Germany remained far more flexible than in France, for example, whereas in Italy large regional divergences in the wage-relation between North and South could be observed (Boyer 2005: 513-514).
The concept of Fordism, as it was developed from an analysis of the US case, thus does not present a replicable growth model in the sense that a specific institutional configuration will create a coherent mode of regulation that allows for the regular reproduction of an accumulation regime. Instead, the decentralized character of capitalist reproduction and the complexity of any given society in which it is embedded will always produce historically specific configurations that at a given level of abstraction may or may not exhibit similarities with others.

These findings point to two things: 1) A simple correspondence between accumulation regime and mode of regulation in a mode of development does not exist, and 2) in the absence of such correspondence we should not assume any functional coherence or complementarity among institutional forms in a mode of regulation and its effect on an accumulation regime.

The findings of regulationist research thus have demonstrated that the purpose of such research cannot be to develop generalized statements about and models of institutional configurations creating virtuous growth cycles. Instead it has been shown that the relation of the institutional forms within a mode of regulation are historically contingent and must be accounted for on a case-by-case basis. The creation of generalizable growth models is also impossible for another, much more general feature of capitalist development, namely, that it is happening in the form of an irreversible progression in the development of the means of production. Even if we could abstract from the historical social and political specifics of a case with the aim of creating a replicable blueprint, the development and application of a model of development would be frustrated by the steady progress in the development of the means of production and thus the changing conditions on top of which such a model would have to be implemented.

3.4 Summary: Theory and method

From the research in the RA discussed above, we can come to a number of conclusions and statements about capitalist accumulation and reproduction:

It is important that we distance ourselves from the idea that something like a stable mode of development can exist. Fordism, the original object of inquiry of the RA, presents a historical exception in that it is associated with a relatively long period of not only rapid but also relatively balanced accumulation. This mode of development, like others, however, continuously produced contradictions that eventually became insurmountable leading to its breakdown and transformation into what we know today as globalization or ‘neo-liberalism’.
The ultimate reason for the instability of a mode of regulation lies in the process of the accumulation and reproduction of capital itself: A given accumulation regime may produce observable regularities and patterns, but these do not indicate a state of equilibrium, but a process of social transformation, of historical change in the conditions and relations that produce surplus value. This social transformation produces contradictions: 1) the process of the valorization of value by the sum of individual capitals produces certain patterns of investment and consumption in the circulation of capital, which, as accumulation proceeds, run into contradiction with the overall use value requirements of the social reproduction of capital. Economically, this contradiction is expressed in disproportionate, imbalanced or uneven development. 2) Accumulation as a process of social transformation motivates the contradictions in the capital-labor relation in the production process as well as in the division of value allocated to investment and consumption, limiting the viability of political compromises in the class struggle, for example by the effect that changes in the social composition of capital have on profits.

A mode of regulation and its institutional forms explain the regularities and patterns in the regime of accumulation in so far, as they mediate the reproduction of social relations involved in capitalist accumulation and thus also give the reproduction of the associated contractions a specific historical form. They do this by providing the norms, rules and regulations under which the social agents directly and indirectly involved in the process of capitalist accumulation make decisions and resolve conflicts. We may explain this procedure theoretically in terms of justified expectations about actions and outcomes (Lipietz 1988), strategic selectivity (e.g. Jessop and Sum 2006: 97ff.), path dependency or opportunity costs, though for an analysis of the specifics of capitalist development in a given society the social outcomes of this process will, at least initially, be of greater relevance than an analysis of these particular processes on a micro-level.

The explanatory power of the concept of mode of regulation for the problem of capitalist reproduction likewise does not require a meta-theory of institutional order, which could explain coherence, complementarity or hierarchy among institutions in isolation from a concrete case of capitalist reproduction. It is unnecessary to assume the existence of universal mechanisms of institutional creation and transformation, which produce ordered institutional relations as an answer to the problem of capitalist reproduction with regularity. Indeed historically, any mode of regulation and the institutional ensemble, which it is composed of, may be of greater or lesser efficiency or fortuity in the regulation of capitalist reproduction. If our research interest is focused on the problem of capitalist reproduction in a concrete historical case, then any concept...
of institutional order (coherence, complementarity, hierarchy) should appear ex post from the exposition of an analysis of the relation of institutions to this concrete case and its contradictions. The need for a meta-theory of institutions arises only if we wanted to analyze institutions in isolation from the problem of capitalist reproduction.

The aim of an analysis of capitalism thus cannot be to derive from it some general conclusions about “best practice” or even reproducible models of successful reproduction. The analysis should instead focus on the contradictions that are reproduced over an extended period of accumulation and how they ultimately give way to a crisis. Analytically, the concept of accumulation regime presents the capital-logic side of this process of reproduction, while the concept of mode of regulation presents the class-logic side. Both are integrated dialectically within the concept of mode of development. The analytical task then is to find out which contradictions are reproduced in what form.

The concepts of spatiotemporal fix and institutional fix, because they directly relate to the contradictions created in capitalist development, provide additional analytical tools with which the concepts of accumulation regime and mode of regulation can be connected. They also provide insight into the order of institutions within a mode of regulation.

The empirical case study will proceed inductively rather than deductively, as we will try to produce general, theoretically argued statements from the observation of patterns and regularities of capitalist development in China. It will consist of two major parts.

The first is an analysis of the accumulation regime guided by the theory and concepts laid out in our discussion of the accumulation and circulation of capital in section 3.2. In it, we will analyze the macroeconomic patterns of capitalist development in two steps. Step one is an analysis of surplus value production, accumulation, and profits. At the center of this step stands the analysis of some Marxian economic categories (rate of surplus value, composition of capital, profit rate) according to the method developed by Shaikh and Tonak (1994). The second step will analyze the patterns of the circulation of capital and disproportionate development in the Chinese accumulation regime with the help of recent literature on functional income distribution in China.

Then follows the analysis of the mode of regulation in terms of its institutional forms and their relation to general patterns of development of the accumulation regime. We will focus our analysis on the wage-relation and competition as the two central institutional forms for the reproduction of capitalism and touch upon other forms as necessary.
4 The Accumulation Regime

4.1 Introduction

The Chinese economy has grown at very high rates in international comparison, with GDP growth averaging at above 9% p.a. in the period 1993-2011. As we have already discussed theoretically, behind these sheer numbers stands a process of social transformation caused by the expansive reproduction of capital, a process that is especially rapid and fundamental in the Chinese case, where during the period under observation here, the Chinese people now predominantly live in cities and pursue some form of wage labor. This presents in a relatively short time a profound change from a society that was predominantly agrarian and in which industrial employment was a lifetime bond with the state until the 1990s.

The purpose of this chapter is to analyze the general economic patterns and regularities, which have accompanied this process of social transformation, as an expansive process of capitalist accumulation and circulation, which together form the process of the social reproduction of capital. We will thus be able to determine the salient features of the accumulation regime in China 1993-2011.

Our discussion of Marx in chapter 3.2 has already yielded a suitable analytical distinction for our analysis of the accumulation regime, that between the process of accumulation, which comprises the production of surplus value, the composition of capital and profits, and that of the circulation of capital in which the process of its social reproduction is completed. Our analysis of China’s accumulation regime will, following this division, have two major parts.

Chapter 4.3 analyzes the patterns of capital accumulation by measuring the rate of surplus value, the value composition of capital, and the general net rate of profit and discuss their relationship in a way appropriate to the still relatively high level of abstraction. Beforehand, however, we will need to determine methodologically how labor value in capitalist relations of production, which is the fundamental unit for the measurement of all other categories, can be estimated from the national accounts of China in chapter 4.2.

In chapter 4.4 we will proceed to analyze the circulation of capital and the associated development of the structure of reproduction. It is not possible to gather meaningful data for a construction of reproduction schemata à la Marx, on the one hand because Marx’s analysis of the two departments of production is an illustration of the problem of reproduction at a level of abstraction that does not immediately lend itself to empirical analysis, and on the other hand
because the United Nations system of national accounts used by China (and most other countries) does not provide adequate data for such an analysis. We will instead consult the recent literature on functional income distribution in China to trace the patterns of circulation and reproduction as well as data from the National Income and Production Accounts (NIPA). This will allow us to analyze the disproportionate development of the relation of profits and wages, and investment and consumption in the Chinese case.

The patterns of the accumulation regime can be analyzed, but cannot be immediately explained without recourse to an analysis of the mode of development and its institutional forms. Our initial observation and analysis of the accumulation regime will thus necessarily be incomplete and serves to formulate questions for the following analysis of the mode of regulation. The synthesis of our results and the relationship of accumulation regime and the mode of regulation will be discussed in the conclusion in chapter 6.

4.2 Measuring Marxian categories of value

To our knowledge, there have so far been two previous attempts at measuring surplus value and other, related Marxian categories for China, the first by Zhang and Zhao (2006) and the other by Gaulard (2008; Gaulard (2014). Both attempts suffer from certain methodological problems, as they neither evaluate the quality of the statistical data they use and thus do not account for the accounting changes that took place during the periods they observe, nor do they evaluate the representativeness for Marxian categories of national accounts data in general or in the case of Chinese national accounts data in particular. Zhang and Zhao say that no systematical data are available for the whole economy, and thus use only data from enterprises with independent accounting systems, which are mostly large state-owned enterprises and not representative of the whole economy. Gaulard assumes, for example, that ‘total compensation of employees’ given in the national accounts is an unproblematic measurement of variable capital and labor value. She also makes no adjustments to account for statistical changes in the measurement of ‘total compensation of employees’ in 2004 and 2008.

In any case, we believe that it is problematic to measure labor value and the rate of surplus value in China before the 1990s, as both Gaulard and Zhang and Zhao do, as beforehand “free” wage labor and competition aren’t sufficiently generalized. Under capitalist production relations we can at least assume a certain uniformity to the intensity of work, which would be a precondition for the measurement of value from macroeconomic data to have any meaning.
The method used here to measure the Marxian categories of surplus value, composition of capital and the rates of profit has been devised by Shaikh and Tonak (1994). Their procedure remaps price data from national accounts, namely from the national production and income accounts and from input-output tables (I-O tables) to reflect Marxian categories of value. Here we will introduce their approach and proceed to demonstrate how it can be applied to data from China’s national accounts. At first though, a couple of theoretical assumptions that underlie the method need to be discussed. First, we need to clarify the relationship of prices used in national accounts and labor value. Then, as Shaikh and Tonak (1994: 20ff.) emphasize, the attempt to remap conventional national accounts data to represent the concept of value as elaborated by Marx in the labor theory of value, crucially depends on introducing into this data a distinction between that share of the data which represents the product of capitalistically employed labor and in that sense reflects Marxian value concepts, and that share of the national product, which does not. Such a distinction rests on a distinction within the activities of social reproduction between production and non-production activities, which is different from the one found in conventional national accounts, and on a distinction between labor that is productive of capital and labor, which is not, or, phrased differently, labor, which produces surplus value for capital and that which does not.

4.2.1 Prices and value

The relation of prices and labor value has repeatedly been the subject of academic discussion. Much has been written, for example, about the so-called transformation problem, which refers to the theoretical and methodological problems of transforming the value of commodities, which is based on the socially necessary abstract labor required in their production, into prices of production, i.e. the prices of commodities and profits resulting from their sale, which are influenced by conditions on the market. Attempts to transform measurements of value into market prices on a micro-level, i.e. for cases of individual firms, have created deviations that could not be accounted for. This lack of accountability lies at the core of the transformation problem. Discussions of the various debates surrounding the problems of using the labor theory of value as a basis for empirical investigations can be found in Desai (1991) and Mohun (2004), amongst others.

Fortunately, the transformation problem does not immediately present itself at the macro-level. We start with the basic premise that prices are a measurement of labor value in monetary form (as opposed to a measurement of labor value in terms of necessary labor time spent). To explain, money, which has no value in itself, allows measuring one commodity in terms of
another, or, in other words, it provides a common measure of their commensurability. This commensurability, however, is not a property of money itself, but the result of the common property of the commodities compared, the abstract labor time necessary that was spent for their production. The measurement of certain Marxian categories of value that we will arrive at later is generally one of the monetary expression of labor value.

Prices, the monetary form of this measurement, can, as discussed, deviate from the labor value of a commodity. They can be influenced by a number of factors, such as local or temporal demand and supply spikes. Such fluctuations in the prices of commodities, however, are evened out in aggregate national price data, so that “[t]he total price of all commodities expresses the total number of hours of abstract labour, which went into their production” (Freeman 1991: 87).

4.2.2 Economic production activities, labor productive of capital

If we wish to construct measurements of Marxian categories of value from national accounts, we also need to explain how the Marxian concept of what entails a production activity differs from conventional concepts, as the later provide the conceptual yardstick for national accounts measurements.

In mainstream economics, which discards a concept of labor value in the classical and Marxian sense, all economic activities that are not consumption activities are considered to be production activities. This axiomatic binary distinction appears to be a necessary precondition for orthodox economics’ concept of a price-mediated supply and demand equilibrium model forming a market economy in which all economic relations are essentially equal relations of exchange, which is precisely the concept from which we wish to distinguish ourselves in our treatment of capitalism.

If we want to measure the capitalist production of value, we need to reintegrate two central concepts of the labor theory of value into the measurement of national accounts. One is the property of commodities and some services of providing a use value without which they could not also be bearers of exchange value. The other is the concept of surplus value, which tells us that it is the product of capitalistically employed labor engaged in the production of services and commodities.

The concepts of use value and exchange value requires us to introduce a different and more fine-grained distinction between production and non-production activities than the one found in national accounts. Instead of simply dividing all economic activity into production and consumption, Shaikh and Tonak (1994: 21) distinguish production as the utilization of use
values for the production of new such use values, from distribution, social maintenance and reproduction, and personal consumption.

“[…] production, in which the various objects of social use (use values) are utilized in the process of the creation of new such objects; distribution, in which various objects of social use are utilized in order to transfer such objects from their immediate possessors to those who intend to use them; social maintenance and reproduction, in which use values are used up in the private and public administration, maintenance, and reproduction of the social order by the government, the legal system, the military, corporate security personnel, etc.; and personal consumption, in which the objects of social use are consumed directly by individual consumers.” (Shaikh and Tonak 1994: 21-22), original emphasis)

This distinction does not yet incorporate the concept of capitalistically produced exchange value and of surplus value, which is introduced later. We should also emphasize that the distinction between production and non-production activities is not normative, but simply economic. All four activities are necessary economic activities, in the sense that they contribute to the total of activities involved in the reproduction of a given social formation, but only production activities produce new objects of use, or use value. Distribution activities, on the other hand, are not concerned with the transformation of existing use values or the production of new ones, but rather with the transformation of their properties “as objects of possession and appropriation” (Shaikh and Tonak 1994: 26). Activities of social maintenance and reproduction consume use values in the process without providing new or transformed ones. It follows for all of the latter two economic activities and their associated labor, that “nonproduction labor is a form of social consumption” (Shaikh and Tonak 1994: 28).

So far, we can already make some general assumptions about which sectors of the economy engage in production activities, i.e. agriculture and industrial manufacturing, and those which engage in non-production activities, such as distribution and circulation, as, for example, the finance, insurance and real estate brokering sectors (FIRE). Based on our theoretical premise that exchange value is born by commodities and services providing a use value, it follows then that only production activities as defined above can also produce exchange and thus surplus value for capital. This, however, does not mean, that all labor engaged in the production sector is productive of surplus value and thus of capital, as will be discussed in the following.
Figure 2: Production, production labor, and labor productive of capital

![Diagram showing the distinction between total labor, production labor, and non-production labor.]


If we wish to measure the specifically capitalist forms of production of value and surplus value, we need to distinguish between labor productive of capital and labor, which is not and, only in this sense, unproductive labor. This distinction intersects with the distinction between production and non-production activities above: Labor productive of capital is any labor that produces surplus value. It is thus labor that is capitalistically employed (wage labor) and it is labor engaged in production activities as defined above. It is thus necessary to distinguish between capitalistically employed labor productive of capital and capitalistically employed labor that is employed in activities of distribution or social maintenance and reproduction and which is thus unproductive (albeit necessary), i.e. management, research and development, financial services etc. Consequentially, the value created in capitalist production will be distributed first between capitalistically employed productive labor and capitalists in the form of value and surplus value, and then a share of that surplus value will be distributed and/or consumed by unproductive activities.

Equipped theoretically with the distinction between production activities and non-production activities, as well as productive and non-productive labors, we will now proceed to outline how measurements of Marxian categories of value, namely total value added, variable capital, surplus value, and constant capital can be constructed from Chinese national accounts which will allow us to arrive at measurements derived thereof, namely surplus value, the composition of capital, and the rate of profit. This will provide the basic measurements of Marxian categories of value and their relations in the Chinese case for our analysis of the Chinese accumulation regime.
In the following discussion, we will mark abbreviations referring to categories used in conventional national accounts with a † to avoid confusion with our own Marxian categories.

4.2.3 Data sources

Winston Churchill’s famous dictum not to trust any statistic one has not manipulated oneself has long served as an important reminder for social scientists working on China. Over the past few years, however, the quality of Chinese statistical material has improved significantly and allows for detailed comparative work – well-grounded skepticism on structural and occasional shortcomings notwithstanding, as will be discussed in the following.

The data sources used in our estimation of Marxian categories of value are official statistics published by the National Bureau of Statistics (NBS) of China (国家统计局: guojia tongji ju) in the China Statistical Yearbook (CSY) (中国统计年鉴: zhongguo tongji nianjian). The changes and reforms of China’s statistical system are in part responsible for choosing 1993-2011 as a time horizon for our study. During the socialist period, Chinese statistics were based on the Soviet Material Production System and the NBS has made the transition to the 1963 standard of the United Nations’ System of National Accounts (SNA) only in 1993 and continuous to adapt to more recent standards. While main statistical indicators such as GDP and price indices have been recalculated until 1978 and earlier to be compatible with the SNA, I-O tables, based on monetary units, which our method relies on, are only available since the 1990s (cf. Xu 2009).

Chinese official statistical data are often viewed with suspicion regarding their accuracy (Aglietta and Landry 2007; Holz 2004; Xu 2009), and indeed the NBS is well aware of shortcomings in its method and data (OECD 2000: 16). In 2004, Holz writes on Chinese statistics:

“Traditional data collection methods were unable to capture the rapid growth in productive units outside the direct reporting system. New statistical concepts and variables had to be adopted while some variables were redefined by other government departments in the course of economic transition. Incentives for data falsification, political prerogatives, and shifting interests of reporting units did nothing to facilitate the compilation of accurate statistics. Consequently, Chinese official data suffer from a large number of complications ranging from statistical breaks to various errors.” (Holz 2004: 403)

Despite these difficulties, Holz (2004: 403) estimates that Chinese GDP figures, for example, are correct within a 1% margin of error. The NBS has since continued to improve its methods of data collection and estimation, for example by relying more extensively on surveyed data than on reported data and by introducing changes to statistical categories. This has over
time led to a number of revisions in the way that statistics for national accounts have been calculated. Probably the most significant impact on national accounts had the 2004 economic census (中国经济普查: zhongguo jingji pucha), which, among other changes, has led to a upward revision of GDP estimates by 16.8% (Aglietta and Landry 2007: 14).

Due to these ongoing efforts in improving their quality, Chinese statistical data can be assumed to be sufficiently accurate for our purposes here. Besides, the analysis of Marxian categories in order to better understand the peculiar nature of Chinese capitalism does not rely on the presentation of accurate absolute figures, but rather on the evaluation of trends over time and the relations between statistical categories. We take into account changes made by the NBS by making our own corrections to the data, mostly by integrating relations among values from older data series into the latest national accounts data series available from the NBS, as will be explained in more detail below.

The following construction of variables and estimation of data follows the method developed by Shaikh and Tonak (1994). We apply it here for the first time to the Chinese case.

4.2.4 Valued added, variable capital and surplus value

Value added (VA) is the monetary expression of the value of labor, and more specifically, of capitalistically employed, productive labor in the production sector, expended in a given period. Mathematically, it is the sum of variable capital (V), the value of necessary labor, and surplus value (S), the value of surplus labor appropriated by capital in capitalist production relations, \( VA = V + S \). \( V \) is necessary labor in the sense that it is the share of value added retained by workers in the form of a wage and which is spent for their own reproduction. \( S \) is the amount of value produced by labor power spent in excess of what constitutes necessary labor and which the owner of the means of production appropriates.

To arrive at an empirical estimate of the monetary value of \( VA, V, \) and \( S \), we will proceed to estimate \( VA \) as the sum of value added in the production sector, and \( V \) as the total wage bill of capitalistically employed, productive labor. Surplus value will then be calculated as \( S = VA - V \).

4.2.4.1 Estimating value added (VA)

Value added from production (\( VA_p \)) is the sum of \( GVA^\dagger \) of the production sector, as defined above. We include in \( VA_p \) taxes paid by these sectors, as they represent transfers of value produced in the production sector to the state. We do not include depreciation, as it represents the replacement costs of existing capital stock and thus does not reflect new value produced.
The data sources for primary industry $GVA^\dagger$, secondary industry $GVA^\dagger$ and the relevant tertiary industry’s sectors’ $GVA^\dagger$ are the GDP data series 1993-2011 in the China Statistical Yearbook 2012. Depreciation of fixed assets in the primary and secondary sectors is subtracted from their $GVA^\dagger$. Results are then added to “transport” and “other” sectors’ $GVA^\dagger$ to arrive at $VA_p$.

To estimate $VA$ from statistical data published by the NBS, we need to be able to separate those sectors of the economy that engage in production activities from those sectors that do not, a distinction that is not made in national accounts, where gross value added ($GVA^\dagger$) simply represents the price-value added of all economic activity.

To distinguish between production and non-production activities, we classify the activities of the various industrial sectors according to the relevant definitions of Shaikh and Tonak (1994) discussed above. The empirical distinction between production and non-production sectors is based on the sectoral classification used in the 2011 I-O tables and their earlier equivalents, and our conceptual assessment of which sectors (predominantly) engage in production or non-production activities.

It is evident that the industries classified under 1-12 are involved in the production or transformation of use values and can thus easily be classified as belonging to the production sector. It is also evident that the industries classified under 15 and 16 are distributive, with the possible exception of business services, where, for example, accounting and management services would fall under the category of social maintenance and reproduction. In any case, both belong to the non-production sector.

Problematic are the industries classified under 13, 14, and 17. The economic activities exercised in the transport, storage, post, information transmission, computer services & software sector are not easily qualified as either productive, distributive or social maintenance and reproduction activities. Transport can be productive as far as it transforms the use value properties of a commodity. The change in location is a useful property if it makes the object available for consumption. “To be consumed, an orange must not merely be an orange somewhere, it must be an orange where the consumer is” (Shaikh and Tonak 1994: 23). Transportation may also be distributive when it is an activity simply related to the possession and appropriation of commodities (i.e. storage and warehousing – thus the tendency to avoid these kinds of unproductive activities in modern just-on-time production systems). Analogous arguments could be made for communication and information services. Software certainly provides a use value. To be consistent in our method, we will here, as at later points, tend to overestimate $VA_p$ by assuming that this sector 13 is wholly productive. We choose to
overestimate value added so that if in our analysis the data points to a crisis in the accumulation and reproduction of capital, this cannot be attributed to underestimating the value productivity of the economy. The category 17, other services, “consist of services for agriculture, forestry, animal husbandry and fishing, geological prospecting and water conservancy management, social services, health, sports and social welfare, education, culture and art, radio, film and television, scientific research and comprehensive technological services, personal services and others.” (OECD 2000: 44). Here again we are confronted with a mix of productive, distributive and maintenance activity that is not easily classified as productive and non-productive and, to stick with our previous rule, will thus be assumed to be wholly productive and their share of $GVA^+$ will be completely added to $VA_p$.

Table 1: Distinguishing between production and non-production sectors

<table>
<thead>
<tr>
<th>Production sector</th>
<th>Ambiguous production</th>
<th>Non-production sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Manufacture of Foods, Beverage and Tobacco</td>
<td>14) Wholesale and Retail Trades, Hotels and Catering Services</td>
<td>16) Financial Intermediation</td>
</tr>
<tr>
<td>4) Manufacture of Textile, Wearing Apparel &amp; Leather Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Other Manufacture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Production and Supply of Electric Power, Heat Power and Water</td>
<td>17) Other Services</td>
<td></td>
</tr>
<tr>
<td>7) Coking, Gas and Processing of Petroleum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Chemical Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Manufacture of Nonmetallic Mineral Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Manufacture and Processing of Metals and Metal Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) Manufacture of Machinery and Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Construction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Categories from Intermediate Use Part of 2010 Input-Output Table in China Statistical Yearbook 2013

Value added from the trade sector ($VA_t$): From the perspective of the labor theory of value, the trade sector’s share of $GVA^+$, represented above in category 14, wholesale and retail trades, hotels and catering services, does in fact represent a share of surplus value produced in the production sector and appropriated by the trade sector in exchange for its distribution activity. In I-O tables and NIP accounts, the $GVA^+$ of the trade sector is usually recorded as the trade margin appropriated by that sector (cf. Shaikh and Tonak 1994: 23). This seems also to be true for the Chinese case (cf. National Bureau of Statistics of China 2009; OECD 2000). $GVA^+$ of
the trade sector thus does present a share of \( VA \) and is added including taxes, less depreciation. The data source for \( VA_t \) is the “wholesale and retail trades” section in the GDP data series 1993-2011 in the China Statistical Yearbook 2012.

**Intermediate inputs \( (M_{tt}) \) of the trade sector:** This is value created in the production sector and consumed in the process of distribution. It does not show up as a share of \( GVA^\dagger \) in national accounts, but does from our perspective present new value produced and consumed in non-productive economic activity. We calculate \( M_{tt} \) based on the trade sector’s intermediate inputs to the production sector, which we find in intermediate I-O tables and adjust the data to construct a coherent series based on the China Statistical Yearbook’s 2012 data series on \( GVA^\dagger \) (cf. on the Greek economy Maniatis 2005: 499).

The procedure is as follows: I-O tables are available for years 1992, 1995, 1997, 2000, 2002, 2005, 2007, and 2010 in various China Statistical Yearbooks. For the years available in I-O tables, we calculate the ratio of total intermediate inputs of the trade sector to total value-added of the trade sector, \( \frac{M_{tt-io}}{TV_{Att-io}} \). We then determine \( \frac{M_{tt-io}}{TV_{Att-io}} \) for the non-benchmark years in the 1993-2011 period by linear interpolation. The resulting ratios are then multiplied with the 2012 \( GVA^\dagger \) data series on the trade sector for respective years to arrive at a coherent data set on the production sector’s intermediate inputs to the trade sector for the years 1993-2013.

The royalties paid by the production \( (RY_p) \) and \( (RY_{tt}) \) trade sectors to the non-production finance, insurance and real estate sectors: These, too, present transfers of value produced in the production sector, in part via a detour through the trade sector, to non-production sectors of the economy. For our estimation then, intermediate inputs of FIRE, which are discounted as intermediate inputs from \( GVA^\dagger \) in national accounts, must indeed be added to \( VA \). The procedure employed to calculate \( RY_{tt} \) and \( RY_p \) is the same as outlined for \( M_{tt} \).

Finally, \( VA = VA_p + VA_{tt} + M_{tt} + RY_{tt} + RY_p \).

### 4.2.4.2 Estimating variable capital \( (V) \)

Variable capital \( (V) \) is the measurement of the monetary expression of the value of productive labor in the production sector and it is estimated from wages paid. To make sure that \( V \) is an expression of the workers’ share of value capitalistically produced and that thus \( VA-V = S \), we need to be able to differentiate wages paid in the production sector from wages paid in the non-production sector as well as productive labor from unproductive labor in the production sector. Because the data available does not readily reflect these categories, a coherent data series needs to be constructed.

Furthermore, we need to differentiate productive labor in the production sector from unproductive work. This is done on the basis of occupational statistics from the year 2000 population census. The data lists number of employees in occupational groups by industrial sectors comparable to those found in the I-O tables. The occupational groups are 1) state, party, and enterprise cadres, 2) professional and technical personnel, 3) clerical workers and associated staff, 4) commercial and service workers, 5) agriculture, forestry, animal husbandry, fisheries, and water conservancy production personnel 6) production, transport equipment operators and related workers, and 7) others. We classify categories 1, 3 and 4 as unproductive labor and the rest as productive labor and thus arrive at ratios for productive and unproductive workers varying between the various industrial sectors engaged in the production of value.

Table 2: Occupational classifications in the 2000 population census

<table>
<thead>
<tr>
<th>Chinese Description</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>一。国家机关、党群组织、企业、事业单位负责人</td>
<td>1) Leading personnel of work units in the state organs, party and mass organizations, enterprises and institutions</td>
</tr>
<tr>
<td>二、专业技术人员</td>
<td>2) Professional and technical personnel</td>
</tr>
<tr>
<td>三、办事人员和有关人员</td>
<td>3) Clerical staff and associated personnel</td>
</tr>
<tr>
<td>四、商业、服务业人员</td>
<td>4) Commerce and service personnel</td>
</tr>
<tr>
<td>五、农、林、牧、渔、水利业生产人员</td>
<td>5) Agriculture, forestry, animal husbandry, fisheries, water conservancy production personnel</td>
</tr>
<tr>
<td>六、生产、运输设备操作人员及有关人员</td>
<td>6) Production workers, transport equipment operators and related workers</td>
</tr>
<tr>
<td>七、不便分类的其他劳动者</td>
<td>7) Other personnel not conveniently classified elsewhere</td>
</tr>
</tbody>
</table>

Source: Cf. table 4-8 in: Zhongguo 2000nian renkou pucha ziliao (Tabulations on the 2000 population census)

For the benchmark years available in I-O tables, we calculate the share of productive and unproductive labor for each of the relevant industrial sectors and then add these up to estimate total wages paid in the production sector to productive workers. Compare these numbers to the total compensation of employees for a given year and we have a ratio of productive to
unproductive labor in the economy. We interpolate this ratio for years with incomplete data in the 1993-2011 period.

We make two important assumptions here: 1) We assume that the relation of productive and unproductive labor does not change significantly between years when using occupational statistics from the 2000 census for the whole period, while we should actually assume that the share of unproductive labor in an economy rises as it grows more complex in the course of development. 2) When using occupational statistics that measure numbers of employed to divide wages data, we assume that productive and unproductive labor – in the Marxian sense – is on average paid equally, while we should actually assume that unproductive labor is paid higher wages than productive labor as clerical and managerial wages are usually higher than production worker wages. Both assumptions will lead us to overestimate the share of productive labor in wages paid and ultimately to overestimate $V$.

To construct a coherent data series of the production sector’s productive workers’ wages, we would now proceed to multiply the ratios calculated with data on total compensation of employees found in national income accounts. Unfortunately, the NBS does not regularly publish national income accounts (NIA) data on a national level, so that we have to substitute national-level data with regional data from provincial income accounts, which are published annually in the China Statistical Yearbook. In theory, the sum of gross value added given in all provincial income accounts should be identical to the sum of gross value added found in national production accounts. However, the aggregate of gross value added given in provincial income accounts regularly surpasses gross value added in national production accounts by several percentage points (Holz 2006: 175). Because all of our other data series are based on national-level data, we will have to correct for this deviation. The procedure is as follows: First we sum up the depreciation of fixed assets, the total compensation of employees, net production taxes, and operating surplus given for each province in the 1993-2011 period to create an aggregate provincial data series. Second, we calculate the share of each aggregate provincial income accounts component in gross value added. Third, we divide national accounts data on gross value added provided in the China Statistical Yearbook 2012 by the shares previously calculated and thus create an income accounts series based on national-level data.

Additionally, we correct for methodical changes in accounting for total compensation of employees introduced by the NBS in 2004. The adjustment method adopted here is discussed in Zhou et al. (2010) and Molero-Simarro (2011).

Now that we have constructed a coherent national-level NIA data set for the period of 1993-2011, we can calculate the wages of productive labor in the production sector by multiplying
the ratios calculated above with our NIA data on total compensation of employees for our final estimate of $V$.

### 4.2.5 Constant capital: stock and flow measures

Constant capital represents the capital inputs used in production and can either be expressed in its flow measure $C$ or its stock measure $K$. In terms of the labor theory of value it presents the value of previous labor, but does not create new value in production. Constant capital is an object of transformation of labor, while labor is the value-creating subject.

#### 4.2.5.1 Estimating stock measure of constant capital ($K$):

We use the NIA approach to the calculation of fixed asset values devised by Holz (2006), wherein a “fixed asset series [is] obtained through a hitherto unexplored direct approach of dividing depreciation in the national income accounts by the depreciation rate” (Holz 2006: 183) to estimate $K$ as a proxy for the measure of total stock of constant capital in the Chinese economy. The basic idea is to calculate capital stock from NIPA data, where gross value added is calculated as the sum of depreciation of fixed assets, total compensation of employees, net production taxes, and operating surplus. The value given for depreciation of fixed assets is simply divided by a depreciation rate to arrive at the original value of fixed assets in a given year.

As discussed for the estimation of variable capital above, we substitute national depreciation of fixed assets with depreciation of fixed assets given in provincial income accounts by the same method to construct a coherent data series from data on gross value added provided in the China Statistical Yearbook 2012.

Depreciation of fixed assets in our newly constructed income accounts series can now be divided by a depreciation rate. Again, China’s national accounts do not provide economy-wide depreciation rates, so that these need to be estimated. Many authors assume an average economy-wide depreciation rate of 5% or 6% (cf. authors discussed in Holz 2006; Wu 2009) spanning periods starting from 1952. Holz’s own empirical estimates of depreciation rates in the 1993-2003 period yield an average rate of ca. 6%, which we will also assume for the 1993-2011 period (Holz 2006: 158). Additionally, we follow Holz in adding a scrap rate of 1% to arrive at our final estimate of $K$.

#### 4.2.5.2 Estimating flow measures of constant capital ($C_p$):

Holz’s method allows us to estimate capital stock and thus gives us an idea of the value of constant capital as it is accumulated over time. Unfortunately, however, the method does not
allow us to differentiate between production capital and non-production capital, instead $K$ represents the combined capital stock of production and non-production sectors. This is an accurate measure if we want to observe the development of the accumulation of capital on a societal scale. It is a problematic measure, if we want to analyze the development of relations of production in the production sector alone, as for example in the composition of capital. For this reason, and because the relevant data is readily available, we also estimate a flow measure of constant capital $C_p$ from intermediate inputs of the production sector.

The procedure is as follows: $C_p$ is estimated as the sum of intermediate inputs of the production sector ($M_p$) plus its depreciation costs ($D_p$). For years available in I-O tables, the ratio of $M_p$ to $GVA^\dagger$ is calculated and then interpolated for missing years in the 1993-2011 period. The coefficient thus constructed is multiplied with $VA$ (cf. above), thus estimating the value of constant capital in relation to value produced. We also add depreciation, which has previously been discounted from $VA$, but obviously represents a share of constant capital.

The resulting measures of $C_p$ and $K$ are different in absolute terms and $K$ is significantly larger, as would be expected from a stock measure of capital accumulated over a multi-year period vis-a-vis the annual flow measure $C$. Both series do, also as expected, display very similar developments of value relative to one another as both are tied to the same development of productive forces.

With our estimations of $VA$, $V$, $S$, and $C/K$, we can now calculate the rate of surplus value $e'$ (also called the rate of exploitation), the value composition of capital $k$, the general rate of profit $p'$ and the net rate of profit $r'$.

The results of our estimations are available in the annex. More detailed data including the calculations themselves, which are not easily reproduced in print, are available from the author upon request.

### 4.3 Surplus value, capital accumulation and profitability

On the basis of our estimations for value added, variable capital, constant capital and surplus value, we can now proceed to analyze the accumulation regime in China. The accumulation regime is an intermediate concept of analysis, less abstract than the general norms of the production of surplus value and accumulation developed by Marx. Its purpose is to trace the specific conditions and historical patterns of capital accumulation and reproduction and the associated processes of social transformation. We will focus in this section on the production
of surplus value, the accumulation of capital and the general profitability of capitalist production and analyze the reproduction and circulation of capital in the next section.

In a first step, we set out to layout the movements observable in the development of the rate of surplus value in China 1993-2011. To repeat, the rate of surplus value is surplus value, the share of $VA$ created by surplus labor and appropriated by capital to the share in $VA$ of variable capital, to the value of necessary wage labor in the production sector productive of capital, $e' = S/V$. Aglietta calls the rate of surplus value “the pivot of capitalist accumulation” (Aglietta 1979: 87) and it is thus the fundamental economic indicator for his analysis of the accumulation regime in the United States.

Surplus value is important and its rate a fundamental statistical indicator of the viability of capitalist accumulation, because, and as opposed to variable capital, it represents the share of total $VA$ that is not destined for (working class) consumption, but the share of value that is produced in excess of necessary consumption and thus available for accumulation. As the surplus product, it is also the ultimate source of capitalist profits and consumption (though not their only determinant). The sustainability of a given phase of capital accumulation furthermore depends on the ability of capital to increase the rate of surplus value to compensate for the cost of capital, which rises as accumulation progresses.

The rate of surplus value traces, at this abstract macroeconomic and macrosocial level, the process by which the production of value and its division not only constitutes and reproduces the labor-capital relation, but also the process by which the reproduction of this social relation is constantly transformed as a share of surplus value is accumulated as capital. It would thus be wrong to read the rate of surplus value simply as an expression of the quantity of value that is shared $ceteris paribus$ between labor and capital: the movements of the rate of surplus value are precisely not the result of an invariant production function or a closed econometric model, they are the result of a historical process (in the sense of irreversible qualitative change) of social transformation.

In tracing such a process of social transformation, we can rely on the analytical distinction between absolute and relative forms of surplus value production. The production of absolute surplus value refers to the expansion of the capital labor relation. This concerns, on the one hand, the expansion of that share of the population, which is employed as capitalist wage labor. It concerns on the other hand the length of the average working period. Both culminate in an increase of the amount of total labor time subordinated to capitalist production relations.

The production of relative surplus value refers to means of increasing the intensity and productivity of work to expand surplus value produced within a given amount of labor time.
This is achieved primarily through the introduction of new types of work and production organization (i.e. Taylorism, Fordism, “Toytaism”) and by the introduction of productivity-enhancing machinery.

We need to emphasize again that the distinction between absolute and relative surplus value production is an analytical distinction. As already mentioned above, we will not find a real case of capitalist development that rests exclusively on the production of absolute or relative surplus value, as these are analytical distinctions grounded in theory. Capitalist development understood as a process of social transformation is always a process in which the expansion of capitalist wage-labor goes hand-in-hand with accumulation-cum-technical revolution. However, it is also clear from historical observation that we can discern phases of capitalist development characterized to a smaller or larger degree by the expansion of the capitalist production relations or to a smaller or larger degree by technical revolutions, both linked to the “maturity” of this development.

Observing $e'$ (cf. Chart 1), we notice a slight decline until 1997 and a subsequent rise in the rate of surplus value until 2003 and its subsequent decline and stagnation until 2009. The movement of $e'$ allows us to make a first attempt at periodization. The decline in the rate of surplus value until 1997 is starkly contrasted by the record GDP growth rates of more than 13% observable in 1993 and 1994. But the boom years of the early nineties were primarily a political boom marked by the failure of attempts to institute an economic reverse course after the Tiananmen massacre by the socialist conservative faction and by Deng Xiaoping’s Southern Tour and the adoption of the concept of Socialist Market Economy by the 14th CPC National Congress in 1992. The high growth rates were made possible by a fixed investment growth rate of more than 30% (Zhu and Kotz 2011: 21), which was financed by a relaxation of fiscal and credit policies as well as foreign direct investment. Almost in a kind of relapse to the boom and bust cycles of the mid to late 1980s, the investment boom of the early nineties was marked by high but unproductive investment of SOEs, which ate away at their profitability (cf. Fan and Woo 1996), and was accompanied by skyrocketing rates of inflation, as witnessed in the 24.1% growth rate of the consumer price index in 1994 (cf. Chart 2).
In contrast to the boom period of the early nineties, starting in 1997 we see a period of accelerating social transformation, a protracted revolution in the relations of production, as the rate of surplus value increases. As will be shown in the analysis of the institutional forms, and especially the wage relation, the increase in the rate of surplus value was caused by a double movement, which has generalized the capitalist wage relation throughout the Chinese economy. This movement consisted on the one hand of the transfer of rural agricultural labor into the cities (cf. Chart 3) and on the other of the restructuring of labor relations in the urban secondary and tertiary sectors. Going hand-in-hand, these combined movements can be analytically separated as a movement increasing the rate of surplus value by the expansion of absolute surplus value, i.e. an increase in the mass of labor (time) expended in capitalist production relations, and on the other hand a movement increasing relative surplus value by increasing the productivity and intensity of work.
Significantly, $e'$ declines already after 2004, well before the impact of the Global Financial Crisis 2008ff., which would indicate that the reproduction of this process of social transformation had reached certain limits, exposing contradictions in the accumulation regime.

Acting on our theoretical assumption that the reproduction of social relations and, as relevant in this case, especially the capital-labor relation follows the schema contradiction – reproduction – crisis, our task is to explain the secular rise and decline of $e'$ in terms of the concrete social conditions of surplus value production and their transformation in China in this period: Which concrete forms did the social transformations expressed in the expansion of surplus value production evident in rising $e'$ take? How did this transformation bring to bear which concrete contradictions that cause or influence a decline in $e'$ after 2004? To answer these questions we have to analyze the characteristics of the accumulation process in more detail.
The productivity of labor has increased in the period under observation, both in terms of the social productivity of labor as is evident in the increasing technical composition of capital, which refers to the physical output per worker, here substituted with VA, and the productivity of labor for capital, which is evident in the rising rate of surplus value. The growing productivity of labor, however, goes hand-in-hand with a growing value composition of capital as accumulation progresses, of which we can observe a steep increase from 1997-2010, which means that the ratio of capital to labor utilized in production is rising, which bears witness to the increased capital intensity of production. From a value-theoretical perspective, the growing capital intensity of production means that the amount of new value produced by labor declines in relation to the amount of existing value that is reproduced in the form of capital.

At this point in our discussion, we can only give a rough sketch of the concrete developments that underlie the rising VCC and its relation to the character of the accumulation process. On the one hand, the rising composition of capital clearly shows that the accumulation process in China today is not only extensive, in the sense that a social and spatial expansion of the capital relation is taking place, but also intensive, in the sense that accumulation is accompanied by sustained increases in labor productivity and capital intensity.
As we have established theoretically, the accumulation of capital is driven by the competition of individual capitals and the associated uneven development of the forces of production within and between branches. Any individual capital can rationally expect that an increase in its productivity will increase its share in aggregate demand, thus providing surplus profit over its competitors, even if this means that these surplus profits come at the price of additional investment in capital (or, for that matter, labor unproductive of surplus value, such as managerial and clerical staff). The relations of competition between capitals thus cause on a social scale the generalization of intensified norms of production.

This tendency of accumulation sustained by competition will have a depressing effect on the rate of profit (though not on the mass of profits) as the investment required for the reproduction of the value of constant capital rises in relation to the investment required for variable capital, labor producing surplus value. From the perspective of capital, the way to deal with this problem is to outcompete the competition, thus exacerbating the tendency.

The increase in the rate of surplus value has already shown that increases in the productivity of labor make up an important element of the accumulation process. The increase in the composition of capital in favor of its constant part furthermore suggests that the costs of accumulation and reproduction are increasing. This is also evident if we compare value added (VA) to the value of the capital stock (K). The declining trend shows that capital inputs have grown slightly faster than value added over almost the whole period observed, signaling a
decline in the productivity gains achieved by increases in capital stock (cf. Chart 5, cf. also Gaulard 2009: 887ff.).

From this we would once again infer that under the current accumulation regime the increases in the rate of surplus value are not predominantly the result of a sustained increase in labor productivity caused by technical innovation, but rather the result of restructuring of labor markets and labor relations. In other words, the increase in the rate of surplus value is not predominantly the result of a revolution in the means or forces of production that would have caused the costs of the reproduction of labor to fall by reducing the value of commodities for consumption, thus causing an increase in relative surplus value, but rather predominantly the result of a revolution in the relations of production causing an extension and intensification of work.

Chart 5: Productivity of capital

The declining contribution of capital expenditure to productivity gains can furthermore be attributed to a general tendency of overaccumulation cum overproduction during a boom phase, predominantly in department I, as the social composition of capital changes in favor of its constant part. A proxy for the measurement of this development is capacity utilization. According to estimates of the International Monetary Fund (2012) capacity utilization in
Chinese industry has on average been declining from a level of ca. 90% in 2001 to ca. 60% in 2011.

Chart 6: Average capacity utilization in the Chinese economy, 1990-2011 (%)

Finally, and in an almost classical fashion, the increase in the VCC corresponds with a fall in the net rate of profit, \( r' \) (cf. Chart 7). We calculate \( r' \) as the ratio of surplus value less the costs of reproduction (cost of unproductive labor, circulation, taxes) to fixed capital \( C \) and \( K \),

\[
r' = \frac{(S-U)}{(C+K)}.
\]

The tendential decline in \( r' \) can foremost be explained as the result of the growing VCC. The amount of surplus value and thus profits produced declines relative to the amount of capital invested and the costs of the reproduction of capital. The temporary increase and stagnation of \( r' \) in the years 2000-2004 can be attributed to the increase in the rate of surplus value at approximately the same time. The decline of the rate of surplus value after 2004, however, also gives way to a continued decline in the profit rate.

The empirical data on the accumulation process generally confirms theoretical expectations about the relationship between the rate of surplus value, the composition of capital and profitability and their contradictions. The acceleration of accumulation after 1997 is until 2003 accompanied by a parallel increase in the rate of surplus value, which helps to sustain and even temporarily increase the rate of profit despite an increasing value composition of capital until
ca. 2004. The stagnation and temporary decline of the rate of surplus value corresponds to a relatively sharp drop in the net profit rate until 2009.

The development of $e'$ is likely attributable to a dwindling supply of surplus labor on the one hand and an intensification of the class struggle on the other, which manifest themselves in reports on labor shortages in China’s manufacturing zones and the growing number of reported labor conflicts. This will be discussed in more detail in the chapter on the wage relation (5.2).

**Chart 7: Net rate of profit, $r'$**

Driven by competition, and in spite of the declining profit rate, the accumulation of capital proceeds after 2005 at an only slightly slower pace. As the value composition of capital continues to increase, the detrimental effects on the rate of profit are exacerbated by overaccumulation, measurable in a decline in the utilization rate. At the same time, the accumulation of capital is not accompanied by gains in productivity that would be sufficient to lower the costs of the reproduction of labor in a way that would be able to cause a renewed increase in the rate of surplus value, which would allow it to counteract the detrimental effects of the rising value composition of capital on the profit rate.

The general patterns and features of the accumulation process now need to be set in relation to the circuits of the reproduction of capital.
4.4 The circulation and reproduction of capital

With reference to Marx’s treatment of capitalist reproduction discussed in chapter 3.2.3, we will here attempt to observe the patterns of development in the Chinese economy in a macroeconomic perspective. It will be shown how over the course of the period under observation, 1993-2011, the reproduction of capital has taken place unevenly, relying on capital accumulation as the dominant source of demand, whereas working class consumption plays a subordinate role for the reproduction of capital, which would translate into a disproportionate development between the departments of production.

The analysis can rely on more mainstream methods and data as a proxy for the measurement of disproportionate development than the previous analysis of capitalist accumulation. We will focus in this analysis on changes in the composition of the gross domestic product displayed in national income and expenditure accounts, which has in recent years been subject of a growing literature dealing with the development of functional income distribution in the course of China’s economic growth (Aziz 2006; Aziz and Cui 2007; Bai and Qian 2009a; Bai and Qian 2009b; Bai and Qian 2010; Du et al. 2014a; Fang 2009; Li 2010; Li 2013; Li and Yin 2005; Luo and Zhang 2009a; Luo and Zhang 2009b; Molero-Simarro 2011; Molero-Simarro 2012; Molero-Simarro 2015; Piovani 2014; Piovani and Li 2011; Qi 2011; Wang and Xu 2013; Wu 2002; Xu 2013; Zhou et al. 2010; Zhu and Kotz 2011).

The NBS provides data on the composition of GPD from the perspective of total expenditure and of total income. Expenditure approach components of GDP are divided by final consumption expenditures, gross capital formation, and net exports of goods and services. Final consumption expenditure includes household and government consumption expenditure: “Household final consumption expenditure refers to the total expenditures on goods and services by households for the purpose of final consumption”, whereas “Government final consumption expenditure refers to the expenditures incurred by government for the provision of public services and the expenditures incurred by government in providing to households consumer goods and services free or at prices lower than market prices” (OECD 2000: 49, 55). Gross capital formation includes investment in fixed assets at home and from abroad, minus investment transferred abroad, whereas net exports of goods and services are calculated as exports of goods and services minus imports of goods and services.

According to the definition above, we can read final consumption expenditures as the share of unproductive consumption expenditures in total GDP and thus as a proxy for the share of expenditures spent for the reproduction mainly of the working class. Gross capital formation, is of course growth generated from expenditure on the accumulation of capital.
In Chart 8, we can observe the development of the share of final consumption and gross capital formation in GDP. The contribution of capital formation declines from 43% to 35% from 1993-2000. This decline in its relative share can be attributed on the one hand to the growth in net exports until 1998 and on the other hand to a slow-down in the growth rate of capital formation, which is accompanied by a parallel, though slightly slower decline in the growth rate of final consumption (cf. Chart 9). Beginning in 2001 and until 2011, the growth rate of gross capital formation is on average much higher than the growth rate in final consumption expenditures, causing an increase in the share of gross capital formation in GDP from 35% in 2000 to 48% in 2011 and a parallel decline in the share of final consumption by 14% during the same period. While final consumption declines, the share of exports in GDP rises from 2% in 2000 to 9% in 2007 before it declines as a result of the impact of the global economic crisis.

The complementary method by which GDP is calculated is the income approach, which consists of total compensation of employees, depreciation of fixed assets, net production taxes and operating surplus. While the NBS does not publish income components of GDP on a national level, it does provide annual provincial data. Data on “Components of GDP by Income Approach by Region” has been published for the years 1993-2004 in Data of Gross Domestic Product of China 1952-2004 and provincial data for subsequent years is available from the
China Statistical Yearbook for the years 2005-2007 and 2009-2011. We sum up the provincial data to arrive at a national aggregate for each year.

**Chart 9: Growth rates of final consumption expenditures and gross capital formation, 1994-2011**

Unfortunately, the statistical accounting methods used to calculate the income components of GDP have undergone two revisions that have significant effects on the estimation of labor share and profit share of GDP, one in the wake of the national economic census 2004, and the other after the economic census 2008. Including until the year 2003, the NBS have calculated total compensation of employees by including the income of self-employed proprietors. Beginning in 2004, their income has instead been added to operating surplus. As a result, if the data were used as provided, it would record an unrealistic 5% drop in the share of labor compensation in GDP and a corresponding increase in the profit share. To correct for this change in statistical accounting we employ the method of Zhou et al. (2010), to revert the data back to the original method.

In a first step, we estimate the number of total self-employed, modify procedure of Zhou et al. (2010) by using different estimates for the number of non-registered self-employed. We calculate the total number of self-employed by adding the numbers of registered self-employed available in the China Statistical Yearbook to an estimate of unregistered self-employment. This estimate is based on the difference between the registered self-employed and surveyed
self-employment in the 2004 China Economic Census, and which is for subsequent years multiplied with the (declining) rate of unregistered employment, which we calculate from the difference between total employment and registered types of employment given in the CSY’s labor statistics (cf. Chart 17). We believe that this yields a more accurate estimate, as it reflects the slowly declining share of informal employment after 2004, whereas Zhou et al. (2010) assume that informal employment grows at the same pace as registered employment.

In a second step for each year 2004-2007, we estimate the income of the self-employed as the arithmetic average of two methods: The first method multiplies total compensation of employees with the total number of employed and divides the product by the difference of total number of employed and number of self-employed, yielding the total compensation of employees at its original value plus compensation of self-employed measured as an estimate of the share of total compensation of employees. The second method multiplies operating surplus with the number of self-employed and divides this product by the total number of employed and finally adds the result to total compensation of employees, yielding total compensation of employees at its original value plus compensation of self-employed measured as an estimate of their share of operating surplus.

Finally, the arithmetic average of both methods is subtracted from operating surplus and added to total compensation of employees for their respective years 2004-2007 to make the data comparable to earlier data.

After no data has been published for the year 2008 (we compensate with linear interpolation), the NBS has made an apparent partial about-turn in their method of calculating income approach GDP, which may have been related to the political implications of revising downward the labor share as a result of the earlier revision (Holz 2013: 28).

According to Xu (2011), the income of self-employed in rural households, which make up about one third of self-employed, is now completely counted towards total compensation of employees, whereas the income of self-employed in urban households is now split up into profit income, which is counted towards operating surplus, and labor income, which is counted towards total compensation of employees. The estimation of profit income and labor income varies from industry to industry. Unfortunately, the NBS does not document what their specific relations are, so that we cannot account and correct for them. Following Piketty (2014: 281) in that the profit share of income in self-employed households is equal to or smaller than the national relation of employee compensation to profit share, we would assume, however, that the pre 2004 and post 2008 data series are comparable and risk a small underestimation of the profit share of GDP as compared to the pre 2004 series. In any case, the post 2008 data does
not present any significant deviation from the pre 2008 trend. The spike in compensation of employees 2008 and 2009 is actually caused by the stagnation of profit income due to the impact of the global economic crisis 2008ff.

Chart 10: Income approach components of GDP, 1993-2011 (% share)

Mirroring to a certain extent the decline of final consumption as a component of the expenditure side of GDP is the decline of compensation of employees as a share of the income side of GDP, 1995-2007. The flipside of this development is an increase of depreciation, taxes and operating surplus. If we add taxes and depreciation to net operating surplus, then we can observe that the growth rate of gross operating surplus between 1997 and 2007 is on average higher than the growth rate of employee compensation (cf. Chart 11). The analysis of the income and expenditure sides of GDP suggests that consumption demand and wages have been of declining importance as a circuit for the reproduction of capital at least during the period 1997-2007, whereas the relevance of profits and investments has increased.

It should be emphasized here that these shifts in income and expenditure share are due to uneven relative growth. In fact, both household consumption and compensation of employees have grown considerably during the period under observation, though on average not as fast as operating surpluses and investment.
The developments of the income and expenditure sides of China’s GDP meet with varying explanations in the literature. For the income-side, Bai and Qian (2009a) find that the decline of the share of compensation of employees in national income is mainly driven by two developments. For the period from 1995-2003, structural change between the three sectors of industry, i.e. the transfer of labor from rural agriculture to urban industry, would account for approximately two thirds of the decline in labor share, while effects within the industrial sector, i.e. restructuring and transformation of the labor market, account for about one third. Since 2004, however, within sector effects account for over three quarters of the decline in labor share.

The labor share of income in agriculture in China was found by Bai and Qian (2009a) to be extraordinarily high by international comparisons, which they attribute in part to the effect of unorthodox statistical methods, which overestimate labor income in the primary sector. If this is corrected for, then the labor share in agriculture and the overall labor share in GDP was actually smaller to begin with, and structural transformations in China’s economy are actually less important than the official national accounts suggest. Finally, Bai and Qian (2009a) conclude that on the one hand, the real decrease in labor income share is smaller for the period 1998-2003 than the national income accounts suggests and on the other hand that after
discounting the statistical impact of rural-urban labor transfer, changes within the industrial sector are primarily responsible for the decreasing labor share.

2009b; Luo and Zhang (2009a) confirm findings that the decrease in labor income share between 1996 and 2003 can on the one hand be attributed to the transition of labor from the agricultural sector into the secondary and tertiary sector, and on the other hand to a declining labor income share within the industrial sectors. Intra-sectorial changes are more important than inter-sectorial changes in the Eastern provinces, where industrial development proceeds more rapidly and the labor income share is subject to a stronger decline, as regional comparisons show.

This is somewhat at odds with Zhou et al. (2010), who attribute the decline in the labor income share primarily to the transfer of rural surplus labor that fuels a “low-wage growth strategy” Zhou et al. (2010: 23), in which migrant labor is paid below its contribution to economic growth, with a correspondent effect on functional income distribution. However, while Zhou et al. (2010) make the important corrections for statistical changes after 2004, they do not take into account the possibility of an overestimation of agricultural labor income, as Bai and Qian (2009a) do.

Supportive of the view that the development of functional income distribution is not simply a function of rural-urban labor transfer, are the findings of Li (2010), who finds that standard explanations of a declining labor share in early development (i.e. the Kuznets hypothesis) cannot fully explain what has happened in the Chinese case.

Bai and Qian (2009b) come to similar conclusions as before when analyzing factor income distribution with the help of flow of funds accounts, adjusting the NBS data with survey data from the Economic Census 2004. Here, the authors analyze national income distribution between the household, government and corporate sectors and find that income distribution has changed in favor of the corporate and government sectors, while the share of household sectors in national income has declined in the 1996 to 2005 period. The main reasons for the shift in shares of the primary distribution of national income are declining labor income and property income shares. A further decline of the household share 2005-2007 is mainly attributed to the increase in the share of net production tax. “The household share of disposable income declined from 66.83% in 1996 to 54.12% in 2005. In the meantime, the shares of the corporate and government sectors rose from 17.8% to 24.13% and from 15.36% to 21.75% respectively, implying that the benefits of the economic growth since 1996 have gone mainly to the corporate and government sectors” (Bai and Qian 2009b: 199).
Xu (2013) also evaluates the official statistical data on household income in flow of funds accounts, as well as on household consumption and capital formation in expenditure approach GDP by comparing them with household survey data from China’s first and second economic census. The findings suggest that the statistical data overestimates the share of investment, but not to an extent where this overestimation would have a significant impact on the macro composition of the expenditure-side of GDP (Xu (2013: 24).

Bai and Qian find the reasons for the change in factor income shares to be “structural transformation, the restructuring of the SOEs [state-owned enterprises] and increase in monopoly power” of employers on the labor market (Bai and Qian 2009a: 36; Bai and Qian 2009b: 200), see also Bai and Qian (2010). The declining primary income share of households is mainly attributed to a declining labor income share.

Zhang and Zhang (2012) support the argument that structural changes in the economy, the transfer of labor from the primary to the secondary and tertiary sectors, are not primarily responsible for the development of China’s labor share. Indeed other factors, namely the long-term stagnation of the labor share in the secondary and tertiary sectors need to be taken account. To prove their point, Zhang and Zhang (2012) apply similar statistical corrections to the labor share in the primary sector as does Li (2013), as both believe that labor income in agriculture is overestimated. Taking this into account, the effect of inter-sectorial changes on the labor income share is even less relevant than earlier research, i.e. Bai and Qian (2009a), suggests. Instead, the specific pattern of Chinese economic growth, which emphasizes investments and capital accumulation, relies on exports and FDI (foreign direct investment), should be taken into account (see also Wang and Xu 2013).

To allow for an international comparison of China’s national income accounts, Li (2013) adjusts data on the labor share of national income to be internationally comparable for the 1978-2007 period based on the UN’s 1993 System of National Accounts. Among other changes, and in addition to controlling for changes in statistical method after 2004, Li also re-estimates the labor income share of the primary sector to be comparable with international statistical standards. Based on these adjustments, Li (2013: 11) finds that China’s labor share is in any case on average lower than that of developed countries, but, depending on method of estimation, may also range below the average labor share of developing and transitioning economies. Li’s findings are supported by Du et al. (2014a), who, looking at the expenditure side of GDP, find that the consumption to investment ratio compared to growth in real GDP has declined faster in China than in any other East Asian country. In other words, GDP growth in China has relied more strongly on investment than in any other East Asian country.
The relative decline in household consumption can furthermore be explained by its relation to household savings. It can be argued that low interest rate policies contribute to a secondary distribution of national income in favor of capital and to the disadvantage of households: “Since the corporate sector is a net borrower from the household sector, the low interest rate policy forced the latter to subsidize the former” (Bai and Qian 2009b: 201). Aziz and Cui (2007), however, caution to overestimate the effects of household savings on household consumption. They find instead that household savings only explain a fraction of the decline in household consumption, whereas most of it can be explained the relative decline of household income from wages, as discussed earlier.

In summary, the research on functional income distribution in China generally agrees that the decline in the labor share of national income is on the one hand the result of structural changes between sectors, i.e. the transfer of rural agricultural surplus labor to the urban secondary and tertiary sectors, and on the other hand, the result of a decline of the labor share within the secondary and tertiary sectors, caused by industrial restructuring and labor market regulations that have increased the monopoly powers of employers in determining wages. The decline of the labor share in functional income distribution has significantly contributed to the decline in household consumption as a share of GDP. The relative decline in labor income and household savings as a share of GDP now lead us to consider the corresponding relative increase in profits and investment as a driver of accumulation and economic development.

In international comparison China’s saving rate, the difference between income and consumption, is extraordinarily high, especially in the post-2000 period. In 2006, the saving rate of China was 3.3 times higher than that of low-income countries (16.1%), and 2.4 times higher than the world average (22.1%) (Yang et al. 2012: 251).

The high household savings rate can be attributed to a number of factors. Common theoretical models seem to have difficulty in explaining the savings decision of households. Indeed other factors, such as the decline in the public provision of social services and education, various types of social insurance and health care, as well as uncertain employment and labor market conditions, seem to have contributed to an increase in household savings (Yang et al. 2012: 269ff.) and thus to the relative decline in household consumption.
The high corporate savings rate can to a large extent be explained by China’s credit and financial system, which due to its non-market based criteria for the allocation of credit by banks to enterprises, incentivizes enterprises to rely on internal savings as a source of investment (Aziz 2006). This is evident when one compares sources of investment provided in the China Statistical Yearbook (cf. Table 3). Between 1993-2011, the share of domestic loans as a source of investment has declined from 23.5% to 13.4%, whereas self-raising funds and other sources have increased from 65.5% to 80.9%. The share of foreign investment has also decline steadily from its peak in 1996 at 11.8% to less than 1.5% in 2011.

The high corporate saving rate is thus linked to self-raised funds as the by far most important source of investment in the Chinese economy, which suggests that capital accumulation in China is predominantly dependent and directly sourced from corporate profits (He and Cao 2007; Kuijs 2005; Li and Yin 2005; Li and Yin 2009; Molero-Simarro 2011; Molero-Simarro 2012; Molero-Simarro 2015; Wang and Xu 2013).

The Chinese economy has been producing a constant but moderate net export surplus of 1-4% between 1993-2004. Only since 2004 has the net export surplus risen to its peak of 9% in 2007, after which it declined as a consequence of the demand-side shock caused by the global financial crisis. While a very high net export surplus has only been a prominent feature of the
Chinese economy in the mid-2000s, the importance of exports as a demand side component has been steadily increasing since the 1990s, accompanying the decline in household demand. The important role of exports in overall demand allowed household demand growth to lag behind total growth without creating a demand-side problem. At the same time, the depression of labor compensation, which contributes significantly to the competitiveness of Chinese products on the world market, reinforces this relation and the Chinese economy’s dependence on export markets (cf. Molero-Simarro 2011; Molero-Simarro 2012; Molero-Simarro 2015).

Table 3: Sources of Investment, 1993-2011 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>State Budget</th>
<th>Domestic Loans</th>
<th>Foreign Investment</th>
<th>Self-raising funds and Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>3.70</td>
<td>23.50</td>
<td>7.30</td>
<td>65.50</td>
</tr>
<tr>
<td>1994</td>
<td>3.00</td>
<td>22.40</td>
<td>9.90</td>
<td>64.70</td>
</tr>
<tr>
<td>1995</td>
<td>3.00</td>
<td>20.50</td>
<td>11.20</td>
<td>65.30</td>
</tr>
<tr>
<td>1996</td>
<td>2.70</td>
<td>19.60</td>
<td>11.80</td>
<td>66.00</td>
</tr>
<tr>
<td>1997</td>
<td>2.80</td>
<td>18.90</td>
<td>10.60</td>
<td>67.70</td>
</tr>
<tr>
<td>1998</td>
<td>4.20</td>
<td>19.30</td>
<td>9.10</td>
<td>67.40</td>
</tr>
<tr>
<td>1999</td>
<td>6.22</td>
<td>19.24</td>
<td>6.74</td>
<td>67.79</td>
</tr>
<tr>
<td>2000</td>
<td>6.40</td>
<td>20.30</td>
<td>5.10</td>
<td>68.20</td>
</tr>
<tr>
<td>2001</td>
<td>6.70</td>
<td>19.10</td>
<td>4.60</td>
<td>69.60</td>
</tr>
<tr>
<td>2002</td>
<td>7.00</td>
<td>19.70</td>
<td>4.60</td>
<td>68.70</td>
</tr>
<tr>
<td>2003</td>
<td>4.60</td>
<td>20.50</td>
<td>4.40</td>
<td>70.50</td>
</tr>
<tr>
<td>2004</td>
<td>4.40</td>
<td>18.50</td>
<td>4.40</td>
<td>72.70</td>
</tr>
<tr>
<td>2005</td>
<td>4.39</td>
<td>17.25</td>
<td>4.21</td>
<td>74.15</td>
</tr>
<tr>
<td>2006</td>
<td>3.93</td>
<td>16.47</td>
<td>3.64</td>
<td>75.96</td>
</tr>
<tr>
<td>2007</td>
<td>3.88</td>
<td>15.28</td>
<td>3.40</td>
<td>77.43</td>
</tr>
<tr>
<td>2008</td>
<td>4.35</td>
<td>14.46</td>
<td>2.90</td>
<td>78.29</td>
</tr>
<tr>
<td>2009</td>
<td>5.07</td>
<td>15.71</td>
<td>1.85</td>
<td>77.38</td>
</tr>
<tr>
<td>2010</td>
<td>4.72</td>
<td>15.20</td>
<td>1.60</td>
<td>78.48</td>
</tr>
<tr>
<td>2011</td>
<td>4.29</td>
<td>13.39</td>
<td>1.46</td>
<td>80.85</td>
</tr>
</tbody>
</table>

Source: China Statistical Yearbook 2012

Zhu and Kotz (2011) also demonstrate that investment has been the leading component of GDP growth for the years 1993-2001 and that investment and exports together have been the leading components for GDP growth from 2001-2007, accounting for a combined 69.4% GDP growth during that time Zhu and Kotz (2011: 20-22).

To summarize the findings of the literature on functional income distribution in the Chinese economy, we can assert that China’s rapid economic growth in the period under observation has predominantly depended on the expansion of fixed asset investments financed by corporate profits. Even though the national savings rate is generally high for households, the state as well
as corporations, domestic loans, which channel household savings to corporations, have declined in importance as a source of investment, whereas the importance of self-raising funds has increased to above 80% in 2011, pointing to the importance of corporate profits in determining investment.

Chart 13: Household consumption, exports and investment compared to GDP, 1993-2011 (%)

Source: China Statistical Yearbook 2012

We can furthermore assert that the increase in corporate profits as a share of GDP starting in the late 1990s has proceeded at the expense of wage earners’ income, whose share of the national income has declined. The literature attributes this to the ability of capital to keep wages growth well below productivity growth, depending to varying degrees on the rural-urban labor transfer and the restructuring of employment relations in the industrial sector.

The relative decline in wages has not only helped to increase corporate profits but has also caused a decline in household consumption expenditure as a share of national expenditure, signaling the declining importance of Chinese households’ contribution to aggregate demand. This is compensated on the one hand, of course, by increasing demand for investment goods and on the other hand, by the increasing importance of exports as a source of final demand, creating large net export surpluses in the 2000s.
The study of functional income distribution in China thus reveals clearly the tendency of the disproportionate development of capital in this specific case. At the same time, the depression of labor compensation, which contributes significantly to the competitiveness of Chinese products on the world market, reinforces this relation and the Chinese economy’s dependence on export markets.

4.5 Summary: Specific patterns of accumulation, circulation and crisis in the Chinese accumulation regime

Our analysis of the relationship of surplus value production, accumulation and profits on the one hand and of the patterns of the reproduction of capital on the other hand, have so far revealed the specific contradictions associated with these two processes, that are here analytically separated, but in reality of course intimately related. The final task then is to make explicit a synthetic understanding of this relationship.

To recap, the accumulation of capital is initially accompanied by an increase in the rate of surplus value, which can be attributed to the fundamental restructuring of employment relations in the second half of the nineteen-nineties and the first half of the 2000s. Around 2003, however, the rate of surplus value enters a phase of decline and stagnation, which brings to bear the depressing effect of a rising composition of capital on the profit rate, while the process of accumulation, however, is carried on by the rationality of competition.

It is the same process of restructuring of the wage relation that supplies the foundations of the emergent patterns of the circulation of capital through which the accumulation process is reproduced, the relationship of wages and profits, investment and consumption.

The process that has raised the rate of surplus value and spurred accumulation is the same process that emphasized profits and investment rather than wages and consumption as the dominant channel for the circulation of capital. Under these conditions capital accumulation necessarily becomes the leading source of the expansion of aggregate demand. This relationship is reflected in the rising social composition of capital in favor of its constant part (one may add with a view to general equilibrium theory, that it is precisely the conjuncture of supply and demand, which brings about this development and which thus precludes the formation of an equilibrium of consumption and investment). Capital thus expands upon the demand created by its own expansion.

As the home markets especially for consumer goods grow more slowly than the productive capacity of capital, the insertion of China’s economy into a liberal world market regime
provides an outlet for excess aggregate supply, so that exports provide an initial “fix” for the endogenous contradictions of the accumulation regime. At the same time, the availability of export markets combined with the relatively low cost of labor, which contributes significantly to the competitiveness of Chinese products, amplifies the circuit of profit-led investment for the reproduction of capital.

Social capital is now firmly inserted within a historically specific structure of reproduction. The circuits for its reproduction are determined by the capacity of capital to produce specific use values only in certain proportions, commodities suited for an investment-heavy world-market oriented accumulation regime. The homothetic expansion of these proportionalities is spurred by the process of competition, meaning that accumulation expands on existing capacities, exacerbating disproportionalities between the relationship of wages and profits, investment and consumption, the departments I and II.

“Going one step further, the imbalanced structure of income distribution is actually determined by China’s specific mode of production and pattern of capital accumulation, namely the use of abundant cheap labor and comparative advantage, maintaining low wages, which brings about high profits and rapid capital accumulation and high investment and high exports make for high growth. It is precisely this pattern of production that determines the patterns of distribution, and the patterns of distribution determine the patterns of demand” (Wang and Xu 2013: 36).

The accumulation process meanwhile transforms the historically specific social conditions that supplied the preconditions under which the restructuring of the wage relation, which increased the rate of surplus value, could take place. To re-evoke Mandel (1989: 37-38): The rise in the rate of surplus value is not proportional to the rise in the organic composition of capital, due to intensification of the class struggle: the rate of profit declines.

From the perspective of capital, inserted into a historically specific structure of reproduction that emphasizes investment in capital goods and world market competition, increasing wages primarily appear as a cost eating away at profits and not as a source of additional demand (which is exacerbated by the fact that a large share of household income is saved and not consumed). Declining profits spur competition, so that investment continues but capacity utilization declines. This in combination with export dependence is the historically specific form in which overproduction/insufficient demand materializes in the Chinese case.

By the end of the 2000s, capitalism in China is confronted with the conjuncture of two crises. On the one hand we have the demand-side shock created by the fallout of the subprime crisis. While this crisis was triggered abroad, China’s economy was vulnerable due to its own
specific patterns of accumulation and reproduction. The initial response of the government to the crisis was to create a massive stimulus program of 4 trillion Yuan RMB, about 596 billion US$ (de Haan 2010: 764), which facilitated a relatively quick initial recovery financed by government debt. The crisis, however, made obvious the risks associated with the reliance of China’s economy on foreign demand.

The declining GDP growth rates of recent years, and the associated lowering of official growth targets reveal the exhaustion of China’s growth model, the second, properly endogenous crisis of China’s accumulation regime, which in our data manifests itself in stagnating $e'$ and declining $r'$. This crisis asserts itself gradually and has not (yet?) produced a shock to the Chinese economy. Nevertheless, the Chinese leadership seems to be acutely aware of these problems and tries to enact a policy of restructuring and rebalancing.

Such attempts at rebalancing, if they can be successful at all, present the exceedingly difficult attempt to square the circle, so to speak. We leave aside any considerations of the associated political costs and difficulties associated with restructuring and rebalancing for now, and consider only the contradictions of capitalist development implied in such an endeavor:

On the one hand, restructuring would need to improve household consumption, which, however, would exacerbate the decline in the profit rate as it would imply a sustained increase in wages. The problem of profitability could be tackled by improving the productivity of labor, which would require sustained investment in capital goods, undermining attempts at balancing consumption and investment. To put it in Marxian terms: Overcoming the contradictions of the current accumulation regime in reproduction would require a rebalancing between investment and consumption, whereas the problem of declining profitability requires to increase the rate of surplus value, which in turn requires technical innovation and subsequent generalization of capital goods through investment. If such an act of rebalancing is possible at all without the intervention of a major crisis, it remains doubtful that a synchronous development of the departments of production and the social composition of capital could ever be achieved. Any rebalancing is set to create the point of departure for the renewed unfolding of the general contradictions of capital under historically specific conditions and within historically specific forms.
5 The Mode of Regulation

5.1 Historical antecedents: Labor, the party-state and the crisis of the late-eighties

The economic reforms in the nineteen-eighties were initiated by the liberalization of the rural economy. Its initial success was based on the de-collectivization of agriculture and the introduction of the household responsibility system, which by the end of 1982 had spread to more than 90% of farming households (Naughton 2007: 241), as well as the rise of township and village enterprises.

Together with the government’s decision to increase grain procurement prices, the contracting of farmland cultivation to households caused a large increase in the production of agricultural goods, which considerably improved the national supply of foodstuffs thus signaling the first sustained improvement in agricultural production since the catastrophe of the Great Leap Forward. The reforms furthermore signaled at least a partial end to the long-standing policy of subsidizing urban industrialization at through the forced transfer of agricultural surplus at undervalued prices.

The reforms, however, also revealed that much of rural labor was not productively employed and as the provision of social services was dismantled in the process of de-collectivization, rural reforms also created the initial conditions for the great internal migrations of the late 1990s and 2000s.

Beforehand, rural surplus labor was at least partially absorbed by the booming township and village enterprises, collectively or privately run organizations, which proved capable at adapting to an increasingly marketized environment and which emerged as serious competitors to the state-owned enterprise system (Huang 2008: 68ff.; Naughton 2007: 271ff.).

After a mix of bottom-up and top-down reforms in the rural economy had produced obvious beneficial results, the reform-minded part of the CPC leadership pushed for reforms of SOEs, hoping to achieve similar gains to productivity as reforms had achieved in the rural sector.

The SOE reforms must be viewed in the overall context of political struggles over the course of reform between economic liberalizers and conservatives in the party leadership. The initial steps taken towards economic reform were designed to strengthen the political base of
support of the reformist faction, by catering for the interests of the provinces, many of which had long been neglected under the system of central planning. The devolution of fiscal responsibilities to provincial and lower levels of government created incentives to support economic development because local governments could retain some of the revenues created through growth. Thus, the provinces gained an interest in continued reform and presented a counterweight to resistance in the conservative ranks of the party leadership and central bureaucracy (Shirk 1993; Woo 1999).

Starting from 1984 the creation of a dual-track system (双轨制: *shuangguizhi*) in which the proportion of the inputs and outputs of the state-owned enterprise system, which were procured at fixed prices and allocated according to the plan was held constant, while a growing surplus product was generated outside the plan and distributed through the market and at market prices. This is the process that Naughton (1995) now famously characterized as “growing out of the plan”. The introduction of the dual-track system was accompanied by the contract system, in which the state and its agreed upon output norms and tax contributions on a firm-by-firm basis. While the ownership structure remained largely unchanged, managerial incentives that emphasized profitability rather than plan fulfillment were gradually introduced (Naughton 2007: 91ff.).

As the management of SOEs was conferred greater autonomy, for example in relation to the determination of wage levels, the retention of profits, and in terms of investment decisions, the SOE sector did raise their output considerably, but also created a number of severe macroeconomic crises in the second half of the 1980s, when periods of high inflation and associated stop-go cycles in the Chinese economy can be linked directly to the specific mode of economic growth incentivized by SOE reforms. While the reforms did produce significant output growth, contrary to the expectations of economic policy makers, the profitability of SOE operations declined, thus also causing severe fiscal problems in the state budget, which to a considerable extent relied on SOE income (Fan and Woo 1996).

The ability of SOEs to sell that share of their product, which was not compulsorily allocated to the plan, created incentive for managers to increase the output of their enterprises. This incentive was paired with the fact that the government bore the risks of enterprise failure and was more often than not willing to guarantee SOE survival based on political criteria rather than criteria of economic feasibility. The greater autonomy granted to SOE managers thus did not primarily encourage them to increase production efficiency, but instead to increase their outputs by increasing the consumption of inputs. This strategy was perfectly rational from the
perspective of an individual enterprise, as commodities produced in excess of the plan could be sold at the much higher market prices.

Furthermore, the appropriation of public resources through consumption and investment was financed through the extension of public lines of credit granted by local state banks, which were instructed by local governments to generously contribute to the expansion of the local economy, as local and provincial governments were now able to retain a greater share of income, which earlier had to be forwarded to the central state. The relatively easy access to credit was eagerly utilized by SOE managers, as they could improve their career chances, simply through the boosting of output by increasing current and future inputs and through the enhancement of their popularity with employees by increasing wages and other benefits (Fan and Woo 1996: 216).

Among other effects, the greater availability of credit to SOEs combined with managerial powers to determine wages and bonuses led to an increase in the real level of labor compensation of 7-15% per year between 1984 and 1988, while the net output value of SOEs grew only between 1-5% (Fan and Woo 1996: 211).

SOEs further increased consumption by providing more services, private consumer goods and housing to management and employees. These policies diverted much of the credit readily available to SOEs during the 1980s to non-production related expenditure and investments in non-productive assets. As a result, Woo et al. (1994) estimate the growth in total productivity of SOEs between 1984-1988 to be around 0%.

The reforms of the state-owned sector and the investment and growth strategies employed by SOEs in their wake resulted in a decline in taxes and profits remitted to the state and in the creation of inflationary tendencies.

“[…] decentralization has weakened the fiscal base of the central government without necessarily achieving the desired goal of rationalizing the allocation of investment spending. A significant portion of what would have been state revenue was diverted into consumption and non-productive investments. Furthermore, the decline in real state revenue from the SOEs exacerbated the budget deficit, and, consequently, the printing of money” (Fan and Woo 1996: 215).

The expansion of the money supply, which was responsible for the inflation shocks of the late 1980s, was then a result on the one hand of the increased consumption and reduced profitability of SOEs, which then needed to be subsidized by the state, widening the budget deficit, and on the other hand the expansion of the volume of credit by local state banks, lending
to SOEs, credit that was often immediately monetized in the form of wages (Fan and Woo 1996: 220).

Though consumption and real wages had generally increased over the course of the 1980s, inflationary pressures in the late nineteen-eighties had an impact on the income of working families. Inflation of urban consumer prices reached more than 20% in 1988 and more than 16% in 1989 so that real wages declined in 1988 after rising steadily since the beginning of the 1980s (cf. Chart 14).

**Chart 14: Real wages and inflation in urban China, 1978-1992 (indexed to previous year = 100)**

![Chart 14: Real wages and inflation in urban China, 1978-1992](image)

Source: China Statistical Yearbook 1999 (real wage) and 2001 (price index)

The reforms of the 1980s initially brought great advances to the economic wellbeing of large parts of the Chinese population. The dismantling of agricultural collectives freed Chinese farmers and allowed them to improve their livelihood considerably. The expansion of agriculture, industry, commerce, and services improved the livelihood of the urban population as well and, for the first time in decades, rapid economic growth was accompanied by the expansion of consumption. The failure of SOE reform and the ensuing macroeconomic shocks, however, marked the onset of the social and economic crises of the late 1980s.
To understand the long-term consequences of the failure of the SOE-reforms and the subsequent effects of the party-state’s policies towards its relationship with labor, as well as the significance of the Tiananmen massacre in that regard, one has to understand how the SOE reforms of the 1980s related to the Chinese labor question.

Already at the beginning of the 1980s, the Chinese leadership, reformers as well as conservatives, became keenly aware of the potential dangers of autonomous workers’ organization for CPC political rule, as they had carefully observed the political developments around Solidarnosc in Poland in the 1980s. Labor unrest and attempts to form autonomous union organizations in early 1980s’ China, which occurred as a result of rather objective reporting on Solidarnosc in the Chinese media, were cause for alarm in all factions of the leadership (Walder 1991; Wilson 1990).

As Chan (1993) documents, attempts by workers and/or the All-China Federation of Trade Unions (ACFTU) to gain greater representation and organizational autonomy had repeatedly been defeated at the hands of the party. This included the political struggle over the independence of the trade unions after the founding of the People’s Republic, renewed attempts at autonomous organization and mobilization during the Hundred Flowers campaign, and, in the Cultural Revolution, the creation and violent repression of workers’ autonomous organizations in 1967, which saw the jailing and killing of a far greater number of workers than in the days around June 4th 1989, as well as the autonomous mobilization of Beijing workers in the wake of the death of Zhou Enlai in 1976.

It appears to have been the conviction of the Dengist leadership of the early 1980s that the adequate strategy to deal with China’s workers was to improve their living standards through economic reform, and at the same time to repress any independent political activity (Walder 1991).

“It appears that the Chinese leadership, making use of the dialectical framework of Marxism-Leninism, interpreted the Polish crisis as conveying a dual message. On the one hand, it indicated the need to increase worker support for the regime, both through material concessions and through the strengthening of forms of democratization in the workplace, pragmatically conceived as a means of enhancing workers’ sense of efficacy and identification with the system. But on the other hand, the situation in Poland pointed to the imperative need not to let events get out of control. […] Hence, it was critical to maintain the primacy of Marxist-Leninist precepts, and foremost the leading role of the party as the supreme arbiter of decision-making in Chinese society.” (Wilson 1990: 266)
In the first half of the 1980s, the reform program caused a general improvement of workers’ lives. Real wages grew considerably after almost two decades of decline and stagnation. Housing conditions improved, as did the availability of consumer goods, which could now actually be afforded.

But while the material living conditions for workers improved in the first half of the nineteen-eighties, wages gains began to be eaten up by inflation starting around 1985 with a stagnation and decline of real wages 1986-1988. This development was accompanied by heightened dissatisfaction of workers at the work place, on the one hand caused by growing income inequality between different occupational and social groups as well as within the enterprise, and, on the other hand, a degeneration in labor-management relations (Chan 1993: 40).

Initially, the introduction of performance based bonuses caused great discord in many enterprises among the workforce and between labor and management:

“Initially, China's managers attempted to use the methods of the Mao era: laborious collective work group evaluations whose results could be manipulated by factory leaders. No method could have been calculated to generate more discord on the shop floor, and many factories became paralysed by emotional arguments and work slow-downs touched off by dissatisfaction with the process. These conflicts helped spawn a wave of strikes and several attempts by dissident workers to form independent labour unions.” (Walder 1991: 476).

In the second half of the 1980s, performance evaluations of the kind were largely abandoned and replaced by regular wage raises only loosely linked to performance in attempts by management to accommodate labor and keep the peace. At the same time, however, the impression that wages in SOEs were falling behind incomes of other sectors of the economy became widespread, adding to worker dissatisfaction (Chan 1993; Walder 1991).

Localized experiments, for example in the Shenzhen Special Economic Zone saw the introduction of contract-based employment next to the standard of tenured lifetime employment in SOEs starting in the first half of the nineteen-eighties (Ding and Warner 2001). Contract-based employment was also the norm in foreign invested enterprises. But only starting in 1986 did contract-based employment see its general, though still gradual introduction to the SOE system, so that the system of life-time employment and seniority-based promotion of the “iron rice bowl” remained the norm. This presented a contradiction to what was expected of SOE management in the course of reform, namely to increase the productivity and profitability of their enterprises, which would require the disciplining of their work force. This was attempted on the one hand by a more general introduction of Taylorist work organization into domains
that had previously been the reserve of skilled labor. Furthermore, management sought ways around the fact that most workers could not be fired, making frequent use of the possibility to reassign reluctant workers to less attractive and lower paid jobs within the enterprise or to transfer them to company-owned labor service agencies, which also helped to reduce the payroll (Walder 1991: 478).

The reasons for worker dissatisfaction by the end of the nineteen-eighties had thus become manifold and widespread in the SOE sector, but were certainly not homogenous and often manifest in contradictory positions within the urban working class itself. What is important to note, however, is that the reforms in the urban state sector met with working class resistance. In the context of the socialist employment and enterprise system, this resistance contributed to the creation of the particular mode of consumption and output-oriented growth in the SOE sector in second half of the 1980s, which contributed to inflation and the fiscal crisis of the state.

In any case, it was these developments that help explain why workers joined students and intellectuals at first carefully and later en masse in the spring 1989 demonstrations. More so than the students, the workers, particularly those that formed the Beijing Workers’ Autonomous Federation (北京工人自治联合会; Beijing gongren zizhi lianhe hui) during the Tiananmen protests, attacked the party-state outright for its political failures and its factional politics (Walder and Gong 1993). Equally worrying to the party was the ACFTU’s tacit support of the protests. The brutality of the crackdown on the protesters on June 4th 1989 cannot least be explained by the party’s fear of an imminent labor insurgency and a “Polish resolution” to the crisis.

“Deng’s obsession that the Party not follow the Poles in relinquishing control can be seen to constitute the backdrop to his now infamous remark that ‘even if we sacrifice ten to twenty thousand people, we must exercise control over the situation of the whole country and get 20 years tranquility in return.’ For Deng, the relevant Polish example was the military solution imposed by General Jaruzelski in 1981, not the policy of reconciliation that the General came to endorse eight years later” (Wilson 1990: 272).

The economic and political crisis of the late 1980s was thus also a crisis of the CPC’s relation to the urban working class and of the socialist enterprise and its employment relations. The reform of the urban state owned sector on the one hand aimed to emulate the successful reform of the rural sector by introducing market-oriented reforms, and on the other hand constituted an attempt to improve the party’s relation with its historically most important constituency, urban labor.
Ultimately, however, the attempt to improve the productivity and profitability of state-owned enterprises in a partially marketized environment and to reconcile this with the status and demands of the urban working class proved futile and gave way first to severe macroeconomic imbalances and crisis and finally to the political crisis of 1989.

In many ways, the reforms of this period can be regarded as the first and last attempt by the CPC to reconcile the socialist work place, as it existed in China, with market-oriented reforms. When the CPC officially adopted the concept of Socialist Market Economy later in 1993, this was soon followed by the generalization in law and practice of contract-based wage labor as the only form of employment throughout the state-owned sector.

Arguably then, the contradictions caused by the attempts at SOE reform left a return to the plan or a comprehensive market reform as the only viable political choices, and indeed, within the party, the months and weeks before Tiananmen saw the market reformers purged and its aftermath saw a short-lived revival of the central-planners. The collapse of the Soviet Union and the Eastern Block in Europe and the disintegration of the Communist parties there, however, reanimated the struggle over economic reform within the party elite, as highlighted by Deng’s Southern Tour in 1992 (cf. Zhao 1993). Furthermore, the failure of the central planners’ own attempts to revive the economy quickly put an end to their political credibility at the beginning of the 1990s.

What emerged within the party from this struggle were new lines of economic policy-thinking that were much less at odds with one another than the earlier antagonistic positions of central planners and market reformers. The compromise that emerged with regard to SOEs was that a more comprehensive integration into the market was needed. This demanded, amongst other things, the comprehensive introduction of contract-based (market-based) labor relations to the Chinese state-owned economy.

In retrospect then, the crisis of the late 1980s and its violent “resolution” against the working class appears as the historical precondition for the generalization of “free” wage labor, and what we can thus call a capitalist economy in China.
5.2 The wage-relation: The commodification of labor and the expansion of capitalist labor relations

5.2.1 Introduction

The primary purpose of this section is to show in more detail how the restructuring of the wage-relation roughly in the second half of the 1990s and the first half of the 2000s created the conditions under which the accumulation and reproduction could proceed with an increase in the rate of surplus value. The central questions to be addressed are: How was the generalization of free wage labor brought about? Which factors in the wage-relation contributed to the rise of surplus value? Which factors contributed to its decline? How does the wage-relation affect consumption?

For the period under observation here, two major developments are crucial for the expansion of capitalist production relations in China. One is the reform of state-owned enterprises (SOE) during the second half of the 1990s affecting ownership and labor relations. The other the transfer of rural labor power to the cities in the form of migration under the *huji* (户籍: household registration) system.

5.2.2 The expansion of the wage-relation and the commodification of labor

5.2.2.1 Remaking the labor relations framework

The most important legal foundation for the generalization free wage labor was provided by the approval of the Labor Law (劳动法: *laodong fa*) on July 5th, 1994 by the National People’s Congress (NPC) and its coming into force on January 1st, 1995, which, for the first time prescribed general rules and regulations for contract employment rather than socialist forms of employment across all ownership-types in the Chinese economy. After a pro-market reformist consensus had emerged in the party, the drafting and promulgation of the Labor Law was aimed to address to concerns of the government. One was to increase the managerial autonomy vis-à-vis labor in state owned enterprises by replacing the previous socialist system of employment relations, and the other to create a general legal framework for employment in the budding private and foreign invested sectors of the economy (Gallagher and Dong 2011: 39).

Some of the more important points of the Labor Law, among which article three states the right of labor to freely choose employment, can be summarized as follows (cf. Warner 1996):
• Workers have the right to choose their job occupation, to receive pay, to have rest and holidays, to have workplace protection.

• Contracts regulating payment, work time and hours, work tasks, and conditions of termination should (yingdang) be signed between employers and workers.¹³

• A minimum wage system shall be setup wherein local governments determine minimum wages.

• The average working day is limited to eight hours, the average working week shall not exceed 44 hours with one mandatory resting day per week. Overtime may not exceed 36 hours a month.

• Workers can propose that labor disputes be dealt with. Dispute committees should include employers and workers.

• Workers may organize and participate in trade unions within the confines of the law.

• Enterprises in economic duress may after consultation with the trade union lay off workers.

While the standards stipulated by the law in many respects provide fundamental rights and legal safeguards for labor, importantly, the rights to strike is not recognized and free worker association and organization are restricted by the Trade Union Law (cf. below). Compared to the previous system of socialist labor relations, the introduction of the Labor Law represented the legal formalization of a wage employment system in which, on the one hand, labor and capital could in principle meet as equals to agree upon the establishment of an employment relationship within the general legal framework that afforded a certain degree of protection to labor, but on the other hand the structural power of capital over labor on the labor market and in the employment relationship was now brought to bear to a much greater extent than had previously been the case. The voluntary character of the labor contract, which both sides agree to, factually gives the employer great discretion in determining work hours, work conditions, the wage and the duration of the labor contract. This is especially true under the conditions of restructuring and labor retrenchment in the urban state-owned sector and large-scale rural-urban migration, the effects of which will be discussed later in more detail. The Labor Law provided relative liberty to employers to lay off staff, to hire labor on fixed-term contracts, and to determine wages. The frequently vague wording of the law and the lack of legal penalties furthermore enhance the power of employers (Gallagher and Dong 2011: 41).

¹³ “建立劳动关系应当订立劳动合同”, cf. Labor Law of the People’s Republic of China, Article 16
The role of trade unions and workers’ councils in enterprises is severely curtailed by the Labor Law, especially when it came to participation in management decisions, and the trade union often put in an ambiguous position vis-à-vis workers and employers when it comes to labor disputes, which is also revealed by a closer look at the Trade Union Law.

The Trade Union Law, promulgated by the NPC in 1992, formulates the organizational rights and duties of the ACFTU and its unions and their role in in labor relations. Notably absent is the right of trade unions to organize or engage in any sort of industrial action.

Some of the stipulations of the Trade Union Law serve to illustrate the often-contradictory position that trade unions find themselves in. Trade unions remain organized according to the principles of democratic centralism (Art. 11) and must be registered within the ACFTU’s organizational hierarchy. The ACFTU and its unions are tasked to “safeguard the legal rights of workers”, but only “in addition to safeguarding the overall interests of the people of the whole nation” (Art. 6)\(^\text{14}\), a stipulation that puts the common good as defined by the constitution and CPC policies before the union’s representation of their worker constituency. In many of its stipulations the Trade Union Law of 1992 subordinates unions’ tasks and workers’ interests to the overall goal of successfully realizing economic modernization and growth and to safeguard the general interests of the party-state in labor relations. As such, the law also reflects the party-states’ efforts after 1989 to re-subordinate the ACFTU to its general interests and objectives (cf. Taylor et al. 2003: 114).

Within these general guidelines for trade union organization and work, the unions are accorded certain tasks in the representation and protection of workers interests. Employers need to consult with unions if they plan to lay off staff due to economic reasons and unions may represent workers in disputes with management or seek redress for rights violations. Unions may support employees when concluding a labor contract with management and may participate in drafting collective contracts. The unions’ role is more ambiguous formulated when it comes to industrial action. As already stated, the right to strike is nowhere explicitly mentioned and unions therefore may not organize worker strikes. The Trade Union Law states, however, that in the case of work stoppages or slow-downs, a trade union’s task is to make know labor’s views to management but also to help resolve the conflict so as to restore production to normal as quickly as possible (Art. 25).

The ACFTU’s and its unions’ role and position thus remain an ambiguous one. On the one hand they remain subordinated within the organizational restraints of the party-state and

\(^{14}\)“工会在维护全国人民总体利益的同时，维护职工的合法权益”，Trade Union Law of the People’s Republic of China, Article 6
obligated to support its general policies of the party and what it defines as the common interest, on the other hand unions do have a number of rights and powers that allow them to represent workers’ interests in the enterprise (cf. Clarke et al. 2004). These rights and interests of workers are, however, at the same time severely constrained by the trade union system by its restrictions on free association and an absence of the right to strike. As the ACFTU and by extensions its local- and enterprise-level organizations are firmly embedded within the organizational and legal framework of the party-state, Taylor and Li (2007) go so far as to argue, that the ACFTU is indeed not a trade union organization at all but simply a state organ.

The Labor Law also makes basic provisions for the resolution of labor disputes. Whereas previously, codified dispute resolution procedures existed only for SOEs and were the domain of the enterprise party-branch and trade union, the Labor Law now creates a three-tiered system of work-place mediation, administrative arbitration and judicial litigation. The role for labor unions in this system remains limited, on the one hand, because their effective role in the dispute resolution process is limited to the stage of mediation, which can be bypassed if one of the parties concerned so desires, and because the legal stipulations that provide a role for union organizations cover only individual labor disputes, and then only for those disputes relating to violations of employees’ legal rights or employers’ legal obligations at the work place. ‘Collective’ disputes with groups of three or greater, as well as the general terms and conditions of employment, such as wages and working hours (beyond legal stipulations), are not covered by the dispute arbitration system (Taylor et al. 2003: 157).

The restraints to association, organization and action are of course not limited to the field of labor relations, but must be located in the general context of the relations of the Chinese party-state to society.

The party-state and its laws generally prohibit the autonomous organization of societal interest groups. In the wider context of the process of reshaping state-society relations, the individualization of the labor relation can also be related to the CPC’s concept of 依法治国 (yifazhiguo), “ruling the country according to the law”, or “rule by law”, by which it seeks create and uphold regulatory power while relinquishing administrative control over the relations of production and distribution (Lee 2002: 195ff.).

Effectively then, the legal reforms of the 1990s provide the regulatory framework for the commodification of labor. Workers and employers now can now conclude contracts wherein the former may freely sell labor to the latter. The class dimension of the capital-labor relationship is no longer effectively recognized in this legal framework, the urban working class is effectively abandoned as a particular constituency of the party-state and with it the partially
authoritarian, partially paternalist “neo-traditionalist” (Walder 1984) relations of the socialist workplace. The new regulations establish certain rights and protections that individual workers can appeal to, they apply universally and the system is in this sense freer than the socialist one. In this respect the legal regulations are not very different from that of liberal democracies. The system differs greatly, however, in the way it restrains workers’ association, organization and action. While the Labor Law of 1994 indeed contains comprehensive provisions to guard the rights of individual workers, at the same time it severely constrains labor’s ability to pursue collective organization and industrial action, as do the related regulations about labor disputes and the trade union law. As a consequence, while capital’s structural economic power over labor was largely freed through the creation of a competitive labor market, while labor’s potential economic power over capital, which is conditional on its ability to organize, remains bonded by the new arrangements. This is not only true in principle, but can be witnessed in the way that labor relations effectively play out in the Chinese enterprise.

One major structural feature of enterprises in China, which presents a hindrance to effective trade union work, are the close personal relations between management, enterprise party branch and the enterprise union (Chan 2000: 274; Chen 2009; Clarke et al. 2004; Heng 2010; Lee 2002; Shen 2006). “One widely criticized practice indicative of the marginal status of the Party at the firm level is the concurrent appointment of managerial and party personnel. It has become extremely common to find that the posts of party secretary and factory director belong to the same person; or the factory director simultaneously serves as deputy party secretary, and the party secretary wears the hat of the deputy director” (Lee 2002: 200). In this context, management and party interests, which frequently also align in the context of local industrial policy and politics, could easily trump enterprise and local trade union organizations, even if these were independent. Actually, however, enterprise trade union chairs appear to be frequently just as much involved in management and party business. In a survey of 524 enterprise union chairs, Chen (2009: 680) finds that 49.6% concurrently held leading party positions, 34.9% concurrently held managerial positions, and 73.3% were members of party committees. In many respects, these relationships help to reproduce traditional views of the role of trade unions from when they were still an integral part of the management of SOEs: “For most trade union cadres at the workplace, the idea of representing and protecting the legitimate rights and interests of their members in opposition to those of the employer is something unfamiliar, if not entirely alien, to their traditional practice and to their traditional conception of their role. It is not so much that the trade union is subordinated to management as that the
trade union is an integral part of the management apparatus, ‘just a branch of management’ […]” (Clarke et al. 2004: 242).

The dense personal relations between party, management, and enterprises in part result from the fact that the high density of union organization in Chinese enterprises (numbers) is the result of a process of unionization from above. Contrary to the stipulations of the trade union law, according to which trade unions shall be voluntarily formed by workers, this is indeed not the case, as the party and the ACFTU have since 1999 actively pursued the creation of enterprise trade unions especially in the private sector (Heng 2010). While state-owned enterprises always had a very high unionization rate in excess of 90%, a survey by the ACFTU in 1998 revealed that unionization in privately-owned enterprises (POE) was only around 4% (Shen 2006: 354). The unionization drive of the following years created very high unionization rates, for example in excess of 90% in POEs and foreign-invested enterprises (FIEs) in the Shanghai region (Shen 2006: 357). In this process of top-down unionization, union heads are usually appointed by the respective organizational level’s party branch (Heng 2010: 67). Furthermore, grass-roots trade unions are dependent on their enterprises for funding (Heng 2010: 68; Lee 2002: 200).

A number of reasons thus preclude trade unions to act as representatives and in the interests of workers. The first is their ambiguous legal mandate, which obliges them to pursue the general interest as defined by the party-state as well as the interests of workers. The second are the very close organizational and personal relationships between management, party and trade unions on the local and enterprise level, and the third is the trade unions’ dependence on funding by the enterprise. What emerges from this constellation is a system of “tripartism with four parties” (三方四主体：san fang si zhuti) in which labor relations are negotiated within the framework of the management-party-trade union relationship vis-à-vis the interests of the fourth concerned party, labor. While this characterization does not do justice to the actual complexity and fragmentation of labor relations, which manifest themselves in a variety of regimes of production (Lüthje 2011), it is nevertheless an apt characterization of the fundamental political relations in which more concrete forms pan out.

In practice then, trade unions are marred by these relations in effectively carrying out their most important tasks in the full interests of workers, namely the negotiation of collective contracts and their representation in labor disputes.

The ambiguous role of unions in labor dispute resolution is constituted already by the legal framework and arguably exacerbated to the disadvantage of workers by the actual political relations in the enterprise. As stated, the trade union law tasks unions to assist and represent the interests of workers, but at the same time, according to the regulations on the settlement of labor
disputes, trade unions also take the chair in labor dispute mediation committees. Unions thus are expected to simultaneously fulfill two conflicting roles: that of worker representative and that of neutral mediator. In the best case, where unions actually try to reconcile their conflicting tasks, the contradictory provisions “[...] place the grass-roots union in an embarrassing position when it is involved in labour disputes where the employer is in the wrong. On the one hand, it has to represent workers to fight for their interests; on the other hand, as the chairperson of the mediation committee, the union is required to keep a neutral status as the third party” (Taylor et al. 2003: 167). Effectively, it is quite clear that in practice, “the trade unions did not represent the workers’ interests but served as mediators between employers and employees” (Heng 2010: 66). Ding et al. (2002: 447) somewhat polemically conclude their study finding “[...] that Chinese unions function more as an offshoot of the HR department, and are primarily concerned with supporting managerial interests”.

The other important task of trade unions is to negotiate collective contracts. This role was already confirmed in the Labor Law and trade union law, but is clarified in the 2008 Labor Contract Law (劳动合同法: laodong hetong fa). The Labor Contract Law is clearer in that the signing of labor contracts is a requirement and, contrary to the Labor Law, formulates sanctions and penalties in the case of violations (Harper Ho 2009: 70f.).

The number of collective contracts has increased over the years and they covered about 40% of the working population in 2009 (Luo 2011: 54). As with the rapid increase in the unionization rate at the beginning of the 2000s, the spread of coverage by collective contracts in the second half of the 2000s is the result of top down campaigning by the ACFTU in an effort to curb the rising number of labor disputes and implement the concept of “harmonious labor relations” as part of the Hu and Wen administrations’ program of building a harmonious society. In very few cases, however, is the conclusion of collective contracts actually preceded by effective bargaining over the content of the contract, so that these usually only reflect the basic stipulations of the various labor laws.

Clarke et al. (2004: 250) find that “[t]here is no significant negotiation of the collective contract between the two sides independently representing the interests of employer and employees”, that the trade union membership is not actively involved in the negotiations, and that the trade unions often limit their own demands and proposals to what they deem will be accepted by management. The process of bargaining and implementation is reduced to “mere formalities” (Lee 2002: 200), where in many cases the collective contracts concluded are “merely a copy of sample contracts issued by local government” (Luo 2011: 54).
In cases where trade unions were to make an effort to more offensively push for the incorporation of workers’ interests into collective contracts, despite their ambiguous position in the labor relations framework, this would clearly be hampered by the lack of bargaining power brought about by the legal and political restraint on free association and collective action, such as the absence of the right to strike.

In conclusion of our discussion of the framework of labor relations in China, we find that while certain formal rights and protections do exist for the individual worker, in which she may in principle appeal to, other important rights, such as the right to free association and the right to strike are absent. The role of trade unions as representatives of workers interests is legally and organizationally curtailed by the relation of the ACFTU to the party-state and the actual power relations in the Chinese enterprise, in which the interests of management and the party, which collude in the context of local industrial politics, clearly take priority.

In this context, the secondary role of labor compensation and private consumption in the Chinese accumulation regime cannot solely be explained by certain structural conditions such as an oversupply of labor due to rural-urban migration or the restructuring of SOEs in the late 1990s. Even if the structural situation of labor on the labor market improved, labor would be hard pressed to translate its newly found structural power into economic (or political) gains in the face of a labor relations system that is clearly rigged to its disadvantage. Consequently, the inequalities and imbalances found in China’s economy today, should, at least with regard to labor’s position, not be regarded as necessary or unavoidable symptoms of an economy in transition, but rather as the direct consequences of reforms that owe their particular form and shape to the party-state’s polity its policy preferences.

5.2.2.2 Labor retrenchment in the state sector

Already since 1994 had it become the party’s policy to increase the efficiency and competitiveness of SOEs by normalizing bankruptcies and mergers, and by laying off SOE staff, and since the 15th Party Congress of 1997 this policy gained new momentum and found renewed support even within the more conservatives parts of the party elite (Solinger 2004).

Under the programmatic slogan of zhua da fang xiao (抓大放小: keep the large ones and set free the small ones) the Three Year Reform Plan devised by Premier Zhu Rongji in 1998 accelerated the reform tempo to reinvigorate unprofitable SOEs. The state-owned sector was restructured so as to make more competitive and profitable large and/or strategically important enterprises. Smaller and less important SOEs were either allowed to go bankrupt, merged with larger SOEs or sold off to private investors. The restructured SOEs were subsequently embedded in a regulatory environment, in which they were exposed to stronger competition,
the so-called *shehui shichang jingji* (社会市场经济：Socialist Market Economy), in line with the official denomination of China’s socio-economic order since 1992.

An essential component of the restructuring in the state sector was the assignment of quotas for laying off employees to those enterprises that were to be retained in state-ownership (Solinger 2002: 18). The reform process expelled the bulk of surplus labor from state-owned enterprises, which had been accumulated during the times of the *tiefanwan* (铁饭碗: Iron Rice Bowl), the socialist system of lifetime employment. Sino-foreign joint ventures had already hired employees outside the socialist system since 1979, and beginning in the late 1980s, SOEs were allowed to hire employees outside this system. The promulgation of the Labor Law in 1994 provided the legal framework for the normalization of contract-based employment of wage labor and signaled the formal abandonment of the Iron Rice Bowl:

“Workers were now subject to an employment system that depended on fixed-term labour contracts. Socialist benefits beyond the five legal provisions (pensions, medical insurance, unemployment insurance, occupational injury, and maternity insurance) are not required. Provisions regarding trade union participation in management decisions and employment issues also circumscribe the powers of worker organizations while enhancing managerial authority in comparison to the previous system under the planned economy. […] The new flexibility accorded to firms through the labour law and other changes in the economy (expanding labour markets and large-scale rural-to-urban migration) was well-timed as the state moved to privatize and restructure the state sector more radically in 1997. The legal changes in the 1994 law made it easier for firms to layoff workers and to sign new short-term contracts with new entrants in the later 1990s.” (Gallagher and Dong 2011: 43-44)

Even though the Labor Law and other policies (cf. Knight and Song 2005: 23ff.) had created the institutional framework of a labor market, much of surplus labor in SOEs was not simply released into unemployment, but managed under the policy of *xiagang* (下岗：off post). *Xiagang* was the official category for those workers, who were under life-time employment, a practice abandoned for new employees since the mid-1980s. *Xiagang* were relieved off their duties but remained in a “dependent nonemployment relationship” (Guang 2009: 15, original emphasis) with their enterprises from which they received certain minimum benefits for a maximum period of three years.

Workers who were employed on a labor contract and whose employers had paid unemployment insurance could register as unemployed (*shiye*: 失业) after they were fired from their jobs. A host of other workers, who were neither *xiagang* nor beneficiaries of
unemployment insurance payments, were laid-off without being recorded in the official statistics as unemployed (Knight and Song 2005: 118).

Statistically, the real extent of urban unemployment created by labor retrenchment in SOEs was thus partially concealed, as unemployment fell into a different statistical category than xiagang, and some unemployed did not show up in the official statistics at all. Indeed, as Solinger argues, the division of surplus labor and unemployment into various categories not only made it impossible to come up with reliable estimates of the extent of unemployment. It is also a strategy of the Chinese state aimed at dividing the Chinese working class. In total, Solinger counts seven tiers of unemployed, which receive differential treatment according to their status, and of which xiagang workers and registered unemployed constitute only two (Solinger 2001).

Even by counting only xiagang workers, the total number of layoffs is difficult to estimate. The China Labor Statistical Yearbook provides the number of xiagang workers starting in 1997, where a total number of ca. 14 Million is given. Following issues provide annual data of newly laid-off workers until 2005, so that we can count a total number of more than 42 Million.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>14352155</td>
</tr>
<tr>
<td>1998</td>
<td>7389228</td>
</tr>
<tr>
<td>1999</td>
<td>7814733</td>
</tr>
<tr>
<td>2000</td>
<td>5122882</td>
</tr>
<tr>
<td>2001</td>
<td>2831496</td>
</tr>
<tr>
<td>2002</td>
<td>2106000</td>
</tr>
<tr>
<td>2003</td>
<td>1279000</td>
</tr>
<tr>
<td>2004</td>
<td>495000</td>
</tr>
<tr>
<td>2005</td>
<td>666000</td>
</tr>
<tr>
<td>Total</td>
<td>42056494</td>
</tr>
</tbody>
</table>

Sources: Zhongguo Laodong Tongji Nianjian (China Labor Statistical Yearbook), various years

Alternatively, when looking at overall employment in SOEs during the period under consideration, employment in urban state-owned enterprises was reduced by ca. 48 million between peak employment in 1995 and its lowest point in 2007. If we count in collectively owned enterprises, then employment in the urban public sector was reduced by more than 71 Million in the same period.
Table 5: Employees in urban state-owned enterprises (10,000 employees).

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of employees in urban SOEs</th>
<th>Number of employees in urban COEs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>10920</td>
<td>3393</td>
<td>14313</td>
</tr>
<tr>
<td>1994</td>
<td>11214</td>
<td>3285</td>
<td>14499</td>
</tr>
<tr>
<td>1995</td>
<td>11261</td>
<td>3147</td>
<td>14408</td>
</tr>
<tr>
<td>1996</td>
<td>11244</td>
<td>3016</td>
<td>14260</td>
</tr>
<tr>
<td>1997</td>
<td>11044</td>
<td>2883</td>
<td>13927</td>
</tr>
<tr>
<td>1998</td>
<td>9058</td>
<td>1963</td>
<td>11021</td>
</tr>
<tr>
<td>1999</td>
<td>8572</td>
<td>1712</td>
<td>10283</td>
</tr>
<tr>
<td>2000</td>
<td>8102</td>
<td>1449</td>
<td>9601</td>
</tr>
<tr>
<td>2001</td>
<td>7640</td>
<td>1291</td>
<td>8931</td>
</tr>
<tr>
<td>2002</td>
<td>7163</td>
<td>1122</td>
<td>8285</td>
</tr>
<tr>
<td>2003</td>
<td>6876</td>
<td>1000</td>
<td>7876</td>
</tr>
<tr>
<td>2004</td>
<td>6710</td>
<td>897</td>
<td>7607</td>
</tr>
<tr>
<td>2005</td>
<td>6488</td>
<td>810</td>
<td>7298</td>
</tr>
<tr>
<td>2006</td>
<td>6430</td>
<td>764</td>
<td>7194</td>
</tr>
<tr>
<td>2007</td>
<td>6424</td>
<td>718</td>
<td>7142</td>
</tr>
<tr>
<td>2008</td>
<td>6447</td>
<td>662</td>
<td>7109</td>
</tr>
<tr>
<td>2009</td>
<td>6420</td>
<td>618</td>
<td>7038</td>
</tr>
<tr>
<td>2010</td>
<td>6516</td>
<td>597</td>
<td>7113</td>
</tr>
<tr>
<td>2011</td>
<td>6704</td>
<td>603</td>
<td>7307</td>
</tr>
</tbody>
</table>

Source: China Statistical Yearbook 2012

Naughton (2007: 186) estimates the total number of jobs lost in the state sector at more than 50 million, while Knight and Song (2005: 118ff.) estimate total job losses in the state sector at 60 million between 1997-2000, which would amount to a staggering 30% of the total urban labor force in 1994; according to their research, retrenchment was most likely to affect unskilled and low-skilled production workers and those with low levels of education.

The restructuring of SOEs had a profound impact on the urban labor market, first of all on unemployment and furthermore on the quality and structure of employment. For reasons discussed above, the official statistics significantly underreport unemployment. Depending on the definition of unemployment and on the data underlying their respective assessments, official data underestimate real unemployment threefold (cf. Table 6). Giles et al. (2005), for example, estimate that unemployment among permanent rural residents, meaning those with hukou registration (see below) in their cities of residence, was 11.1% in 2002 instead of the officially reported 4%.
Table 6: Estimates of urban unemployment

<table>
<thead>
<tr>
<th>Year</th>
<th>Registered urban unemployment (失业) rate¹</th>
<th>Aggregate unemployment rate²</th>
<th>Survey-based unemployment rate of urban permanent residents³</th>
<th>Survey-based unemployment rate of all urban residents³</th>
<th>Labor force participation rate⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>3.0</td>
<td>6.8</td>
<td>4.0</td>
<td>72.9</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>3.1</td>
<td>4.5</td>
<td>7.7</td>
<td>4.5</td>
<td>72.1</td>
</tr>
<tr>
<td>1998</td>
<td>3.1</td>
<td>6.29</td>
<td>8.5</td>
<td>5.0</td>
<td>71.2</td>
</tr>
<tr>
<td>1999</td>
<td>3.1</td>
<td>5.87</td>
<td>9.0</td>
<td>5.6</td>
<td>72.9</td>
</tr>
<tr>
<td>2000</td>
<td>3.1</td>
<td>7.61</td>
<td>10.0</td>
<td>5.9</td>
<td>69.4</td>
</tr>
<tr>
<td>2001</td>
<td>3.6</td>
<td>5.55</td>
<td>10.8</td>
<td>6.5</td>
<td>67.3</td>
</tr>
<tr>
<td>2002</td>
<td>4.0</td>
<td>6.14</td>
<td>11.1</td>
<td>7.0</td>
<td>66.5</td>
</tr>
<tr>
<td>2003</td>
<td>4.3</td>
<td>6.02</td>
<td></td>
<td></td>
<td>63.4</td>
</tr>
<tr>
<td>2004</td>
<td>4.2</td>
<td>5.78</td>
<td></td>
<td></td>
<td>64.0</td>
</tr>
<tr>
<td>2005</td>
<td>4.2</td>
<td>5.16</td>
<td></td>
<td></td>
<td>64.6</td>
</tr>
<tr>
<td>2006</td>
<td>4.1</td>
<td>6.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>4.0</td>
<td>5.34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The structure of employment in China’s cities has, unsurprisingly, also shifted significantly between types of ownership as a result of the restructuring process. Employment in SOEs as a share of urban employment has declined from ca. 78% in 1978 to ca. 18% in 2011, employment in COEs from 21% to ca. 1.7%.

Informalization has been forwarded as a solution to the unemployment problems created by SOE restructuring (Solinger 2002: 388) and a strategy employed by local governments in dealing with labor market pressures created by the restructuring process. The concrete measures aimed at helping laid-off workers find new jobs on the labor market included the setting-up of public and private job agencies and in the creation of various types of community service programs. With the help of these agencies and other programs, such as tax-exempts and micro-credits, the government encouraged its former workers to start their own businesses and to “[…] find employment in flexible and various ways, for example, in part-time, contingent, seasonable, and flexible employment” (Cai and Wang 2009b: 187).

The workers affected by labor retrenchment in SOEs have on average earned lower wages when they were re-employed (Appleton et al. 2002; Knight and Li 2006). Knight and Song (2005: 128) find that the impact of unemployment on re-employment wages was mostly determined by the duration of unemployment, causing a reduction in wages of more than 16% after nine months of unemployment and of 39% after the mean expected duration of forty-seven months in their study.
5.2.2.3 Rural-urban labor transfer under the *huji* system

The other great structural transformation, which has shaped the Chinese labor market in the past two decades, is the migration of hundreds of millions of workers from the countryside to the cities. In 1993, more than 376 million people, or 56.4% of the total working population, were employed in primary industry whereas ca. 291 million worked in the secondary and tertiary sectors. Less than twenty years later, in 2011, ca. 266 million people or 34.8% of the total working population were employed in agriculture, whereas nearly 500 million or 65.2% worked in the secondary and tertiary sector (China Statistical Yearbook 2012).

In 1993, merely 331 million, or roughly 28% of the population were living in urban areas. In 2011 the surveyed number of urban residents had more than doubled to reach ca. 690 million, or, for the first time in Chinese history, more than 50% of the country’s total population (China Statistical Yearbook 2012).

Migration in China is regulated by the household registration system or *huji zhidu* (户籍制度) wherein an individuals’ status is determined by her *hukou* (户口) or household registration status. In English language publications, the term *hukou* is usually used to describe both the *huji* system and an individual’s *hukou* status. The *huji* system, while having pre-modern roots in China and other Asian countries, has been (re-) established in 1958 for the purpose of enforcing the strict separation of the urban and rural economy that was a constitutive element of the centrally planned economy.

The decisive attribute of *hukou* registration is its type, which is either agricultural or non-agricultural and serves until today to create a fundamental administrative and socioeconomic division. In the planned economy holders of an agricultural *hukou* were expected to be largely self-sufficient within the framework of collectivized agricultural communes, which entitled them to a share of the commune’s product, or, after the introduction of the household responsibility system, to a piece of land for cultivation. Holders of a non-agricultural *hukou* on the other hand, i.e. the urban working class, were entitled to social and public services and various forms of living subsidies.

Another important attribute is where one’s registered place of residence is. *Hukou* type usually coincides with residency, i.e. holders of agricultural *hukou* have been registered in rural towns and villages, whereas holders of non-agricultural *hukou* have been registered in cities, though exceptions to this rule exist. *Hukou* status is permanent by design, inherited from parents, determined by *hukou* location and type, and cannot be changed without the authorities’ permission.
As Wang (2011: 114-115) explains, the huji system serves four purposes. The first is to provide common and general functions as a civil register, where the state records basic information about its citizens, such as residence, birthplace, marital status etc. Secondly, and a specifically Chinese feature of the system, a person’s hukou serves as the basis for the allocation of resources and subsidies and access to social and public services; thirdly, it serves as an instrument to control the internal migration of Chinese citizens within China, where it is mainly used to restrict rural-urban migration; and lastly it serves as an instrument of police monitoring and control of targeted people (重点人口: zhongdian renkou), persons deemed, in the eyes of the state, a threat to public order.

In the course of China’s economic development since the 1980s, the enforcement of hukou as a means of migration control has been relaxed to allow rural migrant workers (农民工: nongmingong) to seek for work in the sprawling urban industrial clusters and especially in the export processing zones. While rural employment had grown from 306.4 million to 490 million between 1978 and 1995, it has subsequently stagnated and declined, which can be explained as a result of the centralization and concentration of accumulation within the urban centers, which has been accompanied by large-scale rural-urban migration.

**Chart 15: Floating population, 1993-2011 (million people)**

Estimated as the difference of surveyed urban population and population registered with non-agricultural hukou. Sources: China Statistical Yearbook, China Population and Employment Yearbook, various years
The share of China’s population, which has been migrating into the industrial centers to seek for work, but which due to their agricultural and non-resident hukou status are barred from access to public and social services, has been growing rapidly since the second half of the 1990s. As these people have only temporary residence status in the cities they are usually referred to as the floating population (流动人口: liudong renkou). In 2011, the total floating population was estimated at 229 million, of which 156 million migrated for the purpose of work (Department of Services and Management of Migrant Population/National Population and Family Planning Commission 2012: 19). This would amount to ca. 31% of the total number of employed in the secondary and tertiary sector or ca. 43% of the total number of employed in urban areas (cf. China Statistical Yearbook 2012). Rural-urban labor migrants just provide the main stay of China’s labor force. The sizeable growth of the floating population over time can be estimated as the difference between the surveyed urban population and population registered with non-agricultural hukou (cf. Chart 15).

Rural-urban migration under the huji system has caused an ever-growing share of Chinese to live in urban areas while holding an agricultural hukou, where they are, at least in terms of access to services, effectively second-class citizens (cf. Chart 16), and receive lower wages than
urban workers (cf. below). Migration under the *huji* system has created a sub-class of highly mobile, flexible, and exploitable labor, which does unskilled construction and manufacturing work or is hired to do 3D (dirty, dangerous, and demeaning) jobs.

Being younger and less well educated than the average worker, *nongmingong* know less about their legal rights and lack the status-consciousness of the urban working class. Thus, being paid less on average than the urban worker and working longer hours (cf. Table 7), migrant workers are also more often subjected to violations of the labor code or wage arrears.

### Table 7: Wages and work hours of workers in the CHNS survey

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workers with rural <em>hukou</em></strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly wage</td>
<td>191.1</td>
<td>447.1</td>
<td>529.4</td>
<td>685.5</td>
<td>837.1</td>
<td>1268.8</td>
</tr>
<tr>
<td>Monthly hours</td>
<td>200.49</td>
<td>195.59</td>
<td>194.33</td>
<td>211.91</td>
<td>209.11</td>
<td>201.02</td>
</tr>
<tr>
<td><strong>Workers with urban <em>hukou</em></strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly wage</td>
<td>152.8</td>
<td>417.1</td>
<td>556.9</td>
<td>864.5</td>
<td>1008.9</td>
<td>1620.9</td>
</tr>
<tr>
<td>Monthly hours</td>
<td>190.24</td>
<td>171.5</td>
<td>172.62</td>
<td>176.29</td>
<td>176.31</td>
<td>178.21</td>
</tr>
</tbody>
</table>

Source: Yu and Chen (2012: 100). Wages in Yuan RMB.

Lu and Song (2006: 338) summarize the situation of migrant labor thus:

“Rural migrants generally make less money, receive far fewer benefits, and have no health insurance. Most live in precarious dormitories provided by their employers if they have any housing. Rural surplus laborers who moved to urban areas are called mingong to mark their difference from the city-dwelling workers. Rural migrants are treated as strangers and outsiders in cities. They are denied formal urban membership and substantive rights and their children are largely prohibited from attending city schools.”

The exact conditions under which non-residents may seek for work and take up temporary residence in city areas vary from locality to locality. Holders of a non-local *hukou* in any case require a temporary residence permit before they can be legally employed. A temporary residence permit, however, does not entitle the holder of an agricultural *hukou* to access to the same social and public services made available to holders of a non-agricultural *hukou*. Such services include education, medical care, housing subsidies, social security coverage, etc.
Table 8: Social insurance of urban and migrant workers, 2009 (%)

<table>
<thead>
<tr>
<th></th>
<th>Basic pension</th>
<th>Basic health care</th>
<th>Unemployment insurance</th>
<th>Work injury insurance</th>
<th>Maternity insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban workers</td>
<td>57.0</td>
<td>52.7</td>
<td>40.9</td>
<td>47.9</td>
<td>34.9</td>
</tr>
<tr>
<td>Migrant workers</td>
<td>9.8</td>
<td>13.1</td>
<td>3.7</td>
<td>24.1</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Cai (2011: 42)

Song (2014: 205-206) describes these benefits in greater detail for larger cities: As housing prices in large cities have become very high, low-income workers with a local *hukou* are often entitled to rent or buy housing at subsidized prices. Furthermore, many cities bar non-local residents from buying housing space, i.e. an apartment. Children of non-local *hukou* holders are often barred from public schools. While the state council has in 2001 issued a document according to which local governments should provide at least nine years of basic schooling to migrants’ children, access to public schools often remains attached to various conditions that migrant workers cannot easily fulfill. Migrants’ children thus often have to visit specially created migrant schools and are barred from access to high schools altogether. Lastly, workers are at least since 2008 legally entitled to employment-based social insurance contributions by their employers regardless of their registration status. This, however, is often not well enforced with a coverage rate as low as 10%. Furthermore, many local governments have set up local insurance programs from which non-local residents are excluded. An overview of surveyed insurance coverage rates between urban and migrant workers is provided in Table 8.

The subordinate economic position of rural-urban migrants is also reflected in their housing conditions. As wages are lower than average and access to subsidies is restricted, *nongmingong* access to standard housing is even more restricted than that of urban residents in an already tight urban housing market. Especially young migrant workers in the manufacturing sector thus live in factory dormitories, while those working in the construction sector simply live under make-shift conditions on site.

Connected to the housing and income-situation of migrant workers is the sub-standard education that rural *hukou* holders in cities can provide education for their children. Gong et al. (2008: 135ff.) report survey results according to which 60% of rural-urban migrants leave behind their children with relatives or grandparents, indicating that they would be subject to the on average sub-par education of rural areas. Parents cite high costs of living and school/daycare fees as a reason to leave their children behind.
Table 9: Housing conditions of migrant workers while away, 2008-2012 (%)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work unit dormitory</td>
<td>35.1</td>
<td>33.9</td>
<td>33.8</td>
<td>32.4</td>
<td>32.3</td>
</tr>
<tr>
<td>Construction site shed</td>
<td>10.0</td>
<td>10.3</td>
<td>10.7</td>
<td>10.2</td>
<td>10.4</td>
</tr>
<tr>
<td>Production and business establishments</td>
<td>6.8</td>
<td>7.6</td>
<td>7.5</td>
<td>5.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Shared rental housing</td>
<td>16.7</td>
<td>17.5</td>
<td>18.0</td>
<td>19.3</td>
<td>19.7</td>
</tr>
<tr>
<td>Independent rental housing</td>
<td>18.8</td>
<td>17.1</td>
<td>16.0</td>
<td>14.3</td>
<td>13.5</td>
</tr>
<tr>
<td>Self-acquired housing near site of work</td>
<td>8.5</td>
<td>9.3</td>
<td>9.6</td>
<td>13.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Commute home</td>
<td>8.5</td>
<td>9.3</td>
<td>9.6</td>
<td>13.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Other</td>
<td>3.2</td>
<td>3.5</td>
<td>3.5</td>
<td>4.0</td>
<td>3.6</td>
</tr>
</tbody>
</table>


As was already mentioned above, access to schools for migrants’ children in cities is also restricted. Gao (2009: 181) finds that 94% of migrant children, whether left-behind or accompanying their parents to the cities, complete compulsory education. Migrants’ children in cities, however, face greater problems in school than their urban comrades and cannot easily enroll in high school. Post middle school attendance rates of migrant children over the age of 13 thus drop much more rapidly than those of urban residents’ children Gao (2009: 183). Gao also emphasizes the lower quality education that left-behind children receive.

“With the opening of urban public educational resources for the incoming population, a lot of migrant children already visit public schools. But in fact, urban public educational resources still primarily serve local urban residents and migrant children are believed to be confronted with many tangible and intangible barriers. Even though the state has repeatedly requested that school attendance fees and other additional fees be waived for migrant children, there still exists a great amount of public schools, which collect school attendance fees from migrant children; especially with a view to school enrollment restrictions to the gaokao [higher education entrance examination], very many important city middle schools refuse to take in migrant children. Consequently, a considerable portion of migrant children can only
attend simple privately run schools with mediocre conditions or special schools for migrant workers’ children.”(Gao 2009: 181)

As they are not entitled to social services, such as the urban *dibao* (低保) minimum living allowance, due to precarious housing situations, and due to the fact that many rural-urban migrants leave their families behind, migrants tend to return to their registered place of residence in case of sickness of unemployment. The mass lay-offs after the global financial crisis caused 20-45 million migrant workers to return, which probably prevented an otherwise significant increase in the unemployment rate (Chan 2009: 207; Meng 2012: 88). The individual risks associated with wage-labor are thus externalized to the countryside and the associated costs borne by rural society.

The socioeconomic position of migrant workers becomes clearer, if we look at the causes of wage differences between urban and migrant workers. A number of studies deal with the question to what extent wage differentials between holders of local and non-local, respectively non-agricultural and agricultural *hukou* exist and how those differentials can be explained (i.e. Fu and Ren 2010; Wang 2005; Zhao 2005; Gravemeyer et al. 2010; Song 2013; Deng 2007; Tian 2010; Yu and Chen 2012; Démurger et al. 2009; Lee 2012; Lu and Song 2006; Dong and Bowles 2002; Meng 2012). While there appears to be a general consensus about the fact that wage discrimination towards migrant workers exists, results and explanations vary between studies. Discrimination means that characteristics not relevant for a worker’s job ability, as in our case *hukou* registration, are responsible for differences in wage income. Wage differentials as a result of discrimination on the labor market can be the result of unequal pay for equal work or unequal job access opportunities. Discrimination can also occur before a worker enters the labor market, such as in unequal access to education and vocational training.

Migrant wages have been growing slower than wages of urban workers. Based on data from the Urban Household Survey and the Rural Urban Migration in China and Indonesia Survey, Meng (2012: 91) estimates real earnings increases between 2002 and 2008 at 16% for urban blue collar workers and 11.4% for rural migrant blue collar workers. Controlling for various observable characteristics, such as work experience and education, urban worker’s wages still grew 4.5% faster than those of rural migrant workers.

Wang (2005) finds that nearly half of the observable wage differential between local and migrant labor (which she calls 落外来劳动: wailai laodongli) are caused by discrimination. This is caused partially by job discrimination and partially by wage payment discrimination. Contrary to their urban counterparts, rural migrant workers have difficulty in finding stable and regularly paying jobs in formal employment and work instead in pseudo self-employment.
Where migrant workers do find employment, it is in the private informal sector, whereas access to the formal and public (state-owned) sectors is much more difficult than for local residents. Whereas workers who find formal employment in the private or, more likely, state-owned sector enjoy pension, medical, and unemployment insurance, and a stable income, migrant workers in the private informal sector usually do not enjoy these benefits and receive low and unstable payment.

Different forms of employment in different sectors of the economy between local and migrant workers thus explain wage differentials. Discrimination between the two groups can, however, also be observed within the same employment. Employers choose to pay lower wages to migrant labor simply based on their status. Also, advancement within firms is more difficult. Overall, Wang finds that 54%-61% of wage differentials between local and migrant labor can be explained as a result of differing human capital endowment, whereas the rest can qualitatively be attributed to labor market and workplace discrimination. The finding that hukou status contributes to the wage gap is confirmed in an empirical study by Lu and Song (2006).

Zhao (2005) in his review of previous studies on the topic, largely confirms Wang’s findings that wage differentials cannot only be explained by skill or by wage differences between branches and sectors, but also include as significant element of discrimination.

The quantitative study of Deng (2007), using large-scale household and migrant survey data gathered by the Chinese Academy of Social Sciences in 2002, found that 40.48% of the income disparity between local residents and labor migrants could be explained by observable characteristics, mostly educational level, so that almost 60% of the wage difference remains unexplained and can be attributed to discrimination. Furthermore, wage income discrimination against female migrants was higher than against male migrants. Similar results are found by Gravemeyer et al. (2010), who apply the same regression model to a survey sample of ca. 1000 households and 3000 individuals in Shenzhen. Here, 47-53.4% of income differentials are found to be the result of discriminatory practices, in which hukou status seems to play the most important role.

Song (2013) shows that wage discrimination against non-local hukou holders is especially severe in state-owned enterprises, where wages and job security are generally higher than in the private sector. Lee (2012), working with data from the 2005 China Urban Labor Force Survey, confirms findings that the wages gap between rural migrants and urban residents cannot be fully explained due to objective characteristics and adds that only a small minority rural migrant workers receives bonuses and insurance premiums equal to their urban colleagues.
Based on 2008 survey data, Tian (2010) finds that rural to urban migration has not contributed to the narrowing of rural urban income inequality or income inequality between rural migrant and local urban workers in cities. Tian (2010) compares the influence of human capital and household registration on employment opportunities and wages to account for differences in wage income between the two groups, and finds that rural hukou holders are only 20% as likely as urban hukou holders to find a job in the state-owned sector. Contrary to earlier studies, however, wage income discrimination in-between similar jobs seems to have declined significantly. Here, human capital endowments can account for most of the differences in wage income between rural and urban hukou holders, while the registration status itself is only of secondary importance. Overall, ca. 39% of the wage differential between migrant and local workers can be explained by discriminatory practices, mainly owed to restricted access to public sector jobs, whereas the rest is due to human capital.

Based on an analysis of China Health and Nutrition Survey data 1993, 1997, 2000, 2004, 2006 and 2009, Yu and Chen (2012), controlling for differences in human capital endowments, find that household registration in all years usually had the greatest impact on wage difference determination. After 1993, household registration could account for more than 70% in wage differences on average, which had lowered to about 50% in 2000 and 42% in 2004, and 40% in 2006. Significantly, wage discrimination based on household registration increased significantly in the 2009 sample, after the global economic crisis impacted labor markets. Below the 80% quantile of the sample, 63% of wage differences could be explained by hukou, a value that declines to no less than 42% for the total sample.

Contrary to the studies presented above, Démurger et al. (2009) in their own analysis of 2002 Chinese Household Income Project data find that pre-market discrimination, especially lower education, is more relevant in explaining income differences between rural and urban workers than on-market discrimination. The role of pre-market educational attainment is also emphasized by Fu and Ren (2010) who argue that the impact of hukou on wages can best be understood only in conjunction with the circumstance that educational quality and standards in rural China are usually much lower than in urban China. Schooling years thus cannot ceteris paribus serve as a common denominator for educational attainment between urban and rural migrant workers. Accordingly, Fu and Ren (2010) find educational returns for rural migrant workers are lower than for urban workers and this difference becomes greater in comparison as years of schooling decrease. Expanding on this analysis, wage-difference are the result of pre-market discrimination in education and on-market discrimination due to employers lower expectations in rural migrants skills. This is a suspicion also shared by Lee (2012: 469): “One
possible source of the discrimination is that Chinese employers are engaging in statistical
discrimination to overcome labor market information asymmetries regarding education quality
of migrant workers.” It is questionable if this educational gap and the associated blanket wage
discrimination against rural migrants can easily be bridged by subsequent generations in the
face of discrimination against rural migrants’ children in the Chinese educational system.

In summary, rural-urban migrants receive lower wages for equal work, work longer hours,
have only restricted access to public services and social insurance, have sub-par access to urban
housing and suffer from limited access to the education system. The socio-economic position
of migrant workers thus is one where, due to a number of factors that are directly or indirectly
connected to the hují system, their social reproduction as wage laborers is not fully integrated
into the urban centers of accumulation.

The hují system thus creates a distinct working class for capital, whose costs of
reproduction lies well below that of the average urban working class, and which thus provides
the basis of super-exploitation and super-profits. To illustrate this relationship, Li et al. (2012b)
have calculated the difference between actual migrants’ wages and a “living wage” that would
allow for the full reproduction of wage labor in an urban setting. According to their calculations,
the difference between the two would constitute 6% of wages and 9% of profits generated
between 2003-2009, which illustrates the importance of hují-regulated migration for the profit-
and investment-led accumulation regime of the 2000s. The “incomplete” reproduction of this
half of the working class, in the same amount that it contributes to the accumulation of capital
(productive consumption), of course also contributes to hasten the relatively declining
importance of individual consumption in the accumulation process.

5.2.3 Patterns in the exploitation of labor

5.2.3.1 The informalization of work

One defining feature of the commodification of labor in China has been the normalization
of informal employment. Informalization has been put forward as a solution to the
unemployment problems created by SOE restructuring (Solinger 2002: 388) and a strategy
employed by local governments in dealing with labor market pressures created by the
restructuring process. The concrete measures aimed at helping laid-off workers find new jobs
on the labor market included the setting-up of public and private job agencies and in the creation
of various types of community service programs. With the help of these agencies and other
programs, such as tax-exempts and micro-credits, the government encouraged its former
workers to start their own businesses and to “[…] find employment in flexible and various
ways, for example, in part-time, contingent, seasonable, and flexible employment” (Cai and Wang 2009b: 187).

Chart 17: Structure of employment by ownership type

“Informal employment” can be found in organizations operating in the “formal sector” and in the “informal sector” (Cai and Chan 2009; Cooke 2011; Zhou 2013). A standard definition of informal employment has not yet emerged in the literature. The International Labor Organization characterizes informal employment as having a “lack of protection in the event of non-payment of wages, compulsory overtime or extra shifts, lay-offs without notice or compensation, unsafe working conditions and the absence of social benefits such as pensions, sick pay and health insurance” (International Labor Organization). More generally, informal employment can refer to precarious work outside the existing legal and regulatory framework (Zhou 2013: 357).
In China, we find in the formal sector those employers operating as registered independent accounting units (独立核算单位: *duli hesuan danwei*) within a legal regulatory framework that requires them to report their number of employees to the authorities and thus also to pay payroll taxes and social security contributions to the state on their own and their employees’ behalf as required by law. Enterprises can save on these duties if they employ workers without contracts and do not report them. Among the informal sector we often find private businesses that do not have a formal business registration, which can be both “self-employed” private businesses (个体户: *getihu*) with up to eight employees and the larger *siying qiye* (私营企业: private enterprise).

Depending on the definition of informal employment, informal and formal sector used, and also depending on the data sources available, researchers come up with different measurements of informal employment in China, which, however, in all cases highlight its significance for the urban Chinese economy.

Cai and Park (2011), for example, measure informal employment in the statistical residue between reported and surveyed employment. Chart 17 shows the significant increase in employment in the category “Other”, which has grown to be the largest category of employment between 2000-2010. This category represents a statistical discrepancy: The official statistics on urban employment published by the NBS in the China Statistical Yearbook list total employment and employment by ownership type. While total employment is estimated on the basis of annual labor force surveys, which attempt to be representative of the entire population, employment by ownership type is measured based on employment data reported by registered firms that report directly to the authorities, and self-employed workers that have self-registered with the Industrial and Commercial Bureau (Cai and Park 2011: 18). The category other, then, are those workers, who represent the difference between reported and surveyed employment, a category that has rapidly grown since SOE restructuring picked up in 1997 and which peaked at accounting for 40% of urban employed in 2003. Following the argument of Cai and Park (2011), this statistical residue is representative of the rise of informal employment.

Also taking into accounts statistical discrepancies between registered and surveyed employment, and including additional data on employment in the private sector from the China Labor Statistical Yearbook, Hu and Zhao (2006) calculate an even higher share of informal employment in the economy, which peaks at ca. 60%. An extended data series is presented in Zhou (2013: 364), cf. Chart 18.
According to Cai and Park (2011: 22) informal employment has spread to all sectors of the economy. Taking statistical discrepancies between surveyed and reported employment into account, they estimate informal employment in the private sector to make up 37-42% of total employment. While dominant in the private sector, discrepancies between the surveyed labor force and reporting on the labor force by accounting units suggests that usage of informal work has also been a widespread praxis in the state-owned sector. Furthermore, both urban permanent residents and migrants are affected by the informalization of work, as is evident from data reported by the 2\textsuperscript{nd} China Urban Labor Force Survey of 2005 in Table 10.

Among urban residents, those affected by the restructuring of urban state-owned enterprises are most strongly affected, as 80-90% of those reemployed have been employed informally, according to an ACFTU survey (Cooke 2011: 103). This is also evident in sectoral shifts in the structure of employment. Manufacturing employment among those re-employed after SOE restructuring dropped from 42.1% to 14.4%, whereas employment in retail, trade and catering rose from 13.1% to 25.9% and that in social services from 8.4% to 18.9% (Cai et al. 2005: 37). In general, then, state-sector restructuring has also caused a shift of employment from the secondary to the tertiary sector, in which informal employment is arguably more common. This shift goes along with a shift in employment from the state to the private sector (Cai et al. 2005: 37).
Table 10: Workers with formal labor contracts, 2005 (%)

<table>
<thead>
<tr>
<th></th>
<th>Urban permanent resident</th>
<th></th>
<th>Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Has labor contract</td>
<td>Employment share</td>
<td>Has labor contract</td>
</tr>
<tr>
<td>All</td>
<td>61.8</td>
<td>12.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Government</td>
<td>76.2 0.236</td>
<td></td>
<td>43.2 0.030</td>
</tr>
<tr>
<td>State-owned</td>
<td>88.5 0.306</td>
<td></td>
<td>55.6 0.032</td>
</tr>
<tr>
<td>Collective</td>
<td>71.7 0.052</td>
<td></td>
<td>47.4 0.016</td>
</tr>
<tr>
<td>Private</td>
<td>26.5 0.281</td>
<td></td>
<td>7.0 0.847</td>
</tr>
<tr>
<td>Foreign and joint ventures</td>
<td>74.9 0.057</td>
<td>57.8 0.023</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>28.4 0.068</td>
<td></td>
<td>18.0 0.054</td>
</tr>
</tbody>
</table>

Source: Cai and Park (2011: 29), based on 2nd China Urban Labor Force Survey in five large and five small cities

5.2.3.2 Working hours, wages and productivity

The restructuring and informalization of the Chinese labor market and labor relations has entailed a vast extension of average working times, a development which, next to the sheer numerical increase in wage laborers, is central for the expansion of surplus value production.

Chinese statistics provide rather poor data on average working hours. While some data is available for urban employment during certain years in the 1993-2011 period, work hour data for rural workers in township and village enterprises (TVE) is not available. This is problematic, insofar as the distinction between urban and rural industry is drawn arbitrarily along certain administrative boundaries that ignore the actual spread and development of industry. An industrial park just outside the Shanghai city limits would thus fall outside the empirical range of what is statistically considered to be urban industry (Banister 2005a; Banister 2005b).

Nevertheless, even if incomplete and thus in certain aspects inaccurate, the figures which are available show a clear trend towards the prolongation of the average working day. The China Labor Statistical Yearbook provides statistics on hours worked in the urban state-owned manufacturing sector for the year 1992-1998, while the China Population and Employment Yearbook provides more comprehensive data on hours worked by urban workers for the month of November each year starting 2003. The data is based on the NBS Labor Force Survey (LFS). To make the numbers comparable, we compare hours worked for manufacturing employment only, which is provided until 2010.
As is evident from Chart 19, average working hours in the urban manufacturing sector have increased significantly since the reform of the state-owned sector picked up speed in 1997, peaking at 51.3 hours in 2005. From Chart 20 we can see that the brunt of the expansion of the working day is carried by rural-urban migrant workers, who on average work longer hours than their co-employees with urban residence.

This is true regardless of whether migrants are employed in the formal or the informal sector, as shown in the results of the China Urban Labor Force Survey (CULS), carried out in three waves by the Institute of Population and Labor Economics at the Chinese Academy of Social Sciences in the cities of Shanghai, Shenyang, Wuhan, Xian and Fuzhou (cf. Table 11). The working hours reported by CULS for informal work are significantly higher than the average working hours reported by the LFS. With more than 70 hours per week, average working time for migrants in the informal sector, exploitation has certainly reached the limits of human endurance.
The data observed here reflect, as Cao and Rubin (2014: 868) call it, the “deinstitutionalization of the standard work day” in Chinese employment relations. The Labor Law clearly states a standard workday of 8 hours with a maximum of one hour overtime and an average working week of no more than 44 hours with a minimum one day of rest. The average(!) working hours documented in the official labor force survey are clearly in excess of what is legally allowed, as is the apparent normalcy of the 48 hours+ week for a significant share of the working population.

Since the late 1990s, real wages in China’s urban economy have been growing fast at 10-15% per annum (China Statistical Yearbook 2012). The figures available from the NBS, however, only refer to average yearly wages and do not provide a more crucial and meaningful measure of wages per hour worked. The rise of the rate of surplus value in the late 1990s and in the first half of the 2000s indicates, however, that, even though high, the growth rate of real wages ranges well below the rate at which the production of surplus value has been expanded thanks to the extensive (numbers of employed, extension of the working day) and intensive restructuring (re-organization and intensification of work in the course of restructuring) of the wage relation.
The relation of wages, work hours and labor productivity has been subject to a number of studies on respective development in the manufacturing sector. An estimation about the development of hourly wages in manufacturing in China is provided in a series of studies by Judith Banister (Banister 2005a; Banister 2005b; Banister 2013; Banister and Cook 2011; Banister and Lett 2009). According to these studies, hourly compensation, including social security contributions by employers, has on average been growing from 4.74 yuan RMB in 2002 to 6.44 yuan RMB in 2006 and subsequently more rapidly to 10.37 yuan RMB in 2009.

If we construct and index of real hourly compensation and compare it with the index of real total wages published by the NBS, we can see that the increase hourly compensation was lower than the increase in total compensation until 2006, which suggests that until that time the expansion of working hours is the primary driver of increasing real wages (Chart 21). This roughly corresponds with the period of the rise of the rate of surplus value until 2004 and underlines the importance of the extension of the sheer amount of wage labor for the accumulation regime. The more rapid growth in real hourly wages after 2006 again roughly corresponds with the partial stagnation and partial decline in the rate of surplus value.

A look at the development of labor productivity in the manufacturing sector in general shows that labor productivity has been growing much faster than wages well into the first half of the 2000s, but also that the discrepancy in productivity over wages growth is now declining.

In their study of the period 1998-2007, Liu and Zhang (2012: 37) report a nominal growth in wages of 131.9% and a growth in industrial value added by 173%. Industrial value added per worker was 5.8 times as high as wages in 1998 and 6.9 times as high in 2007. Liu and Zhang (2012: 38) also find, however, that the expansion of the wages-productivity gap was less pronounced between 2003 and 2007 than between 1998 and 2003, which would correspond with our previous findings on real hourly compensation and the movement of the rate of surplus value. Liu and Zhang (2012: 50) furthermore find an overwhelmingly positive correlation between capital structure and labor productivity in foreign invested enterprises, and also, but to a lesser degree, in SOEs, and a negative relationship in collectively and private proprietor led
and incorporated enterprises (私人资本: siren ziben; 法人资本: faren ziben). This would indicate that capital accumulation does indeed not contribute to labor productivity growth in the labor-intensive private sector.

**Chart 21: Average real wage index of urban employed persons and of real hours wages in manufacturing**

Source: China Statistical Yearbook 2012 and own calculations based on Banister (2013) and Banister and Cook (2011)

Du and Qu (2008) make similar observations in their study of wages and productivity in the manufacturing sector. According to their findings, the ratio of wages to labor productivity has decreased from 17.72 to 7.31 between 1997 and 2006, signaling a growth in productivity much faster than that in real wages. The average productivity of labor has tripled 2000-2005, while the marginal productivity increased by a factor of 2.4. Starting 2005, however, wages grow faster than the average and the marginal productivity of labor. Also compatible with the findings of Liu and Zhang (2012), Du and Qu (2008: 142-144) report that labor productivity in state-owned enterprises is on average higher than under other ownership types. Wages and productivity growth between industrial sectors, however, seems to be relatively uniform. This would suggest that ownership is an important determinant of labor productivity.

The trend of wages rising faster than productivity in the second half of the 2000s is confirmed by Du and Qu (2012: 143), who investigate unit labor costs in the manufacturing
industry. While unit labor costs are still low in international comparison (for the year 2009 35% of the United States, 26% of Germany, 40% of Japan, 37% of South Korea), unit labor costs show an upward trend since 2004, indicating that labor costs rise faster than the average rate of labor productivity. From 2004 to 2009, the manufacturing sector in nominal hourly wage rates rose 72.8 percent, while the rate of labor productivity has increased by 48.8% Du and Qu (2012: 143).

Chart 22: Unit labor costs according to different methods

5.2.4 Contradictions: Labor shortages and labor conflict as a source of rising wages

5.2.4.1 Labor shortages

Labor market data released by the Ministry of Human Resources and Social Security between 2001 and 2014 shows that the supply-demand ratio has steadily increased, meaning that the demand for labor power has grown faster than its supply. Labor supply shortages have been reported in the Pearl River Delta as early as 2003 and in other Eastern regions in subsequent years (Wang and Gao 2008). According to Wu (2007) even the inland provinces beyond the Eastern coastal provinces (中西部地区) have been affected by labor shortages in 2004. The phenomenon of labor shortage refers primarily to shortages of unskilled labor in the labor intensive industries and thus has in Chinese been referred to as “民工荒” (mingong huang), a shortage of migrant workers (Wu 2007: 73).
The phenomenon of apparent labor shortages in China has attracted growing attention in the literature and often references the concept of the so-called Lewis Turning Point (Cai and Wang, 2010; Cai 2013; Cai and Du 2011; Du and Lu 2013; Golley and Meng 2011; Knight et al. 2011; Wang and Gao 2008; Wu 2007; Zhang et al. 2011). The Lewis Turning Point describes a period of socioeconomic development, where due to migration surplus rural labor has been reduced to a point where the marginal product of agricultural labor increases, yielding growing returns. This causes the flow of labor from agriculture to industry to subside, causing an increase in wages for labor, especially unskilled, in the industrial sector. There is some debate on the question, on whether the current situation in China actually fits the predictions of the Lewis model (cf. Cai and Du 2011; Knight et al. 2011).

Cai and Wang (2010) and Cai and Du (2011) find some indication of the Lewis Point having been reached, such as rising agricultural incomes and the convergence of wages between migrant and non-migrant workers at least in the lower income groups. Zhang et al. (2011) similarly take the observance of the rising incomes of rural workers and migrants in urban industry as an indication that the Lewis point has been reached around 2004.

In contrast, Knight et al. (2011) are generally skeptical about the applicability of the Lewis Model to the Chinese case, mainly due to the restrictions that are exerted by the huji system on rural-urban migration. They believe that the current situation is one where migration to the cities will continue to rise for the foreseeable future, but where this migration is slower than would be expected without the intervention of the huji system so that wages of migrant workers
in the urban industry have begun to rise ‘prematurely’ from the perspective of the Lewis Model. Golley and Meng (2011) provide a similar argument, stating that ample agricultural surplus labor remains and that it is the *huji* system, which disincentivizes rural-urban migration.

Whether or not the apparent structural shortage of unskilled labor on the Chinese labor market is best be explained in terms of the Lewis model or not, it does in any case appear to be associated with an acceleration in the growth of real wages since the mid 2000s. Cai and Lu (2013) and Du and Lu (2013) see in this structural transition the most important reason for the end of the high growth period.

From the perspective of our own analysis of the Chinese accumulation regime, the analyses of structural changes on the labor market indeed seem to deliver an explanation for the partial stagnation and partial decline of the rate of surplus value after 2004, which coincides well with the timing of the initial appearance of labor shortages. We also need to consider another related factor that can explain this development, namely the increase and increasing intensity of labor conflicts in China.

### 5.2.4.2 Labor conflict

The transformation of the wage-relation, i.e. the commodification of labor and the extension and intensification of work, has been accompanied by an increase and intensification of labor conflicts. While the official statistics probably do not extent the true extent of labor conflict, they should at least be reflective of their increasing trend. As can be seen in Table 12, the number of cases that has been settled by one of the various dispute resolution procedures has increased steadily since 1996.

The official statistics on labor disputes do not include labor-related protests or strikes. The government used to publish numbers on so-called “mass incidents”, which include strikes, protests, and riots, but which did not give any information about their content or object. According to Elfstrom and Kuruvilla (2014: 454) the number of such reported mass incidents rose from 9,000 to 87,000 between 1994 and 2005, after which official figures were no longer published. A leaked report gives a figure of 127,000 such incidents for 2008. Comparing a number of studies, Elfstrom and Kuruvilla (2014: 455) suggest that about one third of these incidents are labor-related.

While in the 1990s the class struggle was primarily concentrated in the north-eastern ‘rust belt’, where the workers of state-owned enterprises in the heavy industries resisted the consequences of the restructuring of socialist into capitalist labor relations, the 2000s saw an increase and intensification of struggles against low wages and appealing working conditions fought primarily by migrant workers in the production centers of the south.
The resistance of workers against the restructuring of state-owned enterprises in the rust belt turned against “crises of subsistence”, i.e. the consequences of the dismantling of the iron rice bowl and the loss of the associated guaranteed living subsidies that were associated with socialist employment. As their industries declined, workers lost not only life-time employment, but were also affected by non-payment of living allowances for laid-off workers, subsidies for medical treatment, housing subsidies, etc. Worker resistance also frequently turned against widespread managerial corruption and profiteering in the process of restructuring (Chen 2000). The strategy often employed was to target local governments by mass protests, endangering the ability of local officials to maintain the appearance of successfully managing social stability (Cai 2002; Cai 2006).

Whereas the workers of the “old” industries of the north thus fought against the dissolution of the socialist social contract, the workers in the industrial clusters of the South sought redress for grievances caused by employers’ violations of their legal and contractual rights (Lee 2007: 11), i.e. over wages, wage arrears, overtime, working and housing conditions, maltreatment, etc.

Table 12: Labor conflicts settled by type 1996-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Mediation</th>
<th>Arbitration</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>24223</td>
<td>12789</td>
<td>9531</td>
<td>46543</td>
</tr>
<tr>
<td>1997</td>
<td>32793</td>
<td>15060</td>
<td>22939</td>
<td>70792</td>
</tr>
<tr>
<td>1998</td>
<td>31483</td>
<td>25389</td>
<td>35155</td>
<td>92027</td>
</tr>
<tr>
<td>1999</td>
<td>39550</td>
<td>34712</td>
<td>47027</td>
<td>121289</td>
</tr>
<tr>
<td>2000</td>
<td>41877</td>
<td>54142</td>
<td>34669</td>
<td>130688</td>
</tr>
<tr>
<td>2001</td>
<td>42933</td>
<td>77250</td>
<td>35096</td>
<td>155279</td>
</tr>
<tr>
<td>2002</td>
<td>50925</td>
<td>77340</td>
<td>50479</td>
<td>178744</td>
</tr>
<tr>
<td>2003</td>
<td>67765</td>
<td>95774</td>
<td>59954</td>
<td>223493</td>
</tr>
<tr>
<td>2004</td>
<td>83400</td>
<td>110708</td>
<td>64550</td>
<td>258658</td>
</tr>
<tr>
<td>2005</td>
<td>104308</td>
<td>131745</td>
<td>69974</td>
<td>306027</td>
</tr>
<tr>
<td>2006</td>
<td>104435</td>
<td>141465</td>
<td>64880</td>
<td>310780</td>
</tr>
<tr>
<td>2007</td>
<td>119436</td>
<td>149013</td>
<td>71581</td>
<td>340030</td>
</tr>
<tr>
<td>2008</td>
<td>221284</td>
<td>274543</td>
<td>126892</td>
<td>622719</td>
</tr>
<tr>
<td>2009</td>
<td>251463</td>
<td>290971</td>
<td>147280</td>
<td>689714</td>
</tr>
<tr>
<td>2010</td>
<td>250131</td>
<td>266506</td>
<td>117404</td>
<td>634041</td>
</tr>
<tr>
<td>2011</td>
<td>278873</td>
<td>244942</td>
<td>69008</td>
<td>592823</td>
</tr>
<tr>
<td>2012</td>
<td>302552</td>
<td>268530</td>
<td>72210</td>
<td>643292</td>
</tr>
</tbody>
</table>

Source: China Labor Statistical Yearbook 2013
What all protest forms well into the 2000s had in common, was that they were usually localized at the enterprise or city-level, did not spread within branches or regions, or attempted any wider class-based mobilization or collaboration (Lee 2005; Lee 2007). Worker action remained reactive and was primarily aimed at claiming or defending the minimum of politically and legally guaranteed rights.

Apparently, however, this pattern in worker protests has changed in recent years. Elfstrom and Kuruvilla (2014) find in their own and in others’ recent research (i.e. Clarke and Pringle 2009; Chan and Pun 2009; Pringle 2011; Butollo and ten Brink 2012) that workers increasingly take action to offensively advance their economic interests, i.e. bargaining for wage increases and better working conditions, such as less overtime, rather than to defend basic political guarantees or legal rights. This development is also seen by Chang (2013), who is a prominent labor relations scholar from Renmin University in Beijing.

What has emerged than is an increased willingness of workers to go on strike not only for their rights but also for their economic interests, which has been reinforced by the actual prospect and empirical experience of the success of those actions.

Pringle (2011: 103, 108), for example, reports that strikes and protests of workers can, on the one hand, entice local authorities to raise minimum wages, as has been the case in Shenzhen between 2004-2007, but also, that those strikes and protests are increasingly targeted at specific employers and factories instead of at the authorities.

“Many have developed a very good idea of what they can get away with and how far they can go, so that short sharp strikes and protests have become an extremely prompt and effective way of redressing their grievances. […] Whereas in the past a collective strike was, general speaking, a last resort to be used only after other forms of redress had been exhausted, it is increasingly the case that workers take strike action as a more effective alternative to formal and crowded dispute resolution procedures. In other words, they have become more militant.” (Pringle 2011: 104)

As has already been discussed, the legal labor relations framework and the role that trade unions play in it, hamper and suppress autonomous worker association and interest articulation. The bargaining power that workers have apparently found for advancing their interests is thus not so much associational, in the sense that comprehensive organized mobilization and interest representation has become a possibility, which it has not, but rather structural, in the sense that the ongoing transformation of the wage-relation caused by the accumulation process has created a situation, where labor has gained bargaining power by virtue of its structural position within the accumulation process.
This new found advantageous structural position is on the one hand marked by the appearance of labor shortages discussed above. Under these conditions workers can rest relatively assured that even if their current employers retaliate against industrial action by layoffs, they can easily find work in another factory. Furthermore, employers will be more inclined to agree to wage increases and improvements in working conditions in the face of competition over workers.

Another structural component is provided by way of the insertion of manufacturing plants, especially in the South and East, into production networks and supply chains. This is illustrated in the example of the 2010 strike at a Chinese-Japanese Joint venture, producing transmission parts for Honda in the city of Foshan in Guangdong province. Like most auto parts manufacturers, the company is part of an intricate web of suppliers to the large auto assembly plants, which rely on lean production and just-in-time methods. When workers at the Foshan plant went on strike on May 17 2010 to demand higher wages and less overtime work, and a re-election of the enterprise union, their action soon led to work stoppages in at least for other plants due to interruptions in the supply chain, lending additional economic weight to their actions. Finally, this allowed workers to achieve a resolution of the strike in their favor in negotiations with high-level corporate and union representatives under circumvention of the local management and union (Pauls and Pries 2012: 390). The successful strike at the Honda plant was immediately followed by at least twelve strikes in the automotive and related industries in the region (Hui 2011).

Butollo and ten Brink (2012: 427ff.) have analyzed the patterns of these and other strikes, finding that they have shown a new quality in that they displayed offensive wage demands, a broad geographical scope, involved collective bargaining, as well as high participation and bottom-up mobilization by workers. Wage demands were high and increases were in the 30% range. The success of one strike caused workers at other plants to adopt similar demands and strike and bargaining patterns, leading to a wide-spread “contagion” of worker action without central coordination (see also Chan and Pun 2009). Workers engaged in an interest-based bargaining process with management instead of appealing to government entities. Lastly, the strikes took place under broad inclusion of different strata of the workforce, including the democratic election of strike committees.

Along with the changing structural position of labor within the economy, state and party have, embodied in President Hu’s slogan of building a socialist harmonious society (构建社会主义和谐社会: goujian shehui zhuyi hexie shehui), attempted to address some of the pressing social issues, which have been created in the course of rapid capitalist development, such as
social inequality, in the interest of social and, by extension, political stability. In the field of labor relations, the passing of the Labor Contract Law and the new Labor Dispute Mediation and Arbitration Law in 2008 have been the most obvious signs of attempts by the party state to address the gravest deficiencies of the labor relations system and to improve labor’s position vis-à-vis capital. While these measures are primarily aimed at directing workers’ grievances into the provided legal channels, Clarke and Pringle (2009) find that there also appears to be a growing willingness on the side of the party state and its trade unions to refrain from repression of worker action and towards making concessions to meet workers’ demands.

Overall, the increasing opportunity and willingness of workers to resort to strikes to push for their interests may signal a turn towards “more coherent and collective ‘class’ action” (Butollo and ten Brink 2012: 433) and the initial becoming of Chinese labor into a “class-for-itself” (Chan and Pun 2009: 303).

5.2.5 Summary

In this chapter, we have discussed the most prominent features and developments of the wage-relation by discussing 1) the expansion of capitalist labor relations and the concrete forms that the commodification of takes within the relevant institutional frameworks, 2) the effects of this transformation on labor and production relations, emphasizing the informalization of work, and the relationship of work hours, wages, and labor productivity, and 3) discussing some of the contradictions that arise in the reproduction of these relations within the process of accumulation, namely labor shortages brought about by the rapid accumulation of capital, and relatedly, an intensification of the class-struggle on the side of workers, both of which help to explain why wages have in recent years begun to grow more quickly than labor productivity.

The final task in this summary is to relate our analysis of the wage-relation to the patterns of accumulation and reproduction observed in our analysis of the accumulation regime and in particular to the movement in the rate of surplus value. To repeat, the development of the rate of surplus value is marked by a period of rapid increase between 1997-2003, and a period of decline, which is, however, less pronounced than the preceding increase.

To once again cite Aglietta (1979: 68), an accumulation regime is “a form of social transformation that increases relative surplus value under the stable constraints of the most general norms that define absolute surplus value”, or, to put it in other words, an accumulation regime is a theoretical concept that integrates the historically concrete forms of social transformation that affect an increase in the rate of surplus value within the general norms of surplus value production in capitalist production relations.
In the Chinese case, the reform of the political economy of the 1980s can be interpreted as a failed attempt, arising out of a specific historical situation, to combine elements of petty commodity production and proto-capitalism in rural areas, socialist production relations in urban industry, and a (partially) free commodity market. While the concept was only adapted later, this period could thus aptly be called a “Socialist Market Economy”. The economic and political crisis in which this period ended, and, which at least in some respects culminated in the Tian’anmen protests and massacre, arguably set the stage for the subsequent expansion and generalization of capitalist production and commodity relations in the 1990s, and it is thus in this period that we find the theoretical concept of accumulation regime to be analytically applicable.

In the first half of the 1990s the party-state has created the most important institutional foundations for the capitalist transformation of the economy in the Labor Law, which provides the legal recognition of the universal applicability of the wage contract and thus of commodified wage labor in the Chinese economy, and which stipulated the basic conditions and limitations of such a contract. Together with the Trade Union Law and other laws and regulations, the Labor Law is also the basis for a labor relations framework that in principle provides relatively far-reaching rights and protections for labor, but which in fact are subordinated to the collusion of management and party interests in factory and local industrial politics. The ability of labor to pursue independent interests is furthermore severely curtailed by the absence of the right to free association, so that labor disputes have predominantly been fought out within the context of individual appeals to legal redress in the channels of mediation and arbitration provided by the party-state.

Within this framework took place the real social transformation in the wage-relation as a dual-movement of labor retrenchment in the urban state-sector and the rapid growth of rural-urban migration within the confines of the huji system. Both movements, by providing within a relatively short time frame a vast pool of “surplus” labor (or industrial reserve army), have contributed to the informalization of the labor market and of labor relations, which together with the repressive institutional framework of labor relations created a situation in which labor was easily subordinated to the interest of and exploited by capital.

In this context, the increase in the rate of surplus value 1997-2003 is primarily the result of intensification of work by reorganization and the vast expansion of working hours (well beyond the confines of the law), both of which helped to keep wages growth well below the increases in labor productivity and which increased profitability. The pattern of accumulation befitting to
this mode of exploitation is thus necessarily one that emphasizes profit-led investment in capital goods and neglects consumption as a source of aggregate demand.

Taking the rate of surplus value as our yardstick for measuring the sustainability of capital accumulation, it is astonishing how quickly, that is within less than a decade, this accumulation regime has shown signs of exhaustion, which are rooted within the contradictions sharpened in the reproduction of the wage-relation. The rapid accumulation of capital has equally rapidly expanded the demand for wage labor, draining the surplus labor pool quickly.

This means that de facto capitalist production relations expanded and demand for labor grew faster than technical innovation could provide labor savings measures, and we may assume that the demand for such technology was low and the investment deemed unnecessary and risky in the face of competition, given that labor was easily exploitable in any case. Moreover, the *huji* system, while on the one hand providing a significant share of the surplus labor pool and increasing the exploitability of labor, at the same time may have hastened the factual exhaustion of the labor pool by keeping wages low and thus throttling migration. This question would merit further research.

In any case, the apparent labor shortages have at least contributed to the fact that wages have been rising faster than productivity, at least since the second half of the 2000s, due to intensified competition of capital for labor and due to an improvement of the structural position of labor, which has provided workers with new opportunities to more offensively pursue their interests. Rising wages and reduced (though still long) working hours lead to a decline in the rate of surplus value, so that the growing organic composition of capital again comes to exert downward pressure on the average rate of profit, which, with delay, in the year 2014 causes Premier Li to announce China’s growth target at ‘a new normal’ of ‘around 7%’, which would mark the slowest expansion of GDP in China in 24 years (Mitchell and Wildau 2015).

Even though the Chinese economy continues to grow, the current situation presents a crisis in the sense that the contradictions in the dominant features of the wage relation have matured and reached a point where their continued reproduction appears unsustainable. In conjunction with the impact of the global economic crisis 2008ff. any solution to this crisis of reproduction would have to address the role of consumption in aggregate demand and the question of productivity, i.e. the ability to expand the rate of surplus value.

In this regard, we can already pinpoint how the features of the wage relation, which enabled the high growth rates in the previous accumulation regime, not only present contradictions in its current reproduction, but also obstacles to a “rebalancing” of the economy. This is most obvious in the case of migrant labor. The exclusion of this part of the working class from
integration into urban life and adequate access to public services and education has promoted the reproduction of a class of unskilled and uneducated labor. This is again a clear case where accumulation produces its own contradictions. On the one hand, rapid accumulation depends on this super-exploited segment of the working class and associated modes of exclusion, and on the other hand, its reproduction as an unskilled segment of the working class impedes increases in labor productivity, which would be needed to curb the declining rate of surplus value.

In an almost cynical manner, Cai Fang, head of the Institute of Population and Labor Economics at the Chinese Academy of Social Sciences, with a view to the problem of high migrant wages, warns of government intervention in the labor market to support employment in the face of declining growth.

“To counter structural employment difficulties, the government’s apparent intent of more active employment promotion, assisting the labor market to lower friction, and to raise human capital to match the level of supply and demand, is naturally its undeniable responsibility. However, the necessary labor market signals are also essential. That is, we actually need to maintain a certain natural rate of unemployment so that those workers whose human capital and labor power do not match the market, come under pressure, so that future workers are guided to conform to the requirements of the constantly adjusting structure of industry, and to receive the highest possible degree of general education and vocational training, as well as various kinds of training.” (Cai 2013: 89, author’s translation)

The assertion of Marx (1962a: 658, 661ff.) that unemployment is not only a normal, but a necessary element in the reproduction of capital, in which the price and supply of labor fluctuate around the cycles of accumulation, is here merely rephrased to apply to the specific problem of labor productivity in the current stage of development of the Chinese economy. Productivity and wages, however, are of course two sides of the same medal, in that a relatively faster growth of productivity over wages affects a cheapening of labor and an increase in the rate of surplus value.

This is indeed important, because another central contradiction unfolds here: on the one hand, wages rise faster than productivity in certain sectors, on the other hand, working class consumption is still far lower than what would be necessary to provide an adequate outlet for commodity production. “Rebalancing” of the economy will thus face the difficult conundrum of on the one hand preserving a certain level of profitability by increasing productivity and surplus value production, on the other hand by further increasing wages to spur working class consumption. Whatever the concrete form that this rebalancing would take, it would appear to
be extremely difficult to square the circle of consumption and wages on the one hand and productivity and profits on the other.

Current research into the matter finds that developments in the manufacturing point to a “balancing” in favor of productivity and profits rather than consumption.


5.3 Forms of competition

5.3.1 Introduction

Our previous analysis has revealed how the rise in the rate of surplus value observable in our analysis of the accumulation regime is first and foremost the result of the restructuring of the wage relation in the late 1990s and early 2000s in the form of labor retrenchment in the state sector and rural-urban labor migration under the huji system. The highly exploitable industrial reserve army thus created produces the surplus value for an accumulation regime driven by profit-led investment and highly dependent on external markets for aggregate demand, as the growth of consumption by the domestic working class lags well behind the explosive growth in commodity production.

Our following discussion of competition will analyze the concrete forms that have developed in the relations between different factions of capital in the course of accumulation. The questions discussed are how the specific forms of competition are related to the patterns of investment and consumption observable in the accumulation regime, and how different factions are integrated into the social reproduction of capital, forming specific relations of competition through which value circulates. Furthermore, we will discuss how the forms of competition influence the specific ways in which the general contradictions of the Chinese accumulation regime are borne out in specific ways.
The Chinese economy has experienced a gradual transformation from a planned socialist economy to a capitalist market economy in which state-owned and state-controlled enterprises have, due to the gradualist character of reform, retained an important, if not dominant position. Earlier predictions, according to which the “transition” to a “market economy” would include the disappearance of the state sector have not materialized. We will thus begin with a discussion of ownership forms and analyze how ownership relates to the industrial structure of the Chinese economy.

Subsequently, our analysis of the relations of predominantly state-controlled and non-state industries, capital-intensive and labor intensive sectors, serves to illustrate how on the “non-level playing field” of competition the capital-intensive state sector is integrated into circuits of value with the predominantly private labor-intensive sectors of the economy, which have been the core of the transformation of social relations and the associated expansion of surplus value production. It will be shown that it is also the specific forms of competition, which contribute to the secondary role of consumption in the accumulation regime.

Finally, we will analyze the relation of the forms of competition to the contradictions and crises appearing in the Chinese accumulation regime, which are connected to the phenomenon of “state advances, private retreats” (国进民退: guo jin min tui).

5.3.2 Ownership and industrial structure

5.3.2.1 Ownership forms

As will become clearer later, the question of who owns and controls enterprises in China is quite significant for the structure of competition. It should be noted here that the distinction between state-owned and privately owned enterprises is only of secondary importance to the question of whether China has a capitalist economy or not. To some researchers like Huang (cf. Huang 2008: 10ff.), a capitalist economy is essentially a market economy composed of privately owned enterprises. What is conceptually much more relevant for a definition of capitalism, however, is the generalization of the production of surplus value by wage labor for the owners of the means of production and the generalization of the commodity form linking in competition the reproduction of decentralized production units and that of wage labor, both under the general constraints of the value relation.

Since the beginning of reform and opening in the 1980s, the ownership structure of industry has changed steadily, seeing the decline of the state-owned and collective sector and the emergence of the likes of private enterprises, foreign invested enterprises and Sino-foreign joint ventures. What actually constitutes the state-sector and what constitutes the private sector,
however, has always been very difficult to tell apart. During the initial reform period of the 1980s and in the early 1990s, for example, in an environment where the legality and political desirability of private business, let alone private ownership of the means of production, was by no means established, many township and village enterprises were *de facto* privately run firms, but *de jure* remained under collective ownership. This strategy of clandestine private enterprise was picked up on in the idiom of “wearing a red hat” (带红帽子: *dai hong maozi*). Furthermore, the largest share of TVEs were actually legally registered as businesses under private or household ownership, a fact that for a long time escaped the attention of social science research on the Chinese economy, which thus vastly overestimated the alleged relevance of enterprises under collective and public ownership as successful vehicles for economic transition (Huang 2008: 68ff.).

Today, a straightforward separation between the private and the state-owned sector remains equally difficult. According to the China Statistical Yearbook 2012, enterprise registration status divided into three main categories and twelve partially overlapping sub-types. The three main categories are domestic enterprises, enterprises with investment from Hong Kong, Macao and Taiwan, as well as foreign invested enterprises. Domestic enterprises are comprised of seven registration types, including state-owned enterprises, collective enterprises, cooperative enterprises, joint ownership enterprises, limited liability corporations, share-holding corporations and private enterprises, plus the statistical category “other”. Enterprises with investments from Hong Kong, Macao and Taiwan and other foreign countries can be registered as joint-venture enterprises, cooperative enterprises, wholly foreign invested enterprises and share-holding corporations.

Concerning ownership, the registration type of state-owned enterprise (国有企业: *guoyou qiye*) is, together with that of private enterprises (私营企业: *siying qiye*), the least ambiguous one. SOEs include non-incorporated enterprises where all assets belong to the state, as well as state-funded corporations, and wholly state-owned joint-ownership enterprises.

SOEs, however, are not the only type of enterprise that can be state-owned or state-controlled. Limited-liability enterprises, for example, can be wholly or partially state-funded. Joint-ownership enterprises, for example, can be partially or wholly held by multiple state-owned or state-funded entities. Share-holding corporations can be state-held; state agencies control most of the capital investing in China’s stock markets and SOEs are the major holders of listed firms (Huang 2008: 13; Szamosszegi and Kyle 2011: 9; Walter and Howie 2011: 147). Sino-foreign joint ventures began in the 80s and 90s under exclusive involvement of the state-sector on the Chinese side. Most wholly foreign invested enterprises are probably removed from
a controlling influence of the Chinese state. Enterprises with investments from Hong Kong, Taiwan, and Macao, however, in many cases actually are invested in by SOEs from the Chinese mainland, who until 2008 could make use of investment detours mainly through Hong Kong to save taxes (Szamosszegi and Kyle 2011: 22). The computer maker Lenovo is a prominent example of such a case (Huang 2008: 1-10).

The registration type of private enterprise refers to profit oriented enterprises invested, established, and controlled by natural persons who employ wage labor and is thus also a relatively unambiguous type concerning ownership. But being a private enterprise does, especially in the context of Chinese local industrial politics, not exclude the existence of very close personal ties with government and party or even personal unions of government or party officials with management of nominally private enterprises.

In summary, most registration types, apart from state-owned enterprises and private enterprises, do not discern of whether an economic unit is state-owned or controlled, privately owned or controlled, or a mix of both. This makes it very difficult to come up with exact numbers on the extent of state and private involvement in the Chinese economy.

The blurred boundaries of state-ownership and control in the economy are at least partially accounted for by the NBS, which has introduced the statistical category of state-controlled or state-holding enterprises, guoyou konggu qiye (国有控股企业): “State-holding enterprises are a sub-classification of enterprises with mixed ownership, referring to enterprises where the percentage of State assets (or shares by the State) is larger than any other single shareholder of the same enterprise. This sub-classification illustrates the control of the State over a particular industry” (China Statistical Yearbook 2012). It is unclear, however, how far this statistical category accounts for diverted foreign investments of SOEs or sub-holdings of SOEs or state-controlled enterprises.

In summary then, it should be emphasized that due to the ambiguous nature of registration types and of the statistical categories discussed above, it is not possible to precisely measure the contribution of the private and the state-owned sector to the economy from the official statistics. We do believe, however, that with the statistical category of “state-controlled enterprises” we can at least provide an analysis of the general trends of the development of state and private sector involvement in the economy. Measurement of private economic activity is furthermore restricted to the industrial sector, as data for other economic sectors does not differentiate ownership type (Szamosszegi and Kyle 2011: 22).
5.3.2.2 Ownership and industrial structure

As can be seen in Chart 24, starting from a low 4%, the unambiguous category of “private enterprises” has from 1999-2008 gained a considerable share of 30% in gross industrial output. The share of foreign invested enterprises and those with investments from Hong Kong, Taiwan and Macao has alternated between 26% and 33%, while the share of state-owned and state-controlled enterprises has fallen from 49% to 26%. As has been emphasized before, the state-sector’s share is probably underestimated in these statistics, as they do not reflect state control of foreign invested enterprises and may not account for indirect state control of private enterprises. Nevertheless, there is until 2008 a clear tendency of a retreating state sector and an advancing private sector, at least when measured in sheer contribution to industrial output. After 2008, the development settles into an apparently relatively stable and equal division of industrial output between SOEs, FIEs and POEs at around 30% each. This new development is a consequence on the one hand of the end of large-scale privatizations and of state policy to preserve a strong state sector in certain areas of the economy (ten Brink 2013: 195). So far, however, this does tell us little about the structural position of state and private sectors within the economy and of the quality of their development. On the other hand, we need also consider the development of economic relations between the different sectors, the impact of internal and external economic dynamics and contradictions, and in this context also the impact of state policy on these economic structures and dynamics in the wake of the global financial crisis.

Chart 24: Share of state, private, and foreign sectors in gross industrial output, 1999-2011

Source: CEIC Data, based on NBS data
As is already implied in the analysis of ownership forms, a simple correspondence of ownership and industrial structure does not exist in China. Instead, we find a heterogeneous mix of state, private, and foreign ownership as well as mixed forms in various positions of the industrial hierarchy. It is, however, possible to align certain dominant patterns in ownership and industrial structure.

Ernst and Naughton (2008: 42ff.) divide China’s emerging industrial economy into a three-tier structure. Tier one is dominated by the large centrally controlled state-owned enterprise conglomerates in natural monopoly markets or in markets where they have a very high degree of market power owed to administrative quasi-monopolies. These SOEs are usually active in highly capital-intensive industries. Contrary to Japanese keiretsu or Korean chaebol, these conglomerates are concentrated within specific industrial sectors of the economy and do not branch-out into cross-sectoral activities (ten Brink 2013: 197). The high capital intensity of these firms is witnessed in the relation of state-owned firms and their assets among China’s top-500 companies. In 2007, state-owned firms occupy ca. 70% of this top tier, but ca. 94% of assets (cf. Table 13).

Table 13: Structure and performance of top-500 Chinese enterprises in 2007, by ownership (%)

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Firms</th>
<th>Assets</th>
<th>Profits</th>
<th>Employees</th>
<th>Taxes</th>
<th>Return on Assets (factor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>69.8</td>
<td>93.6</td>
<td>87.9</td>
<td>89.3</td>
<td>92.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Collective</td>
<td>5.8</td>
<td>4.2</td>
<td>2.2</td>
<td>2.4</td>
<td>1.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Private</td>
<td>17.8</td>
<td>1.7</td>
<td>7.1</td>
<td>7.0</td>
<td>3.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Foreign</td>
<td>6.6</td>
<td>0.5</td>
<td>2.8</td>
<td>1.3</td>
<td>1.7</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Source: Du and Wang (2013: 14)

The second tier is made up of large and medium-sized firms active in more competitive markets. This includes large firms in hybrid ownership forms, like Lenovo, Haier, TCL, Founder, Huawei, ZTE, Datang oder SMIC (ten Brink 2013: 203). We find in this tier a very diverse and usually hybrid ownership structure where enterprises thrive in close relations with local state interests. This tier has largely emerged in the context of what 1992; Oi (1995) has called local state corporatism, the marketization of local state-owned enterprises and the rise of quasi-private firms in the context of fiscal restructuring policies that made local governments rely increasingly on direct and indirect income from corporate revenue. Township- and village enterprises as well as collectively-owned enterprises (COE) have during the late 1990s and early 2000s been privatized or turned into limited liability companies in great numbers, but remain embedded in the context of local politics (ten Brink 2013: 196). “Shared ownership
seems to be commonly used to align interests between entrepreneurs and other stakeholders, including local government” (Ernst and Naughton 2008: 45).

The third tier is represented by the small-scale (referring to enterprise size, not total output) predominantly private business sector with, relatively speaking, only loose ties to local government. These firms are often concentrated in industrial clusters and part of subcontracting networks, serving export markets by manufacturing low and increasingly also high-tech commodities. Nevertheless, their production methods remain predominantly labor-intensive. Perhaps in contrast with privatizations in the context of local state corporatism, the small-scale private sector has, for example in Zhejiang, developed through entrepreneurial initiative in a bottom-up movement (Nee and Opper 2012).

5.3.3 The predominantly labor-intensive privately and foreign owned manufacturing sector

Even when we consider that state, foreign and private sectors are not always neatly separated, the vast gains that the registered domestic private sector has made on other parts of industry in its share of industrial output since the late 1990s, which surpassed the foreign and state sector’s share in 2009, bears witness to its dominant position in China’s accumulation regime (cf. Chart 24). In Industry, the advances of the private and foreign invested sectors vis-à-vis the state sector are evident in the whole of the manufacturing and construction sectors. “In general, with minor exceptions, domestic private firms tend to be small in scale and to flourish in markets not dominated by big state-owned enterprises or foreign multinationals. They are found in many labor-intensive industries.“ (Tsui et al. 2006: 6). In recent years, while still mostly concentrated in light industries, the private sector increasingly also takes foot in heavy industries originally occupied by state-sector monopolies (Lardy 2014: 76ff.).

One of the most important footholds of private domestic and foreign-invested enterprises in the Chinese economy is the export-oriented, predominantly light manufacturing sector. After China’s WTO accession in 2001, the share of the domestic private sector in exports has grown from negligible single digit figures in the 1990s to 39% in 2013, not only leaving far behind the contributions of the state-sector, but also making inroads on the share of foreign-invested enterprises since 2005 (cf. Chart 25). In accordance with their outward orientation, the greatest numbers and concentration of registered private firms is found in the Eastern and Southern coastal provinces of Guangdong, Zhejiang and Jiangsu (Nee and Opper 2012: 47)
The province of Zhejiang and its city of Wenzhou stand exemplarily for private sector driven development from below, often labeled the “Wenzhou model”. Large portions of China’s light manufacturing industries today produce in Zhejiang and neighboring Jiangsu, connecting the Yangtze (Chang Jiang) river delta by a dense network of industrial clusters in dozens of different industries. In Zhejiang alone, these clusters comprise more than 240,000 manufacturing companies (Nee and Opper 2012: 45). These clusters of individual enterprises have managed to secure dominant positions on the world market for light manufacturing goods.

“Seventy percent of the international market for lighters is produced in more than 500 firms in Wenzhou municipality. Qiaotou, a township in this municipality, produces more than 60 percent of the global clothing buttons and more than 80 percent of zippers. Liushi Township produces more than 40 percent of the country’s low voltage switches and Datang Township in Zhuji Municipality is the largest socks producer in the world, with more than 100,000 knitting machines in over 8,000 companies producing one third of the global supply. Similar lusters of light industrial manufacturing exist in the shoe industry, toy industry, and ball-bearing production” (Nee and Opper 2012: 45).

Also dominated by private and foreign-invested enterprises is the Pearl River (Zhu Jiang) Delta in Guangdong province, which also harbors what was China’s first Special Economic Zone in Shenzhen. In Guangdong, 65% of enterprises are registered as private and an additional 18% are Joint Ventures (ten Brink 2013: 202).
Especially lower-tech light manufacturing industries are active in a fiercely competitive environment, as can exemplarily be shown for the textile and garment industry, which is connected to the world market through production chains and embedded in buyer-dominated “order economies” (Zhang 2011: 124). These production networks are dominated by international merchant capital in the form of global brands and retail chains, which themselves do not own any factories, but source their commodities from ad-hoc and short term orders to a large pool of competing suppliers. The technology and investment barrier for entry into these supplier industries is relatively low, so that a large number of suppliers compete for orders. Buyers thus have great power in dictating prices and long-term contractual relations between buyers and suppliers are the exception.

The Pearl and Yangtze river deltas have, next to other regions, also emerged as manufacturing centers for the automotive sector, which is technologically more advanced, especially also for manufacturers in the supplier sector. Auto parts manufacturers have emerged in Guangdong province, where they are often operated as local-foreign entities, while predominantly privately owned supplier networks have emerged in Zhejiang and Anhui. While required investments and technological barriers for entry are higher in this sector than i.e. in the textile industry, competitive and price pressures in the automotive supplier sector nevertheless emerge from their vertical integration with the car assembly sector within and outside China.

“Many car suppliers, especially those producing for export, compete heavily on price and labor costs. […] However, these price advantages have come under pressure from rising raw material prices and wages, especially minimum wage raises in Guangdong, Jiangsu, and Zhejiang provinces” (Lüthje et al. 2013: 43).

The private and foreign-invested outward-oriented enterprises are to a large extent located in labor intensive industries and thus have contributed greatly to employment. As can be seen in Chart 17, employment in the private sector has grown faster and more steadily than in any other sector of the economy. Registered employment in private enterprises has surpassed that in state-owned enterprises in 2005 and stands at 33% of total employment in 2011. We may also assume that a large share of unregistered, informal employment is as wage labor or pseudo self-employment in the private sector. Private enterprises then, have by far made the greatest contributions to employment growth since the 1990s. As Lardy (2014: 82) writes: “Despite the predominance of state firms in production in certain sectors, state firms as a group have not been a significant source of growth of employment in the reform era. Indeed, employment in state forms has fallen in absolute terms for more than a decade and now accounts for only 13
percent of urban employment. Conversely, the importance of private and individual businesses in generating employment is difficult to overstate.”

The reliance of the export-manufacturing sector on self-financed investment in the absence of easy access to credit and the associated profit-orientation and short-term horizon of business activities of course also contributes to the particular mode of highly flexible, highly exploitative work organization in the Chinese export manufacturing zones (Carney 2012). The regimes of production found in these companies are, where technologically more advanced, characterized by flexible mass production, for example original equipment manufacturers of information technology, or classic, low tech, low wage regimes, both staffed mainly by labor migrants receiving relatively low wages and working extended, often illegal, periods of overtime (Lüthje 2011: 105-106; Lüthje et al. 2013).

5.3.4 The predominantly capital-intensive state sector oligopolies

In the context of economic reform, the Chinese state has proceeded to corporatize the state sector within a regulatory framework that on the one hand provides general rules for the corporate governance of the state sector within an economic environment characterized by marketization. It has, on the other hand, however, preserved a high degree of political and economic protection for the state sector in certain parts of the economy. After three decades of reform and opening, Naughton (2010: 441) writes, “[t]he Chinese reform process has settled down into a system in which state ownership has an important role”. Preferential treatment and protection for the state sector have not always gone hand-in-hand with the reform and opening policy, but has followed the wake of what some call a state-capitalist turn in the 1990s (Eaton 2011; Eaton 2014; Huang 2008).

With the creation in 2003 of the State-owned Assets Supervision and Administration Commission (SASAC) (国有资产监督管理委员会: guoyou zichan jiandu guanli weiyuanhui) under the State Council, the state centralized control over its SOEs from ministries and other government agencies. The role of SASAC then is to represent the state as owner vis-à-vis the state-owned enterprises and to make sure that its interests and policies are taken up and implemented by the SOEs. As Ernst and Naughton (2008: 43) write, this includes on the one hand the task to foster national champions from enterprises in industries designated by the state council to be leading competitors in their field nationally and internationally with an aim to increase the value of government assets, and on the other hand, to emphasize profitability and financial returns to the state.
To this end, SASAC has in 2006 designated a number of so-called strategic and pillar industries. Strategic industries are those, where the state is supposed to maintain sole ownership or absolute control of the respective companies. The sectors designated as strategic as of 2011 are defense, electricity generation and supply, petroleum and petrochemical, telecommunications, coal, civil aviation, and shipping, while the sectors designated as pillar industries are machinery, auto, IT, construction, steel, base metals, chemicals, land surveying and research and development (Mattlin 2009: 13).

Table 14: Strategic and pillar industries under SASAC (2006)

<table>
<thead>
<tr>
<th>Category</th>
<th>Industries</th>
<th>Ownership objective</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic industries</td>
<td>Defense, power generation and distribution, telecom, oil &amp; petrochemical, coal, civil aviation, shipping</td>
<td>Maintain 100% state ownership or absolute control; increase state-owned assets in these industries</td>
<td>40</td>
</tr>
<tr>
<td>Pillar industries</td>
<td>Machinery, auto, IT, construction, steel, based metal, chemicals, land surveying, R&amp;D</td>
<td>Absolute or relative controlling stake; enhance the influence of state ownership while reducing its share</td>
<td>60</td>
</tr>
<tr>
<td>Other industries</td>
<td>Trading, investment, medicine, construction materials, agriculture, geological exploration</td>
<td>Maintain necessary influence by control of stakes in key companies; reduce state ownership in non-key companies</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Mattlin (2009: 13)

The number of enterprises directly under SASAC’s control is relatively small and has been further reduced in recent years. As of 2015, SASAC lists 112 enterprises under its control on its webpage. These enterprises, however, mostly represent superordinate structures for large corporate conglomerates consisting of dozens and hundreds of subsidiaries. According to SASAC’s own estimations, the corporate hierarchy of its enterprises is comprised of more than 23,000 independent corporate entities on various levels (Lardy 2014). Though it is SASAC’s own stated policy to attempt to reduce and concentrate these assets, the number of subsidiaries has increased from an estimated 17,000 in the mid 2000s (Mattlin 2009: 14-15).

The concept of pillar and strategic industries has never been ratified as an official policy by the state council or even cast into law, but it is rather understood as a “guiding opinion” for the state’s industrial policy (Szamosszegi and Kyle 2011: 33). In general, though, it has been the state’s policy within protected sectors of the economy to allow competitive relations...
between limited numbers of state-owned or controlled economic actors, and to restrict access to these sectors for other economic actors.

In practice, some of the strategic industries, such as the IT, aviation and oil industries are seeing the entrance of private or non-state competitors (Lardy 2014: 89ff.; Naughton 2010). Entry into these sectors, however, remains restricted and competition is not “free and fair” but rather “limited and managed” (Naughton 2010: 444). Whether by allowing market entrance of a limited number of non-state competitors, or by pitting two or three state-controlled competitors against each other, the government creates oligopolistic markets, which on the one hand are supposed to limit to a certain extent the negative effects of monopolies, but on the other hand guarantee higher profits for state-controlled enterprises than freer markets with higher competition (Naughton 2010: 446). To ensure that competition does not become too intense on protected markets, the government does not refrain from intervening into the top-management of its enterprises, as has been the case in a top-management reshuffle in the telecom industry in 2004 (Ernst and Naughton 2008; Naughton 2010).

The state-sector also remains protected by law. The 2003 Merger and Acquisition Law protects SOEs from hostile takeovers (Fabre 2013: 10). The 2007 Anti-Monopoly Law, comparable in wording to similar laws in the European Union and the United States, aims to curb monopoly power and market concentration and to promote competition. However, it provides exceptions for monopolies of state-owned enterprises justified in the interest of the public good (Yueh 2013: 311-312).

Next to market protection, the state sector also profits from a number of direct and indirect subsidies. In the research literature, the arguably most discussed form of subsidies is preferential access to financial resources through banks loans and equity markets. (cf. below). Other forms of subsidies include subsidies to energy, land, material inputs and technology (Haley and Haley 2013). The state sector has also been the target of preferential tax rates until 2008 when this policy was abolished in favor of a unified 25% corporate income tax rate (Szamosszegi and Kyle 2011: 45). In combination, the policies and regulations targeted at the state sector following in the wake of its initial restructuring have contributed to its profitability and an increase in the state’s revenues by protecting it from competition and by providing various forms of subsidies.

5.3.5 The “non-level playing field” and patterns of accumulation and circulation

As has already become clear, the boundaries between the industrial sectors dominated by state, foreign, and private enterprises are not clear-cut, and may continue to blur in the future.
Nevertheless, certain patterns in the relations of competition have become apparent, especially at their extremes. On one end, we have the predominantly private, labor-intensive, light manufacturing sector, which produces to a large extent for the world market in a highly competitive environment. On the other end, we find the capital-intensive central state sector with its large specialized industrial conglomerates, which are embedded in a state-governed framework of limited and managed competition. In between these extremes, we find an increasingly complex and heterogeneous landscape of enterprises in various industries in hybrid ownership arrangements frequently involving local and provincial political interests. The reality of competition is thus obviously more complex than the proposition of a simple dichotomy between state and private. Nevertheless, the extremes of this spectrum present an adequate abstraction from its real complexity if we want to analyze how the state-sector is integrated through the specific relations of competition analyzed above with the dominant features of the wage relation analyzed earlier and its associated modes of surplus value production and working class reproduction.

The relations of competition in and between the capital-intensive state-dominated sector and the labor-intensive private sector are on the one hand certainly the result of the historical conditions under which a capitalist economy was created since the beginning of the reform and opening period. The project of socialist modernization had emphasized the importance of heavy industry for urban industrialization, and in lieu of a policy of radical privatization and liberalization, private and foreign invested enterprises in China emerged next and in relation to an industrial structure in which capital-intensive industries were occupied by the state. These historically conditioned structural relations, have, however, been preserved in variegated forms by a number of policies of the state, which secured a position for the state-sector at the “commanding heights” of the economy. These state policies, which promoted, restructured, and subsidized the central state sector, have contributed greatly to its newly found profitability. The profits as a share of GDP of SOEs under the control of SASAC have grown from 2.2% in 2003 to 4% in 2007 (Naughton 2010: 446) and it has begun to surpass that of the non-state sector since the beginning of the 2000s, while the opposite was true in the 1990s (cf. Chart 26).

Likewise, the focus of private industry on predominantly light export manufacturing is not simply the result of its emergence under preexisting structural conditions in industry and the opening to the world market of the Chinese economy, but is the flip side of the structure of competition created by the Chinese state and its policies towards the state-sector.

The world market provides a fiercely competitive environment and forces manufacturers to rely on imponderable short-term and ad-hoc contracts with foreign clients. Private
enterprises, however, faced and still face a “non-level playing field” (Yueh 2013: 309) in their competition with the state-sector on domestic markets. This is on one hand true for those sectors of the economy, which have been or still are the administrative monopoly of the large central-state owned and controlled enterprises and their subsidiaries. And this is on the other hand true for markets, which are occupied by provincially and local state owned or controlled enterprises, which provide direct or indirect financial benefits to the state and are thus afforded various formal and informal protections and subsidies. The world market, on the other hand, may be a relatively high-risk environment, but it arguably offers a level playing field and potentially high rewards.

Chart 26: Profit margins as a share of sales revenue of state and non-state industrial enterprises (%)

An additional element of policy, which has reinforced the predominant position of the state in capital-intensive industries, and of private enterprises in labor-intensive industries is that which regulates access to money capital for investments, i.e. bank loans and equity financing.

As has been discussed already in the analysis of the accumulation regime in chapter 4, the very high investment rates characterizing China’s economic growth have to a large and increasing extent been financed out of retained company profits rather than though bank lending or financial markets. This pattern of profit-led investment is especially pronounced in the private sector and has been encouraged by the unwillingness of the big four state-owned commercial banks to lend to private sector companies (Haggard and Huang 2008). According
to figures given by Song et al. (2011: 203), private enterprises on average financed about 10% of their investments through external sources, while state-owned enterprises financed about 30% of their investments through external sources.

The banking sector, which is effectively controlled by the big 4 state-owned commercial banks (Bank of China, China Construction Bank, Agricultural Bank of China, Industrial and Commercial Bank of China), supports investment in the state sector by giving access to credit more readily than in other sectors and at lower than average interest rates (Jarreau and Poncet 2014; Szamosszegi and Kyle 2011). As a policy instrument of the state, the banking sector has funneled China’s large household savings to the state-owned sector at favorable, lower-than-market interest rates (Bai and Qian 2009b; Gruin 2013). Fabre (2013: 6) notes that “[t]he financial penalties induced by the spread between low deposit rates fixed by the People’s Bank of China (2 to 4 percent) which are negative in view of inflation, and lending rates (5.5 to 7.5 percent), has cost Chinese households about 255 billion yuan (US$ 36 billion) or 4 percent of GDP in 2008.” The banking sector thus does not only loan more frequently and under better conditions to the state than to the private sector, but also at subsidized rates, which lowers the return on investments for household savings and thus also has a negative impact on household consumption.

In accord with the observations on the favorable financial treatment of the state sector, Song et al. (2011) find that private enterprises lag behind state-owned enterprises in sectors that require high volume and long-term investments. In 2006 the average capital to output ratio was 1.75 in SOEs and 0.67 in private enterprises, while the capital to labor ratio was five times higher in the state than in the private sector. This is true within industries and between industries. Even within the same industries SOEs tend to have higher capital labor and capital output ratios. Furthermore, the share of state-owned enterprises within capital-intensive industries remains high, while private enterprises continue to dominate in the labor-intensive industries (Song et al. 2011: 203-204). Deng and Liu (2015) in their study of wage differences between state-sector and private-sector enterprises conclude that the on average lower wages in the private-sector are mainly a result of the restricted access of the non-state sector to bank-based financing, inhibiting its ability to pursue capital-based industrial upgrading.

The structural position of the state sector, which has been sustained by policy, allows it to profit indirectly from the insertion of China’s economy into the world market by its labor-intensive industries. While the participation of the state sector in exports has been declining, the profitability of SOEs has continued to move in tandem with the expansion of the Chinese economy’s export share (Li et al. 2012a). This points to a linkage between the export-oriented...
sector and the state sector in which SOEs manage to valorize on the high degree of labor exploitation and the world market integration, which is explained by the fact that SOEs have in the 2000s monopolized most of the upstream industries, while the downstream industries were left in the hands of competitive foreign and private enterprises. The SOEs in the upstream sector can thus charge monopoly prices from the export-oriented manufacturing downstream sector, which would explain their high degree of profitability and their linkage to the export-performance of the economy.

Another phenomenon supporting this argument is that among state-owned enterprises, it is predominantly the central state-owned enterprises in the upstream industries that earn by far the greatest share of profits, while the state-owned enterprises remaining in the competitive downstream sector only earn very small profits or operate at a loss. The profitability of the state-sector can thus be explained by protected upstream oligopolies and monopolies, which allows them to acquire a greater share of the value produced in the downstream sector, rather than by efficiency or productivity gains (cf. Han and Zhou 2009; Liu and Shi 2011; Du and Wang 2013).

As the reproduction of capital is always social reproduction, meaning that it takes place as the circulation of value as commodities among individual capitals, the SOEs profitability is not just a function of price-markups in protected markets, but rather a rent on the surplus value produced in the downstream sectors. If this state-capitalist arrangement “seems to be working reasonably well” (Naughton 2010: 442) then it does so, because state policies have been positioned to profit by way monopoly rents from the dominant features in the Chinese accumulation regime, i.e. profit-driven accumulation based on within the highly exploitative expansion of the wage-relation. Similarly, Li et al. (2012a: 4) argue:

“Without the enlarged external demand due to international trade, downstream non-SOEs would not expand that much, and hence upstream SOEs would not be able to make outsized profit. On the other hand, without abundant labor, wages would rise immediately after the expansion of the downstream industries. Then there would be less room for the monopoly pricing on the intermediate goods charged by upstream SOEs, as international trade imposes a price ceiling on the downstream goods, and thus the upstream SOEs would not be able to maintain persistent and high profitability.”

The specific insertion of China’s state sector into the accumulation regime also reinforces the division between labor in the state sector and in the non-state sector. Arguably, the higher wages and more stable labor relations that characterize the “state bureaucratic” and “corporate bureaucratic” regimes of production of the state sector (Lüthje 2011) are hinged on its higher
than average profitability, which are in turn dependent on its strategic upstream monopolies. While the workers in the respective state-controlled industries profit from these arrangements, the monopoly profits of SOEs contribute to increase the competitive pressures and thus the high pressure on wages in the downstream sector and to the general decline of the labor income share on a macroeconomic level (Liu et al. 2013).

In combination with restricted access to finance, the state sector monopolies also affect the non-state sector’s ability to improve on its productivity by squeezing the profits required to invest in human capital and upgraded technology. The decline in productivity growth in the manufacturing sector, which we have found in the analysis of the wage-relation, is thus exacerbated by its relation of competition with the state-sector (Du et al. 2014b: 472). And as private enterprises find it difficult to raise productivity, the rising wages directly affect their profitability, which will a continued growth in real wages difficult to sustain.

5.3.6 Crisis and stimulus package

When as a result of the 2008ff. global financial crisis the implosion of markets in the US and Europe made itself felt as a severe demand-side shock for the Chinese economy, the Chinese state quickly reacted by implementing a number of policies to counteract the crisis’ worst consequences.

The initial response of the government to the crisis was to create a massive stimulus program of 4 trillion Yuan RMB, about 586 billion US$ (de Haan 2010: 764). The stimulus package emphasized investment and was thus geared precisely to sustain accumulation within the structures of the existing accumulation regime to secure reproduction in the face of an imminent shock to the circulation of capital (observe the increase in gross capital formation in GDP after 2008). Only 10% of the total package were set aside for social welfare spending, while 62% were set aside for public infrastructure investment and earthquake reconstruction in Sichuan (in comparison, the initial US stimulus package set aside more than half of its volume for income assistance) (de Haan 2010: 765).

Also in the wake of the financial crisis, the PBOC has significantly relaxed its lending policies, leading to a rapid expansion of credit. In 2009 the volume of lending totaled at 9.6 trillion yuan, almost 50% of GDP. The relaxed lending policies created a fixed asset investment spree, with fixed asset investments rising by 30.5% from 2008 to 2009 (Burdekin and Weidenmier 2015: 139). In accord with the investment focus of the stimulus program, China’s debt leverage has mainly increased in the corporate sector, where it stood at ca. 150% of GDP in 2013 (Fabre 2013: 9).
The initial impulse of the credit stimulus was realized through lending to and investment by the state-controlled sector. In 2009 fixed investment growth among manufacturing firms in the state sector had spiked at almost 45% up from earlier growth rates of 10-15%. POE fixed asset investment growth declined from the high level of ca. 35% before the crisis to 20% before the stimulus and then fluctuated at around 25%-30%. Corporate debt leverage in the state sector increased, while it declined in the private sector (Wen and Wu 2014: 17-18). This explains why the state sector’s share in industrial output halted its decline after 2008 (cf. Chart 24).

Easier access to credit has spurred investment through increased cooperation between central state-owned enterprises and local governments. In the wake of the global financial crisis, local governments have turned to SOEs to sustain local economic growth in the face of receding private investment. Between 2011 and 2013, investment cooperation between central enterprises and local governments has had a volume of more than 12 trillion yuan, threefold the 2008 stimulus package. The industries primarily targeted by investments were electricity generation, such as solar and wind power generation; chemical, petroleum and steel industries; railways, shipbuilding and automobile industries; and other areas were central SOEs already have dominant market positions (Chen and Niu 2013: 6ff.).

For local governments the investment cooperation with central SOEs yields a number of benefits. One is that local leaders performance is still to an extent measured in their ability to generate GDP and employment. Contrary to private and foreign enterprises, the central SOEs have the capability and resources to execute high volume investment projects and to provide the necessary funding thanks to their preferential access to the big 4 commercial banks and the facilitated access to credit in the wake of the financial crisis. For local governments their corporation with SOEs has the advantage of them reaching their growth targets while being able to share the costs of investment.

The credit driven stimulation of investment has further contributed to fixed asset investment growth in an economy already rife with overcapacity.

“None of the manufacturing businesses with mature technologies have had a shortage of production capacity while, as early as 2009, twenty one out of twenty four industrial sectors had excess production capacities26. That may explain why the use of industrial capacities is relatively low – around 60 percent in 2011 according to the IMF, 70 percent for traditional industries (steel, cement, aluminium) according to the National Development and Reform Commission (NDRC), and around 50 percent or much less for equipment industries in 2013.” (Fabre 2013: 9)
Chen and Niu (2013: 13-14) refer to relevant cases from the steel and cement industry. In 2012 the Ministry of Industry and Information Technology reported utilization rates of below 75% in the cement and steel industries. Nevertheless, in the same year companies such as Bao Steel and Fanchenggang Iron and Steel in Guangxi invested large sums (69 billion yuan in the case of Bao Steel) to expand production capacity. In 2011, the China Building Materials Group (Zhongguo jiancai jituan) invested more than 30 billion Yuan RMB to build a new high capacity plant in Chongqing.

The collusion of local governments and the central state-owned enterprises has also contributed to the emergence of a housing bubble. A large share of the stimulus policies after 2008 were financed by local governments through the sale of land-use rights, which are expropriated from their current users for a low compensation and sold at vastly expanded prices to real estate developers. As industrial overcapacities especially in the steel and cement sectors are high, real estate development projects serve as an important outlet for these upstream industries. In 2010, more than 30% of fixed asset investment went into residential or nonresidential real estate investment. The high prices paid for land use rights by real estate developers are meanwhile passed on to future tenants, leading to the explosion of housing prices in China’s cities (Fabre 2013: 11ff.).

As a result of the mainly credit-financed stimulus policies, China’s total debt by mid 2014 was estimated at 251% of GDP up from 147% of GDP in 2008. At an average 17% annually, credit growth was significantly higher than that of other economies, and almost twice as high as GDP growth, which averaged at below 9% during the same period, and thus indicates a low profitability of credit driven investment and is, of course, unsustainable over extended periods. China’s debt to GDP ratio is comparable to that of high-income economies, like Germany, South Korea, France, the United States, et al. and significantly higher than that of other emerging economies (Anderlini 2014).

China’s debt is local and not subject to the interests and decisions of foreign investors and international debt and credit markets, as has been the case for many countries during the Asian crisis or recently in Portugal, Greece, Ireland and Spain. As sovereign debt, and with the PBOC and the most important commercial banks under the control of government policies, the debt itself appears to present little risk of exposure within the Chinese context.

The true risk of debt induced investment and public consumption in the Chinese case, however, is that it perpetuates and exacerbates the endogenous contradictions, i.e. the tendency to overaccumulation and a declining profit rate, within the already unbalanced profit-led and investment-driven accumulation regime. Despite the high growth rates created by the state’s
stimulus package, TFP has declined dramatically after 2008 (Growth 2014). This suggests that while post-crisis policies were successful in bolstering aggregate demand, they were not able to address and arguably exacerbated the more fundamental problem in the Chinese economy of declining productivity and profitability. The continuation of the pre-crisis patterns of accumulation affected by post-crisis policies may thus prevent timely changes in the accumulation regime, cause a deepening of the crisis, leading China into what has been debated as the “Middle Income Trap” (cf. Cai 2012; Chen and Li 2015; Du et al. 2014b).

5.3.7 Summary

Since ca. 2008, Chinese capitalism is experiencing a conjuncture of two crises, both of which are related to its development model, but have different sources, one that is proximately exogenous, and one that is endogenous. The particular way in which these crises play out in the Chinese context is closely related to the forms of competition analyzed above.

As has been discussed in our chapter on the wage relation, the underlying conditions for the rapid expansion of accumulation were the restructuring of employment in the urban sector, the massive transfer of labor from the countryside into urban industries under the huji system, and a repressive labor relations system, which provided a large and highly exploitable industrial reserve army. The associated accumulation regime is one of profit-led investment, relatively low domestic consumption, and high dependence on export markets.

The restructuring of employment in the urban industrial sector was the precondition for the restructuring of the state-owned enterprise sector, which through labor force retrenchment, strategic restructuring, and state protectionism was able to monopolize or oligopolize capital-intensive industries and upstream markets to achieve a high degree of profitability, which is only partially explained by gains in productivity, and partially by monopoly rents.

Meanwhile, the downstream sector was increasingly dominated by the labor intensive and export-oriented manufacturing sector, which created the demand for the state-controlled upstream sectors while itself depended on the world market for sufficient aggregate demand. In a highly competitive environment with abundant cheap labor and under the conditions of financial repression, the privately and foreign owned labor-intensive manufacturing sector pursued accumulation that was extensive, i.e. aimed at subsuming a growing amount of labor under the capitalist production process, rather than intensive, i.e. pursuing productivity gains through technological development and human capital accumulation.

This is not to imply that no technological innovation has taken place in the manufacturing sectors, but rather that the restructuring of the wage relation and re-organization of production
processes were the dominant drivers of productivity gains causing a rise in the rate of surplus value, whereas the contribution of technological progress to productivity today is insufficient to support a continued rise in the rate of surplus value in the face of rising wages and reductions in work hours.

While the downstream manufacturing sectors are exposed to very high degrees of competition, the top tier industries exist in an environment of managed and limited competition. The monopolization of upstream industries means that the state sector can make extra profits on the surplus value created in the downstream sectors, which explains their higher than average share of profit in sales revenue.

Arguably, the competitive wages and input price pressures on the manufacturing sector, in conjunction with limited access to credit, inhibit the ability of enterprises in the downstream sector, especially those in highly competitive, labor intensive and export oriented sectors, to make long-term, large-volume productivity enhancing investments to an extent that would be sufficient to sustain profitability. The particular structural division between state-dominated and protected, capital-intensive upstream sectors and private-foreign dominated, labor-intensive competitive sectors, thus appears to exacerbate the negative effects of the profit-led investment regime on the ages share in the labor-intensive sector and at the same time explains, how SOEs were able to sustain a dominant position on the “commanding heights” of the economy, by diverting profits from the expansion of the labor-intensive manufacturing sector, which is at the center of the accumulation dynamic.

In a macroeconomic perspective, the contradictions of the current accumulation regime have begun to make themselves felt since the mid-2000s, when wages began to rise faster than productivity, causing the rate of surplus value to stagnate. Driven by competition, investment nevertheless continued unabated, causing the composition of capital to increase. A declining capacity utilization exacerbates the negative effect of the rising capital composition on the average rate of profit. This is in the 2000s only a tendency towards a crisis of overaccumulation apparent in declining productivity and profits.

The other central contradiction of the Chinese accumulation regime, that of overproduction of commodities as a result of faster investment than consumption growth, asserts itself in the demand-side shock caused by the global financial crisis, which is superimposed on the crisis tendencies caused by overaccumulation.

This shock is countered by stimulus policies mainly financed through credit (and, arguably, by expansionary monetary policies in the most important market for Chinese exports, the USA). These policies have apparently been able to curb the worst feared consequences of the global
crisis for the Chinese economy, such as high and sustained unemployment. At the same time, however, the stimulus policies have exacerbated the tendency to overaccumulation by spurring credit-fueled expansion of investment primarily through the state-sector, giving rise to the phenomenon of “state advances, private retreats” (国进民退: guo jin min tui).

The debt and credit-financed stimulus policies thus only present a temporary fix, but not a solution, to the Chinese economy’s reliance on exports due to the high-investment, low-consumption profit-led accumulation regime, and further contributes to the tendency towards overaccumulation associated with that accumulation regime. What we witness currently then, is the conjuncture of two crises hinging on distinct but related contradictions in the Chinese accumulation regime.
6 Conclusion

6.1 A comparative perspective on capitalism

The general aim of this thesis has been to study China’s capitalist development through a theoretical framework opening a comparative perspective that highlights the relationship of general and specific features of capitalism within its dynamic and contradictory process of development.

A potentially comparative perspective on an empirical phenomenon requires a theoretical framework, which delivers a general definition of the object of study (what is this object a case of?) and of the relationship of its general properties. This framework, by providing certain analytical concepts, determines the empirical focus of an analysis and the interpretation of the empirical findings. This makes these findings in principle comparable to other cases researched under a similar theoretical framework. Such a comparison may then allow for generalizable statements about capitalist development under \textit{ceteris paribus} conditions and they may contribute to the further development of the theoretical framework.

Based on Marx and the regulation approach, our theoretical approach frames capitalism as a highly dynamic socioeconomic order. This dynamism is the result of capitalism’s fundamental social relations and their contradictions, 1) the capital-labor relation and the struggle over surplus value production, and 2) capitalist competition as the unity of the competition of individual capitals and their combined social reproduction. These contradictions drive the continued expansion of capitalism qua accumulation as an irreversible process of social transformation and thus historical development.

A comparative perspective on capitalism should aim to capture this dynamism and its underlying contradictions. Much of the comparative capitalism literature, particularly of the Varieties of Capitalism kind, has framed the problem of capitalist diversity as a problem of institutional configurations and change \textit{per se}, overlaying an ahistorical and in this sense static concept of capitalism as market economy. In contrast, in our theoretical framework change appears not so much as a theoretical puzzle, but is omnipresent in the reproduction of the contradictions of capitalist accumulation mediated within specific institutional settings, as well as in the limits of reproduction manifest in crisis. To adequately represent these developments, our analysis includes a strong focus on the dynamics of economic development often absent
from the institutional focus of Comparative Capitalism literature, which thus has a hard time accounting for the dynamic relation of accumulation and institutions.

We have specified the most general properties of capitalism in our discussion of Marx’s theory of Capital. This concerned the most abstract and general properties of the accumulation and circulation of capital as the two components of capitalist reproduction, their underlying social relations, contradictions and crisis tendencies. The less abstract intermediate analytical concepts provided *inter alia* by the works of the regulation approach have allowed us to structure and empirically focus our interpretative study of the Chinese case and thus to specify on the one hand the relationship of the general properties of capitalism and its concrete form as the relationship between capitalist reproduction and its institutional setting.

To conclude this study, we will now summarize the most salient features of Chinese capitalism, their reproduction, contradictions and crises. We begin with a schematic illustration of these relations, which together form the features of the mode of development.

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6.2 China’s accumulation regime, its contradictions, their reproduction and crisis

In our macroeconomic discussion in chapter 4, we analyzed the Chinese accumulation regime from the perspective of accumulation and from the perspective of circulation, which are the two elements that together constitute the reproduction of capital.

As we have discussed theoretically, an accumulation regime is at its core a process of social transformation in which the accumulation of capital goes hand-in-hand with an increase in the rate of surplus value. This process of social transformation is capitalist, insofar as it transforms the relations of the exploitation of labor by capital within the general framework of reproduction characterized by decentralized commodity production. Of course such a fundamental transformative process has social implications far beyond its immediate relation to the accumulation process, which nevertheless remains its driving force.

The specific patterns of the reproduction of capital are contingent on the specific form that the exploitation of labor by capital takes in this process of social transformation. The rate of surplus value is the “pivot” of capitalist accumulation because the concrete modalities of surplus value production are central in determining not only the patterns of accumulation, but also the specific patterns of circulation, i.e. the relation of profit and investment, as well as wages and consumption within an accumulation regime. Hence the whole of the relations and processes of capitalist reproduction are hinged on the pivot of the concrete modalities of surplus value production.

In the Chinese case, the process of social transformation that increases the rate of surplus value within the overall accumulation regime takes the form of a grand restructuring of the wage relation from two sides: on the one hand, the abolition of socialist employment relations and labor retrenchment in the urban labor market, and on the other hand rural-urban migration under the huji system, both of which cause a large pool of surplus labor to be made available to capital under conditions that support its almost unrestricted exploitation. The central role in the economic exploitation of this industrial reserve army newly created by policy is taken predominantly by the expansion of the labor-intensive, initially foreign but more and more privately dominated, export-oriented manufacturing sector, which is rapidly expanding since the late 1990s.

If our criterion for determining the character of the Chinese accumulation regime is the rate of surplus value and the character of the processes of social transformation that causes its rise, then we can characterize the Chinese accumulation regime as *predominantly extensive*. This characterization is valid despite the heterogeneity of enterprise forms, labor relation forms and
production regimes encountered in Chinese capitalism, for conceptual and empirical reasons: conceptually, because our theoretical framework characterizes an accumulation regime according to the modalities of surplus value production; and empirically because our analyses of the wage relation and of forms of competition have revealed the centrality of the extensive mode of the wage relation for surplus value production and the rise of enterprise forms associated with this mode. In this context not the static snap-shots picturing the heterogeneity of relations in Chinese capitalism is relevant for a comparative perspective, but rather the dominant features of the developmental dynamics that continually reshape its composition.

The predominantly extensive accumulation process is characterized by an emphasis on profits and investment over wages and consumption as circuits for the reproduction of capital, which is clearly observable in the Chinese case. Initially, wages grow much slower than labor productivity due to labor surplus conditions. The process of accumulation and surplus value production takes the form of a quantitative rather than a qualitative expansion of capital fueled by a sustained expansion of inputs in labor and resources. Within the enterprise, its absolute forms characterize surplus value production, i.e. the extension of the working day and the intensification of work qua sequentialization and de-skilling. Macro-economically, this nevertheless causes a significant rise in the rate of surplus value, which is a relative increase in the amount of surplus over necessary labor, due to the initial transfer of labor into more productive (more exploitative) capitalist production relations. Also due to these conditions, gains in capital productivity by technical innovation appear unnecessary, undesirable, and possibly unachievable due to the investments required and the only marginal gains achieved in the face of competition. In this context, wages are primarily a cost factor rather than a source of demand.

This is in contrast to a predominantly intensive regime of accumulation, which is characterized by the growth of relative surplus value achieved by increases in the productivity of capital (or, to be more exact, of labor due to capital) on the basis of technological change. In such a regime of accumulation, the increases in capital productivity allow for wages and working class consumption to rise, while the rate of surplus value and profits can still rise faster. Increases in the rate of surplus value are accompanied by an expansion of mass consumption sufficient to enable relatively fast-paced and even accumulation between the two departments of production.

In the Chinese accumulation regime, however, the conditions that cause a rise in the rate of surplus value, which provides the foundation for accumulation and profits, are the same that prevent a sufficient growth in wages and consumption: this is the central contradiction of the
Chinese and more generally the extensive type of accumulation regime. This central contradiction is reproduced in two developments:

1) the tendency towards disproportionate development caused by the emphasis of investment over consumption causing overproduction in department II;

2) the tendency towards overaccumulation, wherein the rise of the organic composition of capital is faster than the rise in the rate of surplus value due to the intensification of the class struggle combined with the limits of technological advances in productivity.

Ad 1) To once again cite Aglietta (1979: 71), in the typical extensive accumulation regime, the “combined development of the two departments of production is achieved only with difficulty, the pace of accumulation encountering recurrent obstacles”. This is due to the highly disproportionate character of extensive development, where in the typical case (!) the pace of accumulation is limited due to a combination of overaccumulation and overproduction in the relation of the two departments of production.

Quite to the contrary, the Chinese case is characterized by sustained very high rates of accumulation and GDP growth, despite its predominantly extensive character and the associated tendency to disproportionate development, which is empirically witnessed in the developing apart of the income and expenditure components of GDP. These contradictions of the extensive accumulation regime are compensated for by the Chinese economy’s integration into the world market, which expands the boundaries of aggregate demand that would otherwise present repeated obstacles to the expansion of the labor intensive manufacturing sector and by extension, the whole economy.

In the Harveyan sense, the export-orientation of certain sectors of the Chinese economy thus presents a spatial fixation (or ‘fix’) by which the endogenous contradictions of the accumulation regime, the contradictions of disproportionate development, are moved to other spheres of the global capitalist economy. As the global financial crisis and its consequences for the Chinese economy have strikingly demonstrated, such fixations cannot deliver real solutions to the contradictions of capitalist reproduction, but do indeed only move them around in time and space, which may postpone and relocate, but not prevent, the crisis that ensues as a result of the continued reproduction of these contradictions.

The relation between the US subprime crisis and the Chinese accumulation regime is not coincidental. The crisis of Trans-Atlantic Fordism since the 1970s has given rise to what we can call a financialized accumulation regime in the US and other countries (i.e. Stockhammer 2008), in which, due to declining profitability, productive investment is deemphasized. Instead,
profits are sourced from the integration of financialized merchant capital, companies like Apple or Adidas, into global value chains, to which China has become an integral part in the past two decades (cf. Froud et al. 2014; Milberg 2008). Domestically, financialized capital created the foundations for debt-induced household consumption in the US and other countries, which in turn provide the markets for Chinese exports. Insufficient consumption in China and debt-fueled consumption in the US and other markets are thus two intimately related aspects of the same contradiction.

The relation of the Chinese accumulation regime to the reproduction of global capitalism understood as the relation of multiple accumulation regimes integrated by common contradictions, thus presents itself as an obvious path for future research. What is for now important to assert here, however, is that the impact of the global financial crisis on the Chinese economy cannot simply be understood as an external shock caused by otherwise unrelated developments, but that this crisis is a product of the contradictions of the Chinese accumulation regime, because a) the high pace and relatively smooth process of accumulation in the extensive regime depend on the export fix to work and b) China’s integration into the world economy thus became itself part of and subject to contradictions, which contributed to the US subprime and by extension global financial crisis.

*Ad 2) The rapid rise in the rate of surplus value between 1997-2003 is the result of the initial commodification of large amounts of surplus labor and its integration into capitalist relations of production. The increase in the rate of surplus value is mainly the result of methods of absolute surplus value production, i.e. the expansion of surplus value production by growing the labor force and extending the working day, which together make for a rapid increase of hours worked as surplus labor. Certainly also important is the intensification of labor through its integration into an industrial, predominantly Taylorist (sequentialization, de-skilling), organization of work.

The industrial reserve army supplying the process of extensive accumulation has initially been mustered by workers laid-off from the urban state sector and then predominantly by rural-urban migrants, whose integration into urban society has been restricted by the *huji* system. The extension of the wage relation is accompanied by policies supporting the informalization of labor markets and employment within a labor relations system, which clearly favors management over workers’ interests, prohibits the free association of workers, and atomizes labor conflict in an individualized arbitration and litigation process.

Due to the rise in the rate of surplus value caused by the restructuring of the wage relation, a high rate of profit could be sustained until ca. 2005, despite a rapidly growing organic
composition of capital and despite the associated fall of capital productivity and a declining capacity utilization.

The dynamic characteristics of the extensive accumulation process itself have created the conditions that have set limits to sustained increases in economic exploitation of labor and the rate of surplus value. On the one hand, the rapid extensive expansion of capital has brought with it an equally rapid decline in the availability of labor, which has led to the phenomenon of labor shortages since the mid-2000s and heightened competition between capitals and between localities for labor, putting upward pressure on (minimum legal) wages. On the other hand, the proletarianization of migrant workers, the spatial concentration of work and workers (the factory floor, the dormitory, the factory compound, the industrial cluster, the city, the region) and the insertion of work units into local and regional clusters of production and global value chains, have considerably increased the structural bargaining power of workers, which to a certain extent makes up for their lack of associational bargaining power within the Chinese framework of labor relations. This has in recent years allowed workers to switch from a defensive stance to a more offensive stance in the class struggle against capital, demanding higher wages, shorter working hours and generally better working conditions. At the same time, technological progress was apparently not sufficient to compensate the decline in exploitation caused by higher wages and shorter working hours.

These developments have since the mid-2000s caused a stagnation and decline in the rate of surplus value, though the latter is by no means as pronounced as its previous increase. Nevertheless, the decline is sufficiently pronounced so that the rise in the organic composition of capital can bring to bear its negative effect on the average rate of profit, which has declined significantly between 2004-2009.

Both the indicators of the rate of surplus value and of the rate of profit show a moderate ($e'$) or very moderate ($r'$) recovery after 2009. Even though a final appreciation of this development is not possible here, the developments can most likely be explained as a result of the debt and credit financed stimulus package and investment drives after 2008.

In any case, in the years following 2008, the Chinese accumulation regime is faced with the conjuncture of two crises, one being a crisis of disproportionate development, which has been exposed by the demand-side shock caused by the global financial crisis, the other a crisis of overaccumulation, in which the accumulation of capital causes the rate of profit to decline, because a sufficient increase in labor productivity cannot be achieved under the current mode of exploitation.
The final evaluation of the character of crises and their meaning for the prevailing mode of development is only possible in retrospect and with some distance that allows for an evaluation of its medium- or even long-term consequences. We will nevertheless attempt a preliminary evaluation. We have already established that the consequences of the global financial crisis for the Chinese economy are not sufficiently understood as an external shock, but rather that this crisis is in part the product of the contradictions of the Chinese accumulation regime itself and the spatio-temporal fix that the mode of regulation has provided for this contradiction. Provided that no fundamental changes happen in the global accumulation regime and its mode of regulation, which provide the context for this fix, the shock produced by the global financial crisis may very well be interpreted as a *cyclical crisis*, a periodic occurrence that wipes out the disequilibria caused by the disproportionate tendencies of capitalist development in China and its asymmetric insertion into the world economy (cf. Boyer 1990: 50). In the Chinese case, this cyclical crisis takes the form of an especially violent shock because the spatio-temporal fix of asymmetric world market integration provided additional room and time for its contradictions to mature and for disequilibria to build up.

The decline in the profit rate associated with the crisis of overaccumulation, if not halted, threatens the viability of capitalist reproduction per se within the current mode of development. Therefore, this crisis appears to be much more fundamental in character than the crisis of disproportionality and overproduction, which exposed China to the shock of the global financial crisis. As we have discussed previously, the institutional forms of the wage relation and of competition, which have contributed to the successful reproduction of the extensive accumulation regime and its high growth rates during the 2000s, at the same time contribute to the reproduction and exacerbation of its contradictions, which now show obvious signs of crisis. The crisis of overaccumulation may thus be attributed to the maturation and exhaustion of the current regime of accumulation and its associated mode of regulation and would thus present a *crisis in the mode of development*. To restore the viability of capitalist reproduction would then require a comprehensive restructuring of the accumulation regime and the mode of regulation, a process that is likely to produce significant social, economic and political upheaval.

### 6.3 Contradiction, reproduction and crisis in the mode of regulation

We have focused our analysis of the mode of regulation on the two institutional forms of the wage relation and competition as the forms central for the mediation of capitalist reproduction. The roles of credit and world market integration have been discussed where
relevant for the analysis of these central forms. With a view to the theoretical problems of the relation of institutions and growth in the Comparative Capitalism literature, we will here summarily highlight the role of the institutional forms in capitalist accumulation. The focus here is to show how the relevant institutions contribute to accumulation by mediating the reproduction of contradictions and thus becoming part of the contradiction itself. This is also the process by which institutions lend a historically specific form to the general contradictions of capitalist reproduction.

6.3.1 The wage-relation

The wage-relation is characterized by institutional arrangements, which facilitated the rapid expansion of the capital relation. This mode of extensive accumulation has, however, quickly produced contradictions that will likely prove difficult to overcome in future development.

Initially, the retrenchment of state labor and the migration of hundreds of millions nongmingong to the urban production centers have created a large surplus labor pool that provided the foundation for the extensive accumulation of capital. The surplus supply of labor provided the conditions under which surplus value production could be expanded by methods that require comparatively little technological investment, i.e. the Taylorist re-organization of work, the expansion of the working day, the normalization of extensive overtime, flexible and informal labor relations, etc. The repressive labor relations system as well as the huji system, which lowers the costs of reproduction of labor by excluding workers from full integration into their urban surroundings, provide an institutional framework for this development and appear to be especially conductive to this particular mode of the wage-relation, which can be characterized as competitive and Taylorian.

However, in the same amount that the huji and the labor relations system contribute to the effectiveness of the wage-relation in surplus value production they also contribute to the reproduction of its particular contradictions, which have exposed the dependence of China’s economy on the world market for demand and have caused a decline in the profit rate. To overcome these contradictions-turned-crises, the wage-relation will have to be reshaped on the one hand to increase working class consumption as a share of aggregate demand (meaning that consumption would have to grow faster than investments), and on the other hand to increase the productivity of labor (increase the rate of surplus value) at a pace sufficiently high to compensate for the negative effect of the composition of capital on the profit rate. Already in this very general perspective, these to requirements are difficult to reconcile with one another,
but the difficulties associated with such a project of “re-balancing” in the Chinese context appear to be even greater.

Both low working class consumption and the limits to labor productivity are especially salient in relation to the *huji* system. Originally, this system has supported the high degrees of exploitation leading to the rise of surplus value. With a view to current and future developments, however, the *huji* system exacerbates both the problem of low working class consumption, as the *nongmingong* are only semi-integrated into urban society, and the problem of achieving technology-driven productivity gains, as a vast share of the working class and their children remain excluded from adequate access to educational institutions.

Likewise, the current labor relations system has as of yet not been able to provide a working framework for collective bargaining, which would be a basic requirement to come to any sort of coordination of productivity and consumption growth within industry branches or on a regional level on the basis of a stabilized, less competitive wage-relation that would also support, for example, the longer-term employment relations required for on-the-job human capital formation required in tandem with technology-led productivity growth. It is difficult to imagine how collective bargaining should be implemented without the participation of autonomous organizations representing employers and employees. This would, however, severely undermine the CPC’s role of supreme arbiter of social relations, so that any future solution to the contradictions of the wage relation will be limited by the prerogatives imposed by the CPC’s mode of political rule.

In this sense, the institutions that have shaped the wage-relation lend particular form to the general contradictions reproduced in the accumulation regime and become therefore themselves an integral part of these contradictions.

### 6.3.2 Competition

Competition in Chinese capitalism is characterized by the segmentation between the predominantly state-controlled capital-intensive sectors and the predominantly privately owned labor-intensive sector. This division is of course a generalization of and an abstraction from the real complexity of the relations of competition in China, but it has served to illustrate how the state sector and the capital-intensive industries were able to prosper and profit in an accumulation regime shaped by the dynamics of the expansion of the private, labor-intensive sector.

This segmented form of competition, while historically rooted in the industrial structure of the previous socialist period of development, has been created and shaped by policies aimed at
securing “strategic” positions for the state-controlled enterprises by arranging for limited and managed competition in the form of administrative oligopolies or even monopolies within certain sectors of the economy, to which access for non-state controlled firms is restricted.

The segmentation of competition is furthermore reinforced by the preferential access to credit granted to the state-sector by the state-controlled banking sector and restricted access for the private sector. Banks lend more readily and at below market rates to the state-sector, while the private sector continues to rely on retained profits for financing investments to a much higher degree than the state sector. In effect, this policy limits the ability of the private sector to pursue long-term industrial upgrading projects and emphasizes the need for short-term profitability in an already highly competitive environment.

As these policies confirm the patterns of profit-led investment in the labor-intensive private sector, they also influence patterns of consumption. The on average lower wages in the private-sector are also a result of the restricted access of the non-state sector to bank-based financing, because it inhibits the pursuance of technology-driven productivity gains. The state sector’s favorable treatment by the state-controlled banking sector arguably also puts additional limits on consumption by reducing the potentially higher interest yield of household savings, if the state sector was lent to at market rates.

The strategic positioning of the state-sector within the upstream industries allows it to profit from the expansion of the labor-intensive downstream sector, without being exposed to similarly high levels of competition in markets at home or abroad. The diversion of profits to the capital-intensive state-sector by way of mark-up pricing again puts additional competitive pressures on other sectors of the economy, which together with their limited access to credit financing, contributes to the confirmation of the prevailing extensive mode of accumulation and thus the exacerbation of its associated contradictions.

As is the case with the institutions of the wage relation, the institutions shaping the forms of competition thus also contribute to the reproduction and exacerbation of the general contradictions of the salient features of the extensive regime of accumulation.

6.3.3 State, capitalist accumulation, and crisis

There has been no dedicated chapter on the state as an institutional form per se, but we believe that the role of the Chinese party-state for capitalist development in China has become sufficiently clear in our analysis of the wage relation and competition.

States in capitalism do not and cannot assume the role of neutral arbiter standing above the class relations and the relations of competition underlying the capitalist accumulation process,
which is especially true in the Chinese case. While in the modern liberal representative state the relation of state and economy takes the form of separation, the Chinese state and the CPC remain active parties within all institutions and on all levels relevant to the capitalist reproduction process.

This is especially true for the social relations at the heart of capitalist accumulation, the relation between labor and capital, of surplus value production qua economic exploitation. The historical foundations for the extensive regime of accumulation of the 1990s and 2000s were the failure of reform socialism in the 1980s and the bloody confrontation of the party-state with its own people, including the urban working class, in the streets of its capital. While the reforms of the 1980s may in retrospect be viewed as the failed attempt to reconcile socialist labor and the market, in the post-Tiananmen period the CPC has turned to policies in pursuit of the comprehensive commodification of labor and thus to a capitalist socioeconomic order.

The huji system and the labor relations system, two core institutions shaping the wage relation, have contributed to the workings of extensive accumulation with particular fortitude, as they have contributed to the sharpening of its contradictions. The particular forms of both institutions are tied to the organizational form of the party-state and its authoritarian rule and it is through these institutions that the party-state has actively contributed to the expansion of the capital relation, the submission of labor under capital under particularly exploitative conditions.

In this context, the particular way that the state-controlled sector of the economy has inserted itself into the relations of competition not only allows it to profit from the extensive expansion of accumulation, but once again it also contributes to the exacerbation of its contradictions. The Chinese state and the Communist Party thus do not stand aloof from the development of capitalism; instead they remain immediately involved in the institutions shaping its development, not only as regulator, but as active party.

### 6.4 Final remarks

This doctoral thesis has aimed to make contributions to the theoretical debate in the Comparative Capitalism literature as well as to the debate on China’s capitalist development. Towards both aims, we hope to have demonstrated the value of re-engaging on a fundamental level with the theoretical foundations of our understanding of capitalism.

With regard to the theoretical debate, we have shown that capitalism is not adequately captured in the concept of market economy, as is usually the case in the Comparative Capitalism literature. Attempts by the social sciences to supplement the concept of market economy
without critically questioning its fundamental assumptions have produced institutionalist and sociological facades for an otherwise static and ahistorical conception of capitalism, and have thus limited our ability to understand capitalism as a contradictory and dynamic socioeconomic order in a permanent state of transformation.

A comparative perspective on capitalism that aims to capture these contradictions and dynamics thus seems to provide a more adequate approach to its analysis than the construction of static ideal-typical configurations. We believe that the combination of Marx’s *Capital* and regulation theory that has been employed in this thesis provides a fruitful combination in this regard, though other perspectives, such as that of Polanyi, may of course prove equally suitable. In any case, future theoretical and empirical research on capitalism should aim to tear down the disciplinary boundaries between economics and the other social sciences, because it is precisely these boundaries, which are responsible for the reproduction of a limited and compartmentalized understanding of capitalism as a socioeconomic order.

The contradictory and dynamic character of capitalism is most strikingly revealed in times of crisis, which it inevitably produces with regularity, as has once again become abundantly clear in the wake of the Global Financial Crisis of 2008. Any crisis of capitalism is the result of the interaction of its general properties as a socioeconomic order and the specific political, social and economic circumstances within and through which capitalism and its contradictions reproduce in a specific historical form. Crises thus not only reveal the contradictory character of capitalism in general, but also the specific relationships of i.e. institutions and capitalist accumulation as a process of social transformation. Crises may thus present the most suitable point of departure for any comparative study of capitalism as the study of the relationship of its general and specific properties in a given case, which at the same time explains the origins and forms of capitalist crises.

How this may be done has hopefully become clear in our case study of capitalism in China. In it, its most general patterns of capitalist development have been related to its specific institutional configurations to show how and in which form contradictions and crisis tendencies are reproduced. With the notion of reproduction of capitalist accumulation within and through institutions we have identified at the same time the sources for the rapid economic growth of China’s capitalist economy in the past 20 years, as well as the sources for the current crises and crisis tendencies. We hope that based on the broad analytical perspective developed here, further research may inquire with more detail and care into specific features of and their relationship to China’s capitalist political economy, especially with regard to the role of party and state, which in this analysis have always been implied, but rarely explicitly studied,
reveal behind the veil of governance and regulation once again the role of political rule, conflict, and violence in Chinese capitalism.
References


Bai, Chong’en/Qian, Zhenjie (2009b) “Who is the predator, who the prey?—an analysis of changes in the state of China’s national income distribution”, Social Sciences in China, 30(4), 179-205.


Chen, Xiangguang/Li, Kege (2015) “Kuayue zhongdeng shouru xianjing de jieji moshi tantao (Exploration on the accumulation patterns to overcome the Middle-Income Trap)”, Jiaoxue yu yanjiu, 2, 44-49.


Deng, Quheng (2007) “Chengzhen jumin yu liudong renkou de shouru chayi – jiyu Oaxaca-Blinder he Quantile fangfa de fenjie (Income disparity between urban residents and the floating population – an analysis based on Oaxac-Blinder and Quantile methods)”, Zhongguo Renkou Kexue, 2, 8-16.

Deng, Wei/Liu, Aijun (2015) “Guoyou bumen yu fei guoyou bumen zhi jian heyi cunzai gongzi chayi?—Yi ge jinrong de shijiao (Why are there wage differences between the state-owned sector and the non-state-owned sector? A finance perspective)?”, Jingji Wenti, 1, 77-83.


Fang, Fuqian (2009) “Zhongguo jumin xiaofei xuqiu buzu yuaninyin yanjiu–jiyu Zhongguo chengxiang fen sheng shuju (Research on the causes of inadequate consumer demand among Chinese residents–Based on data for urban and rural areas in different provinces)”, Zhongguo Shehui Kexue, (2), 68-82.


Li, Yang/Yin, Jianfeng (2005) “Laodongli zhuanyi guocheng zhong de gao chuxu, gao touzi he Zhongguo jingji zengzhang (High saving rate, high investment rate during labor transition and Chinese economic growth)”, Jingji Yanjiu, (2), 4-15.


Li, Zhongjin et al. (2012b) “Shengcun gongzi, chaoshi laodong yu Zhongguo jingji de ke chixu fazhan (A living wage, overtime work an China’s economic sustainability)”, Zhengzhi Jingji Xue Pinglun, 3(2), 35-57.


Naughton, Barry (2008b) “SASAC and rising corporate power in China”, China Leadership Monitor, 24(2).

Naughton, Barry (2010) “China’s distinctive system: can it be a model for others?”, Journal of Contemporary China, 19(65), 437-460.


Piovani, Chiara/Li, Minqi (2011) “One hundred million jobs for the Chinese workers! Why China’s current model of development is unsustainable and how a progressive economic program can help the Chinese workers, the Chinese economy, and China’s environment”, Review of Radical Political Economics, 43(1), 77-94.


Taylor, Bill/Li, Qi (2007) “Is the ACFTU a union and does it matter?”, Journal of Industrial Relations, 49(5), 701-715.


Xu, Xianchun (2011) “Dangqian woguo shouru fenpei yanjiu zhong de ruogan wenti (Some issues in current research on national income distribution)”, Bijiao, 6.

Xu, Xianchun (2013) “Zhunque lijie Zhongguo de shouru, xiaofei he touzi (Accurately understanding the income, consumption and investment in China)”, Zhongguo Shehui Kexue, 2, 4-24.


Statistical Sources


## Data Appendix

### Estimation of the rate of surplus value

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Source: China Statistical Yearbook, various years, as elaborated in chapter 4. Data at current prices, 100 million yuan RMB
### Estimation of value composition of capital

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Source: China Statistical Yearbook, various years, as elaborated in chapter 4. Data at current prices, 100 million yuan RMB
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Source: China Statistical Yearbook, various years, as elaborated in chapter 4. Data at current prices, 100 million yuan RMB
## Estimation of capital stock

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Source: China Statistical Yearbook, various years, as elaborated in chapter 4. Data at current prices, 100 million yuan RMB
## Income Approach Components of GDP, 1993-2011

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<th>Year</th>
<th>Compensation of Employees</th>
<th>Depreciation of Fixed Assets</th>
<th>Net Taxes on Production</th>
<th>Operating Surplus (Net)</th>
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Source: China Statistical Yearbook, various years, as elaborated in chapter 4. Data at current prices, 100 million yuan RMB.

Years 2004-2008 modified according to method outlined in Molero-Simarro, 2011 and Zhou et al., 2010.