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From the financial crisis to the next eleven: limits and contradictions in the Korean process of capital accumulation

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This paper examines the South Korean economic crisis of 1997–1998 and the subsequent recovery. For this, it first analyses the specific characteristics and long-term development of the process capital accumulation there. The paper claims that, as in the rest of East Asia, capital accumulation in Korea has, since the mid-1960s, revolved around the production of specific industrial goods for world markets using the relatively cheap and disciplined local workforce for simplified labour-processes as appendage of the machine or in manual assembly operations. This modality of accumulation resulted from changes in the forms of production of relative surplus-value on a global scale through the development of computerisation and robotisation, and the concomitant transformation in the productive attributes of the collective worker of large-scale industry. The 1997–1998 financial-cum-economic crisis, as well as the foundations and characteristics of the subsequent recovery, are understood as manifestations of the contradictory dynamics of this specific form of capitalist development.

Keywords: South Korea; capital accumulation; financial crisis; recovery

JEL classifications: F63; O1; O2; O53

1. Introduction

The Korean economy has undergone one of the most significant structural transformations of the post Second World War (WWII) period. In only one generation, Korea went from being one of the most backward ‘Third World’ nations to become a global industrial powerhouse. In 1966, Korean per-capita gross domestic product (GDP) was only 2.5% of that of the USA. It reached 50% in 1996, when the country joined the Organisation for Economic Co-operation and Development (OECD).¹ A year later, however, Korea was experiencing, together with most of East Asia, a large-scale financial crisis that resulted in the sharp contraction of economic activity. In no time, the country went from a textbook example of a ‘successful’ developmental experience to the opposite. Yet, when mainstream economists were forecasting a bleak future, Korea came back on track and entered a new phase of export-led economic growth and industrial upgrading to the point that financial-sector gurus now put it amongst the ‘emerging’ economies that will soon catch-up with the West in terms of per-capita output and living standards, the leading of the so-called next eleven.² For those interested in the process of economic development, the comprehension of the Korean 1997–1998 crisis and its subsequent, unexpected recovery has become as important as the understanding of the previous ‘miracle’.

Different explanations have been advanced to account for the sharp 1997–1998 financial-cum-economic crisis. In general terms, these can be divided in two groups. On one

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hand, there are authors who focus on the way in which industrial and trade policies implemented during the 1990s created the conditions for the crisis to occur in the event of external shocks. Thus, on the other hand, some authors emphasise the role of state interventions in the foreign-exchange market in generating the overvaluation of the Won and, hence, the emergence of current-account deficits which needed to be financed with external loans (Corsetti et al. 1998). This account, however, fails to notice that the exchange rate was hardly overvalued in the run-up to the financial crisis (Chopra et al. 2001, 12) and that external loans had contributed to capital formation in Korea during most of its economic ‘miracle’.³ Others point at the way in which premature, incomplete and poorly regulated capital-account liberalisation increased Korea’s vulnerability to external shocks (Radelet and Sachs 1998). Yet, they fail to notice that Korean economic growth slowed markedly already in 1996, well before capital inflows reversed and liquidity problems arose. A third group claims that it was the state’s meddling in financial markets what led to high debt-equity ratios and extreme vulnerability to shocks in the *chaebol* corporate sector (Chopra et al. 2001). The problem with this explanation is that state interventions in the allocation of credit to support large-sized firms not only predated the 1990s, but had actually become relatively unimportant in the pre-crisis period. Indeed, a fourth group argues that, contrary to the latter positions, the crisis resulted from the lack of investment coordination as state planning was largely withdrawn during the liberalisation spree of the 1990s (Chang et al. 1998). The issue with this explanation is that Korean firms were producing for world, rather than domestic, markets. Even if non-marginal players, it is doubtful that their over-expansion could have resulted in price drops as large as those occurring in the semiconductors and steel industries. Finally, others suggest that the crisis resulted from the slow growth of labour productivity due to poor governance of both industrial and financial institutions (Graham 2003). Yet, labour productivity and per-capita GDP continued approaching developed-country levels during the 1990s.⁴ Besides these empirical problems, the main weakness of these policy-centred accounts lays in that they leave unexplained the politico-economic forces behind the introduction of particular state policies.

To address that critical issue, other studies focus on the underlying political and institutional processes shaping state policies. Thus, Haggard (2000) finds the source of Korea’s economic vulnerabilities to external shocks in the increasing political control of the state by portions of private capital which allegedly led to efficiency-distortive policies being implemented or to the poor implementation of potentially socially efficient measures (i.e. poor regulatory framework supporting liberalisation efforts), crucially in the financial sector. These political and institutional conditions, according to this author, also reduced state capacity to rapidly address the mounting challenges when the crisis started. Marxist authors like Hart-Landsberg et al. (2007) also emphasise the role played by deeper-level politico-economic processes, both at local and international levels, in producing the conditions for the 1997–1998 crisis to occur. On the local side, the authors argue, state capacity to manage the economy weakened during the 1990s as a result of the increasing political power of business sectors and the working class, both product of the inherent development of the Korean economy. Large firms then began to channel funds to speculative activities rather than to productive investments, while large-scale industrial actions led by *chaebol* workers were pushing wages up strongly. These processes, it is claimed, eroded the international competitiveness of Korean industrial capital. On the international front, the situation also became more complex than hitherto for Korea. In response to the late-1980s surge in durable-consumer goods imports from Korea, the US state stepped protectionism, while US corporations were increasing their investments in

low-wage China to compete with their Korean counterparts. At the same time, to fend off surging Korean competition, the Japanese state began to restrict exports of capital goods to Korea, while Japanese firms accelerated the relocation of labour-intensive processes to Southeast Asia. All these processes, it is claimed, further contributed to affect the capacity of Korean capitals to succeed in global markets.

Undoubtedly, these politics-centred approaches constitute an advanced relative to policy-centred analyses. This advance, nevertheless, is limited. It does not fully explain why different sectors of Korean society have used their political influence, emerging from their economic power, in the way they did. Specifically, why in the 1990s these particular private interests became incompatible with the ‘general’ interest as they had allegedly been in the past. More generally, the main problem with these approaches is that they fail to acknowledge that the political will and actions of commodity producers/owners are forms of realisation of their general indirect social relationship, the exchange of commodities (on which see below). Any explanation of social processes that stops in the political will and actions of the involved actors is then bound to be incomplete and one-sided. In a nutshell, the reason behind the inability of politics-centred explanations to fully overcome the limitations of policy-centred accounts is that, despite their many differences, they regard the process of capital accumulation as being essentially nation-based. Global-economy developments appear there as the context or environment to which national strategies adapt, react or integrate with more or less degrees of autonomy. Consequently, they all consider the state, whatever the political processes that shape its actions, as the prime determinant of national economic performance. Even Marxist authors who signal the relationships of hegemony, power and domination, either at the local or international levels, as the main determinant of national-development paths are unable to overcome these shortcomings. When analysing hierarchical inter-state relations, they regard, at least implicitly, the power of each nation-state as emerging prior to their integration into the global process of capital accumulation. Equally, when analysing intra-state power relationships, these Marxist authors, like their mainstream counterparts, regard social classes or groups as emerging somehow independently of the process of capital accumulation which provides the background for their development and interaction – however antagonistic – and is also influenced by their actions (Grinberg 2014). The fundamental problem with all these approaches is that, contrary to their theoretical starting-point, the process of capitalist development is global in terms of its general dynamics and historical potencies, and national only in its form of realisation. The concrete active subject of this process, hence, is capital, the reified general social relationship amongst commodity producers, rather than the state or the social classes (Marx 1976; Postone 1996; Iñigo Carrera 2008).

The goal of this paper is to present an account of the Korean 1997–1998 economic crisis and subsequent recovery based on an explanation of Korean long-term capitalist development alternative to nation-centred mainstream accounts on the topic, both under their ‘orthodox’ and ‘heterodox’ variants. Drawing on methodological insights of the Marxian critique political economy (Marx 1973, 100–109; Iñigo Carrera 2008, 237–285), the paper will start by analysing the general dynamics of the process of capital accumulation on a global scale before looking at the concrete form this has taken in Korea since the 1960s. The paper will argue that, since then, the development of the production of relative surplus-value through automation and computerisation has manifested itself in the increased differentiation of the productive attributes of the different segments of the collective labourer of large-scale industry and in the reconfiguration of the international division of labour. As a result of contemporary skill-replacing technical changes, capital began to accumulate in Korea, as in other East Asian countries, producing (specific)

industrial goods for world markets with the relatively cheap and highly disciplined local labour-force. The 1997–1998 crisis and the characteristics of the subsequent recovery are, then, considered as expressions of the contradictory dynamics of this specific modality of capitalist development (Iñigo Carrera 2008, 87–88). The analysis presented here will be supported by an original set of measurements, including the evolution of the mass of surplus-value produced in different sectors of the economy and the rate of profit of industrial capital.

For that purpose, this paper is structured as follows. The next section presents a brief analysis of the main transformations of the process of capital accumulation on a global scale since the 1960s, focusing on the forms in which they manifested themselves in East Asia. The third section summarises the main economic and political forms of realisation of the process of capital accumulation in Korea until the late 1980s. The fourth section analyses in detail the politico-economic processes leading to the Korean financial-cum-economic crisis of 1997–1998, while the fifth section focuses on the main characteristics and foundations of the subsequent recovery, showing how these have realised the contradictory, crisis-prone development of capital accumulation on a global scale. The paper ends with a summary of its main arguments and conclusions.

2. Global capital accumulation and East Asian industrial development⁵

One of Marx's greatest scientific discoveries is that the historical specificity of capitalism resides in that the production of use-values needed for human life is not organised, as in previous modes of production, through direct relations among individual members of society. In capitalism, social production is organised, and thus the material unity of social labour established, indirectly, through the exchange of the products of privately and independently performed labour processes. The exchange of commodities resolves the allocation of society's labour capacities to satisfy its consumption needs. It does so by signalling, *post factum*, whether or not a particular individual labour-process was, at the moment of being performed, part of social labour – that is, necessary to the human life process. In other words, private and independent producers give the product of their labour the power to organise social labour. For that purpose, the expenditure of human labour-power for the production of social use-values has to represent itself as (take the form of) the capacity of the products in which it materialises to be exchanged for other socially useful products; as their value. When social labour is organised in such a form, free individuals not only have to put all their senses, consciousness and will to produce goods with exchange capacity, and thus socially useful. They also need to personify the social potencies of the product of their own labour-processes to represent in the market the exchangeability of the commodities they own. Hence, they relate to each other not as persons but as *personifications* of commodities who recognise each other as owners of private property. In capitalism, individuals are free from relationships of personal dependence because they are subjected to the powers of the products of their own labour (Marx 1976, 178–187; Iñigo Carrera 2008, 10–12, 2014, 557–559).

The power that the product of social labour gains when is performed privately and independently does not end in formally mediating the material unity of the process of social reproduction. In gaining such power, it also gets to set in motion each of its individual fragments. In capitalism, the latter, and thus social labour, are put into action with no purpose other than producing more of the materialised social relationship – i.e. valourising the value advanced to set them in motion. Indeed, capital is not simply an object (i.e. an instrument of production) or a legal/productive unit (i.e. a firm) as neoclassical

economics has it, but the reified (thing-like) social relationship between private and independent producers transformed into the very automatic subject of social reproduction. As *self-expanding* value, capital has no *qualitative* determination other than its boundless *quantitative* progression. Subsumed under the capital form, the production of social use-values, and thus of human beings, becomes inverted into the accumulation of the *total social capital*. Hence, due to the impersonal and boundlessly expansive character of the general social relationship among private and independent producers, capital accumulation is, in terms of its general dynamics and historical potencies, a global process. However, due to the private character of social labour, the global unity of capital accumulation starts, and has so far existed, as formally independent national processes (Marx 1976, 247–269, 247, 702, 929; Burnham 1994; Postone 1996, 75–83, 100, 149, 258; Iñigo Carrera 2008, 12–15, 148–149, 2014, 559; Smith 2006, 193–194).

State policies are, contrary to market transactions, *direct* forms of organising the process of social metabolism. They resolve the allocation of individual labour capacities, and thus their participation in social labour, before being performed; they are the product of conscious and voluntary, *direct* relations amongst individuals. Yet, in capitalism, these are themselves representatives – *personifications* – of commodities. State policies, then, are nothing but forms of realisation of the general *indirect* (autonomously regulated) way of organising social production through the exchange of commodities product of capital.

Effectively, beyond its purely mercantile functions as an enforcer of private property rights and its part in the process of primitive accumulation, the historical specificity of the capitalist state develops in the process of production of absolute surplus-value. In this process, the renewal of the conditions for capital's self-valourisation takes form in the trading of labour-power at its value (the cost of reproducing it with the physical and mental capabilities normally required by capital). Competition among sellers of labour-power, however, tends to be stronger than among buyers, thus potentially undermining the normal valourisation of the total social capital. The process of capital accumulation, then, gives these relationships of competition the concrete form of relationships of solidarity between those who personify their labour-power, on the one hand, and between those who personify their capital, on the other. Hence, in the process of trading labour-power at its value, the inherently antagonistic relationship between private sellers and buyers comes about through the struggle between collective personifications of labour-power, the working class, and of capital, the capitalist class. The class struggle is this general direct social relationship in which the general material unity of social labour is established as a form of realisation of the trading of labour-power at its value, and thus of the general indirect social relationship, the exchange of commodities product of capital.

Although a necessary form taken by the reproduction of the total social capital, the antagonistic character of the process of class struggle disrupts the fluidity of the former's valourisation. The process of class struggle thus needs to take the concrete form of its opposite, namely, a relationship of general solidarity where class antagonisms are at the service of the realisation of the 'common good'. For that, this relationship of general solidarity needs to be perceived as the opposite of what it is, as the product of the free will of individuals. But, as the product of free consciousness and will, which are the form of realisation of alienated consciousness and will (that is, of the consciousness and will of personifications of commodities), it also has to take a reified, external form that faces its producers as a power that dominates them in their condition of 'naturally' free individuals. This double necessity finds its resolution taking the form of citizenship of the state. As a concrete form of the general unity of the organisation of social reproduction in capitalism, the state is the general political representative of the total social capital. And, by

virtue of its very nature, the state subsumes all the direct actions necessary to assure the reproduction of the normal conditions of exploitation of the labour-force (Marx 1976, 375–416; Iñigo Carrera 2008, 95–105).

Yet, though its historical specificity develops in the process of production of absolute surplus-value, the historical potentiality of the capitalist state is only fully developed in the process of production of relative surplus-value. This process comes about through the trend towards the expansion of the scale of production and the socialisation of labour-processes. The centralisation of capital is the most potent form of overcoming the limits that private individual property lifts to these, and, thus, to the production of relative surplus-value. The centralisation of capital, partial or complete, through direct state regulation (e.g. public ownership, subsidies/protection, legal monopolies) is the most potent form of doing so. More generally, as in the process of trading labour-power at its value, whenever the forms of production of relative surplus-value result in the valorisation processes of individual capitals affecting the normal fluidity of the accumulation of the total social capital, this, through its direct political representative, the state, takes the regulation of the process directly in its hands (Marx 1976, 779–780; Iñigo Carrera 2008, 106–108).

In sum, state policies and institutions, and the processes of class struggle through which they come about, need to be understood as political forms of realisation of the general *indirect*, self-regulating way of organising the allocation of labour capacities through the exchange of commodities product of capital – the process of valorisation of value on an expanded, global scale. Hence, nation-state policies should not be regarded as independent variables that autonomously shape and determine national processes of capital accumulation. Rather, they need to be seen as *mediations* in the realisation and development of the global unity of the process of capital accumulation through the specific determination of each national portion of the total capital of world society – the *total global capital*. Certainly, this includes the political representation in the world market, with its specifically determined strength, of the total national capital vis-à-vis other national portions of global capital (Iñigo Carrera 2008, 150–164).⁶

The development of labour productivity is the most powerful form that the total social capital has to increase its rate of valorisation. In the short run, before competitive pressures generalise the conditions that allow the gains, productivity improvements reduce production costs and thus increase the rate of profit of the individual capitals that first obtain them. In the long run, as new technical conditions become the norm, and competition forces the cost of producing commodities to fall, productivity gains directly or indirectly reduce the cost of reproducing the labour-force and thus expand the mass of surpluses available for the valorisation of the total social capital; they result in the reduction of wages necessary for a given quantity of labour-power, extensively or intensively spent, or, in other words, in the production of relative surplus-value. The development of labour productivity is the most powerful lever of the process of capital accumulation. An, the mechanisation of large-scale industry is the most potent form for capital to increase labour productivity. This process centres on the transformation of the productive potencies of individual labour-processes into a scientifically organised, yet alienated, social power (Marx 1976, 492–508; Postone 1996, 336–349; Iñigo Carrera 2008, 15–23, 2014, 560).

Still, though inherent to its process of accumulation, capital makes every effort to avoid this expensive and risky process by searching for locations where particular natural or historical conditions allow it to reduce the cost of producing the commodities that are directly or indirectly consumed by the labour-force and thus increase the mass of surplus-value available for its valorisation. Hence, beyond the formal expansion of markets, the

global unity of capital accumulation is, as every other of capital's historical potencies, only fully developed in the process of production of relative surplus-value.

Initially, this process centred on the search for regions where primary commodities could be produced at a lower cost, or at all, a process that gave place to the 'classical' international division of labour (IDL) (Marx 1976, 579–581; Howe 1981; Iñigo Carrera 2008, 150–151, 2014, 562–563). During the last 40 years, however, the process of capital accumulation on a world scale has experienced notable changes in the forms of production of relative surplus-value through the computerisation and robotisation of large-scale industry, and the consequent transformation of the modes of existence of the global collective labourer. Though the process is inherent to the development of machinery, and hence labour productivity, by capital (Marx 1973, 632; Marx 1976, 492–553; Iñigo Carrera 2014, 564), this leap forward in the automation of productive activities – i.e. in the transformation of labour's productive attributes into powers of the machinery – has greatly accelerated the internal differentiation of the collective labourer of large-scale industry. On one hand, these technological transformations have involved the expansion of the productive attributes of wage-labourers performing the more complex parts of the work-process – i.e. those developing them and those organising productions based on them. The cost of producing and reproducing these kinds of wage-earners has thus tended to increase. On the other hand, those technological changes have entailed a sharp step in the simplification of manual labour-processes. The automation of production processes has simplified the productive functions of most manual labourers remaining in the shop floor as operators or appendages of the increasingly self-calibrating and self-adjusting systems of machinery. Their cost of production has thus tended to decrease. These transformations in the productive attributes of the collective worker are inherent to the production of relative surplus-value through the mechanisation of large-scale industry. Yet, they have experienced a leap forward under the technological conditions consolidating in the 1960s, and crucially since the 1970s 'microelectronics revolution'. Moreover, computer-based automation has also generated, as a condition for its own development, a multitude of new production processes still subjected to the manual intervention of low-skilled labourers, like the assembly, testing and packaging of electronic micro-components and appliances which are at the base of the robotised and computer-aided machinery systems (Aglietta 1979, 122–130; Coriat 1992; Balconi 2002; Iñigo Carrera 2008, 65–83).

As an expression of the general dynamics and historical potencies of the process of capital accumulation, those transformations in the productive attributes of the collective worker of large-scale industry have been global in content. Yet, they have led to a transformation of the modes of existence of the global collective labourer which has resulted in a novel differentiation of national spaces of accumulation and in a reconfiguration of the IDL. Based on these transformations in productive activities, and the associated revolution in communication and transportation methods, capital has been increasingly able to spatially disperse the different parts of the labour-process according to the most profitable combinations of relative costs and productive attributes of the different national fragments of the global labour-force, thus giving birth to the new IDL (NIDL). Irrespective of individual capital national origin and of the forms of inter-firm relations, this process minimises the costs of reproducing the global labour-force and thus increases the rate of valorisation of the total capital of world society, the active *subject* of the process of accumulation (Fröbel et al. 1980, 46; Iñigo Carrera 2008, 65–68).

The NIDL has been driven by the relocation of simplified manual labour-processes to regions with labour-forces that are not only *relatively* cheap but, also, whose specific productive attributes include the disciplined subordination to centrally and hierarchically

organised collective labour-processes and the habituation to repetitive manual work during long hours. This has been the case of labour-forces whose genesis occurred in the wet-rice cultivating East Asians' societies (Bray 1986, 67). Those characteristics have made the labour-force there particularly productive when working as an appendage of the increasingly automated machinery systems or in manual assembly operations; hence the region's ubiquitous participation in the NIDL and its consolidation as a global industrial power (Iñigo Carrera 2008, 65–83; Grinberg and Starosta 2009; Grinberg 2013).

Though global-market driven, the NIDL has come about through the consolidation of particular nation-state policies, described in great detail by 'neoliberal' (see, e.g., World Bank 1993) and 'statist' scholars (see, e.g., Castells 1992), and through specific class relations, as analysed by their Marxist counterparts (see, e.g., Hart-Landsberg, et al. 2007). These political processes, it should be stressed, did not autonomously determine the economic content of the accumulation process in East Asia; in their antagonistic unity, they mediated its specific development. Thus, in those Northeast Asian countries (plus Singapore) that around the early 1960s became sources of relatively cheap and disciplined labour-power to perform the simplified parts of industrial labour-processes, state policies concentrated on the creation and subsequent reproduction of the necessary conditions for capital to accumulate under that new specific modality. Despite different national singularities, all East Asian 'developmental' states not only facilitated the outward orientation of industrial capital while nurturing infant industry, but also pursued decisively the political repression of the working class, thus allowing capital to purchase labour-power below its value and to differentiate the conditions of reproduction of the various parts of national workforces according to their productive attributes (Grinberg and Starosta 2009; Grinberg 2013).

Processes leading to the formation of the NIDL have not been static as Fröbel et al. (1980) suggested in their original theorisation on the subject when they one-sidedly associated it with the intensification of the manual division of labour. Initially, the NIDL manifested itself in the spatial relocation of simple, 'labour-intensive' productions. Yet, skill-replacing technical changes have involved an ever widening range of industrial sectors, including relatively advanced ones in the durable- and capital-goods industries (Coriat 1992; Hasegawa 1996; Balconi 2002). Moreover, as surplus populations in the countries first participating in the global economy under this specific form – Japan and the so-called East Asian Tigers – were exhausted, domestic labour-forces began to be reproduced under new material conditions which, in turn, have enabled them to perform increasingly more complex productive tasks. Production in 'unskilled-labour-intensive' industries contracted in these countries while expanding in places where surplus populations with similar productive attributes were still extensive and real wages lower (e.g. Southeast Asia, Mexico and China).

In sum, it has been the emergence and development of the NIDL what explains East Asia's fast industrialisation. The general foundation of this worldwide transformation has been the international fragmentation of the different parts of the collective labourer of large-scale industry resulting from contemporary transformations in the forms of production of relative surplus-value through the computerisation of equipment and electronics-based automation (Grinberg and Starosta 2009, 773).

3. Korean capitalist development from the 1960s to the 1980s⁷

During the two decades following WWII, the structure of the Korean economy did not differ *qualitatively* from those 'developing' countries where the process of capital accumulation revolved around the appropriation of primary-sector surpluses, notably

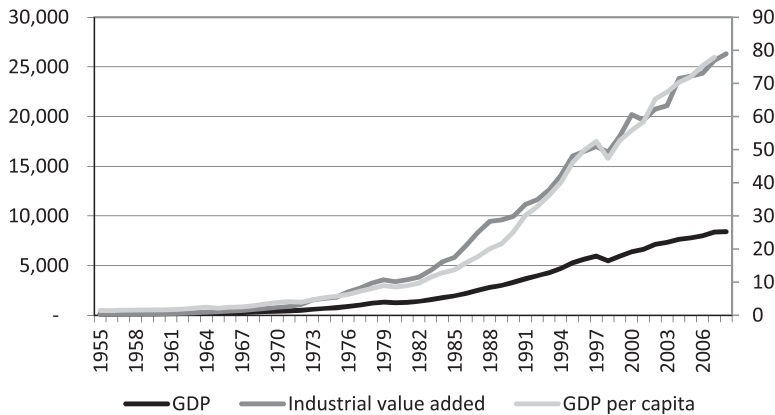


Figure 1. GDP and industrial value-added. Source: Grinberg (2011, 196–197). Left axis: GDP and industrial value-added in 2004 W\$ (1955 = 100). Right axis: per-capita GDP relative to US levels (%).

ground-rent, by different social subjects (Grinberg 2013). Albeit interrupted by a prolonged and destructive war, this specific modality of capital accumulation came about, as elsewhere, through the implementation of a set of policies ‘promoting’, however inconsistently, import-substituting industrialisation (ISI). The singularity of the Korean ISI process resided in that the meagre primary-sector surpluses available for appropriation were complemented with substantial inflows of foreign aid that somehow compensated for the destruction caused by the 1950–1954 war with its northern neighbour.

Yet, through the mid-1960s, the structure of the Korean process of capitalist development began to experience a profound transformation, entering a high-growth path that has, in terms of its general dynamics and characteristics, continued into the present. Contemporary skill-replacing technical changes were then creating the conditions for capital to produce in Korea industrial goods for world markets, using the largely available, internationally cheap and disciplined local labour-force. This was particularly suitable to perform productive tasks as an appendage of the machine or in manual assembly operations. Moreover, given the relatively small size of primary-sector surpluses and the post-1957 sharp reduction of US aid inflows, the mass of extraordinary social wealth sustaining capital accumulation through ISI had stagnated and the process of economic growth had come to a halt, further enhancing, through the strong contraction of industrial wages, the potentialities of the emerging modality of capital accumulation.

Between the mid-1960s and the mid-1970s, changes occurring in the Korean economy resulted largely from the continuous appreciation of the Japanese industrial workforce, as the global process of capital accumulation was transforming Japan into a producer of consumer-durable goods, industrial inputs and equipment. The Japanese labour-force was then increasingly replaced by new sources of relatively cheap and disciplined labour-power available in East Asia to perform simple manual labour-processes like those in the textile, apparel and microelectronics industries. After the mid-1970s, however, the transformations experienced by the Korean economy have resulted not only from the appreciation of the Japanese labour-force. They have also resulted from the direct impact of contemporary skill-replacing technical changes, initially in process (continuous-flow) industries like steel and chemicals and later on, crucially since the ‘microelectronics

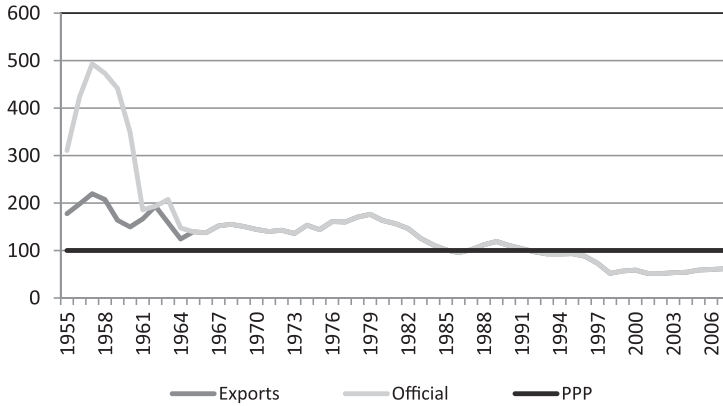


Figure 2. Fluctuations of exchange rates around their PPP (1985–1996 = 100). Source: Grinberg (2011, 71).

revolution’, in serial production (repetitive-flow) ones like motor-vehicles and electronics. Moreover, thereafter the Korean labour-force became itself a product of the industrialisation process; its quality was, thus, continuously improving through on-the-job experiences and, increasingly, state mediation. As the transformation of the bases of valorisation of industrial capital took place, the production of surplus-value, and hence the process of capital accumulation, experienced a strong expansion.⁸

Three types of policy-sets mediated the structural transformation of the Korean process of capitalist development throughout the 1960s and 1970s. Some policies enhanced the export orientation of local industrial capital. These included exchange-rate devaluation (see Figure 2), import-tax reductions for inputs used in export production and the creation of various institutions supporting export activities. Other policies accelerated the concentration of industrial capital in the masses required for world-markets-oriented production. These not only included support for private-firm international borrowing, supply of credit by state-owned banks and infant-industry protection, but also, when necessary, the creation of publicly owned companies or the forced centralisation of private capital. A third set of state policies mediated the reproduction of the local workforce with the characteristics and price needed for export-oriented production. These included not only its ‘upgrading’ through various types of state-sponsored educational programmes but also its repression and indoctrination through state institutions. In general terms, the metamorphosis of the mostly ‘liberal’ direction in economic policies of the second part of the 1960s into the ‘interventionist’ and repressive ‘developmental’ state of the 1970s mediated politically the above mentioned developments in the IDL and the Korean process of capital accumulation – i.e. its transition from a light- to a heavy-industry-based export-oriented industrialisation.

As occurred in many other ‘developing’ countries, the early-1980s global-economy recession triggered in Korea a process of financial-sector and foreign-trade liberalisation. This process, however, did not express politically, as in Latin America, the inability of the local ground-rent to sustain diversified, domestic-markets-oriented industrial sectors (Grinberg and Starosta 2009). Rather, led by overseas sales, the strong growth and development of the Korean industry continued from 1983 onwards. The production of surplus-value, as well as the valorisation capacity of industrial capital, thus enjoyed a robust expansion, even in the context of raising wages (see Figures 4 and 5).

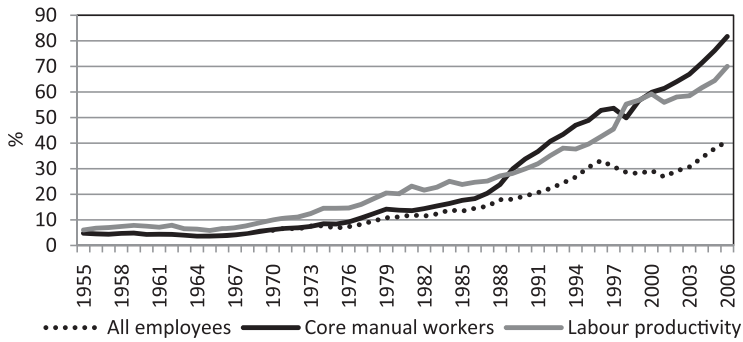


Figure 3. Purchasing power of industrial wages relative to US levels. Source: Grinberg (2011, 204, 212).

The so-called market-liberalisation reforms, then, expressed in Korea largely two other processes. First, the ‘maturation’ of parts of its industrial sector, which no longer required extended market protection and state support for their normal reproduction. Secondly, the phasing out of other parts that proved to have had limited commercial potential (e.g. aluminium and heavy-machinery industries) and of excessive productive capacity in potentially viable sectors (e.g. motor-vehicles, shipbuilding); these could no longer be supported in the international context of the early 1980s. Hence, 1980s ‘free-market’ reforms were not the abstract opposite of state policies related to the ‘big push’ of the 1970s, as often claimed (see, e.g., World Bank 1993). Both seemingly contradictory policy orientations were two inherently united, necessary moments in the specific development of the Korean process of capital accumulation. Moreover, during the 1980s, ‘nascent’ industrial branches (e.g. microelectronics and motor-vehicles) remained strongly supported (Chang et al. 1998, 740; Green 1992, 416; Mathews and Cho 2000, 119–135) while developing the capacity to compete in world markets under the same specific base as the HCIs, namely, the use of a *relatively* cheap and disciplined labour-force for simplified productive processes (Bello and Rosenfeld 1992, 113–118; Williams et al. 1994, 61–63).

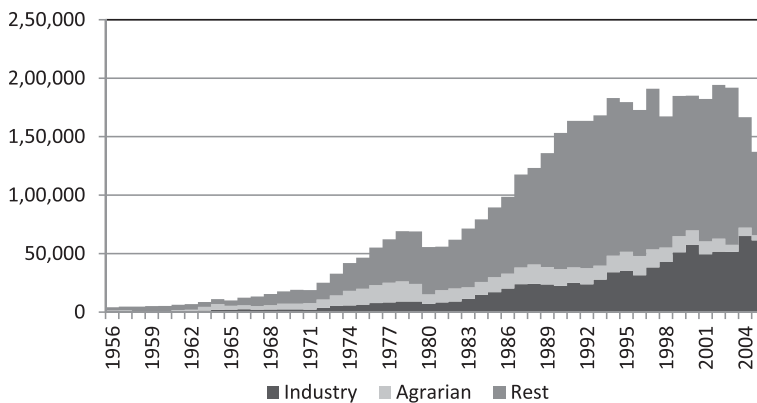


Figure 4. Net surplus value in billions of 2004 W\$. Source: Grinberg (2011, 84).

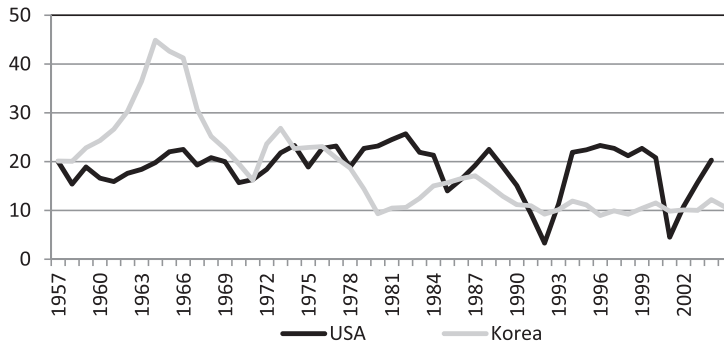


Figure 5. Pre-tax rate of profit of industrial capital. Source: Grinberg (2011, 87).

Incipiently neoliberal reforms in Korea also contrasted with contemporary experiences in OECD countries where they mediated the differentiation in the conditions of reproduction of the various fragments of the local industrial labour-force (Iñigo Carrera 2008, 72–76). During most of the 1980s, wage differentials among Korean industrial workers declined, albeit from highly unequal bases. Manual workers' wages increased strongly across-the-board as the industrial base 'deepened' and so did the demand for more skilled labour-power that could no longer reproduce normally with payment conditions corresponding to its peasant origin. This process of real-wage realignment came about through a period of political opening and the sharp, though short-lived (1987–1990), increase in working-class activism, crucially by core manual workers (Koo 2001, 153–187).

4. The era of 'neoliberal globalisation'

In early 1993, when old-time opposition leader Kim Young-Sam became the first civilian president since 1960, the Korean economy was slowly coming out of the so-called 'growth recession'. The USA, its main export market, was in its second year of economic growth after the business cycle bottomed out during the 1990–91 recession; Europe slowly followed suit. As in 1983–1988, global-economic recovery was being fuelled by the rapid growth of low-cost credit sustaining social demand. Unlike then, the expansion of credit supply was large enough to reach 'developing' countries, Korea amongst them.⁹

Yet, for Korean industrial capital to take part in the global-scale expansion of credit starting in the early 1990s, the country's financial sector needed some adjustments. Crucially, it required the elimination of those state policies that had been regulating private firms' international borrowing activities. Not only were these no longer requiring state support to access international capital markets, as had been the case in the past. Now, any kind of state regulation of the process began to be regarded as an obstacle for individual capitals' normal development. Moreover, expressing the high liquidity of international credit markets, the US government and other global actors were stepping up their pressure on Korea to lift existing restrictions on loanable-capital inflows (Chang et al. 1998, 736–738; Haggard 2000). As a form of realisation of this two-sided necessity of the process of capital accumulation on a global scale, the newly invested Kim government implemented a new Five-year Plan, the so-called Blueprint for Financial Liberalisation and Internationalisation. This had three main parts: a partial opening of the capital account of the balance of payments permitting short-term borrowing in foreign

currencies; the further, though still incomplete, deregulation of domestic financial markets; and, a drive to reduce, though not eliminate fully, the role of industrial policy in guiding private-investment decisions (Chang et al. 1998, 736–7; Chopra et al. 2001, 4–5; Shin 2003, 139–46).

Hence, the policy shift undertaken during the early 1990s did not constitute a break from the previous modality of capital accumulation by limiting state involvement in the allocation of ‘resources’, as argued by some authors (e.g. Chang et al. 1998). Nor did it simply constitute a cosmetic change, as implied in other analyses (e.g. Chopra et al. 2001). Rather, the policy shift, however, extended in practical terms, entailed a transformation in the politico-economic forms of realisation of the Korean process of capital accumulation, without modifying its underlying specific structure, as an expression of its own inherent dynamics and of contemporary developments in the process of overproduction of capital on a global scale.

With growing global consumption and loanable-capital inflows pulling the demand for industrial output and financing capital formation, respectively, in the early 1990s, the Korean economy entered a new period of strong growth and high investment rates. Exports of consumer electronics, memory chips, low-end automobiles, steel and ships accelerated, helped by the rapid increase in labour productivity and the appreciation of the Japanese Yen, both improving the price competitiveness of Korea’s industrial output in world markets (Noland 2000, 195–196; Graham 2003, 94). The demand for labour-power thus strengthened and average real wages in the industrial sector grew strongly (see Figure 3). GDP growth accelerated to the levels of the mid-1980s expansion (see Figure 1).

Unlike in previous periods, industrial growth through the 1990s was based largely on capital-intensive and, increasingly, high-tech productions, and occurred without extended forms of direct state involvement in investment decisions. Yet, as noted, the structure of the Korean economy and the specific modality of the accumulation process remained essentially unchanged. Effectively, the development and growth of the industrial sector during this period, including its ‘upgrading’ path into high-technology branches, realised similar transformations in the global process of capital accumulation as those behind Korea’s earlier industrial development. The emergence of new sectors (e.g. micro-chips manufacturing) and consolidation of others (e.g. automobile assembly, steel and ship-building) resulted from the low cost (relative to established producers) and high productivity of the local labour-force, ensuing not only from previous improvements in its quality, but also, and crucially, from the further automation of production processes and thus simplification, standardisation and routinisation of manual factory work in the sectors in question (see, e.g., Brown and Campbell 2001; Balconi 2002).

Hence, despite the impressive performance of the Korean economy, which in late 1996 granted its OECD status, the inherent contradictions of the local process of capital accumulation, arising from its specifically limited base, soon became evident. Throughout the 1990s, the same structural forces that had been behind Korea’s strong growth in the past were now rapidly turning against it. Crucially, Korean industrial capital began then to suffer from increasing competitive pressures in relatively simple and low value-added productions from firms located in Southeast Asia, Mexico and China, where industrial capital had access to a much cheaper and, arguably, equally disciplined labour-force, especially after the substantial post-1987 real-wage increases in Korea and the 1994–1995 devaluations of the Chinese Yuan and the Mexican Peso. In turn, the mid-1995 devaluation of the Japanese Yen was putting extra pressure on Korean exports of relatively more complex industrial goods like ships, cars, memory-chips and steel.

Without the type of workforce necessary to do otherwise, Korean capital had been competing in these markets on the basis of price rather than product innovation (Noland 2000, 199; Graham 2003, 95–98).¹⁰ Indeed, these structural weaknesses manifested themselves negatively in the evolution of capital's valourisation capacity, long before the onset of the financial crisis. Unlike in the period of strong growth occurring in middle part of the 1980s, during the fast-growth years of the 1990s, the profitability of industrial capital in Korea failed to show any substantial and sustained recovery (see Figures 4 and 5).

As early as the mid-1990s, Korean industrial capital was responding to these developments through a two-pronged strategy. First, firms accelerated the relocation of unskilled-labour-intensive production processes to low-wage countries in the region, to Mexico, India and the European periphery (Lautier 2001), and increased the use of 'temporary' and immigrant labour in Korea (Lee 2003, 278–282). Second, they also invested in high-wage OECD countries to acquire technological and design capabilities either by setting Research and Development (R&D) centres employing local high-skilled workers or by purchasing domestic firms specialised in these activities (Perrin 2001).

Yet, despite these strategies by individual capitals, the contradictions inherent to the Korean process of accumulation would turn into crisis when in late 1996, well before the devaluation of the Thai Baht triggered the so-called East Asian financial crisis, the international prices of Korea's main exports (microelectronic components and industrial inputs) began a sharp downwards trajectory. For instance, the unit price of semiconductors, Korea's leading export item, dropped by as much as 70% during 1996–1997 due to a glut of supply and, incipiently, weakening global demand. Korean current-account deficit thus enlarged, increasing the economy's need for external loans (Hahm and Mishkin 2000, 23; Noland 2000, 197–198).

As economic problems mounted, the Korean state, the political representative of the total social capital, moved to reduce the cost of factory labour-power, which had kept increasing despite the ensuing difficulties, in a desperate attempt to renew the general bases for the valourisation of industrial capital. Under strong pressure from the business sector, in 1996 the Kim government passed a law reforming the labour market with a parliamentary trick that resembled those used by Park Chung-Hee's (1961–1979) authoritarian regime (Koo 2001:198–199; Shin 2003, 161–164). Though the organised labour movement responded with a two-month long general strike, the first since the mid-1940s, that afforded it some concessions, most parts of the reform were finally implemented (Koo 2001:199–200; Shin 2003, 164–165).

These changes in the labour market, however, were not enough to avoid the further deterioration of the Korean economy during 1997. Not only were export prices falling as a result of growing international competition. After several years of steady interest-rate increases, global financial markets were, again, tightening (see Figure 6). As global credit growth slowed and loanable capital moved to the industrially-advanced countries to take advantage of higher returns there, 'developing-country' economies began to face restrictions in their access new loans at affordable conditions (Wade 1998, 699). The general process of overproduction on a global scale was beginning to manifest itself in a new limited crisis – that would last until 2001 (Brenner 2006; Iñigo Carrera 2008, 210–231). Despite its new OECD status, high credit ratings and strong export performance, the Korean economy was no exception to that trend. Effectively, as early as mid-1997, Korean financial institutions began to have difficulties in getting their external short-term debts rolled over, notably by their Japanese creditors who were attempting to stabilise their own balance sheets (Noland 2000, 201, 210). Moreover, the negative impact of increasing interest rates and drying capital markets on global demand was putting extra

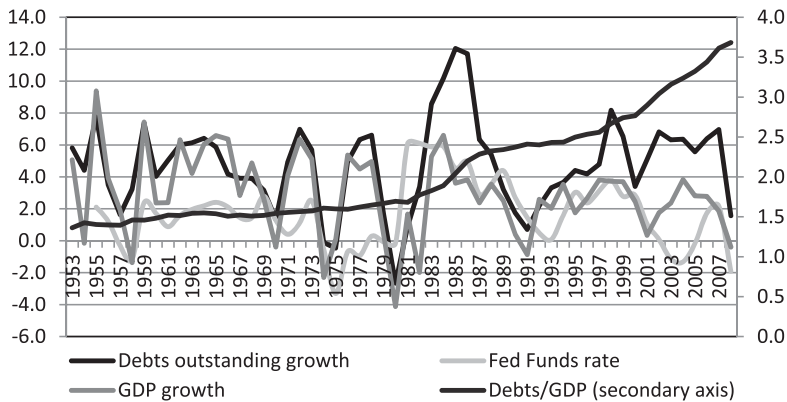


Figure 6. USA: debts outstanding growth, GDP growth and Fed Funds real interest rates. Source: Grinberg (2011, 64).

downwards pressure on Korean firms' international sales, further hurting export prices and profitability.

Tensions developing in global markets rapidly found their specific manifestation in the Korean economy. First, as noted above, the highly leveraged Korean firms had become increasingly dependent on foreign loans to fund their massive investment programmes. Much of that capital was now excessive due to the on-going transformations in the NIDL and the weakening demand for Korean industrial output. Second, Korean financial institutions, notably the merchant banks that expanded thanks to the two-speed financial-sector reforms, had borrowed largely short term in international financial markets to lend for long-term investments and were facing serious maturity-mismatch problems (Chang et al. 1998, 738–739). Furthermore, a substantial part of these loans had gone to borrowers in Russia and Southeast Asia. These economies were already collapsing in mid-1997, worsening the banking crisis in Korea (Noland (2000, 199–200). Hence, the root cause of the 1997–1998 economic crisis in Korea is not to be found on the policies carried out (or not) by the Korean state, whatever these were and whatever political forces were behind them, as all the authors reviewed in the introduction suggest. Nor is it to be found simply on the change in Korea's commercial partners' attitude towards its presence in international markets of consumer goods, as also argued by some authors reviewed above. All these were politico-economic forms of realisation of the process of capital accumulation on a global scale through the specific determination of Korean capitalism. Instead, the root of the Korean economic crisis is to be found in the contradictory dynamics of the NIDL (i.e. the development of the production of relative surplus-value on a global scale), which throughout the 1990s was transforming some parts of Korea's industrial capital into a surplus for the global process of accumulation; a process that did not manifest itself as such when international credit markets boomed, but became openly acute when a new limited crisis of overproduction of capital incipiently began to take shape in mid-1997.

As exports growth stagnated and external loans were not being fully rolled over, the supply of foreign exchange in the Korean economy dried up rapidly. Acting as lender of last resource to externally-indebted firms, Korean Central Bank's (KCB) international reserves fell sharply and, by the end of 1997, the Won collapsed. The Korean state had no

option but to negotiate a substantial stand-by package with a group of creditors led by the International Monetary Fund (IMF) and the US Treasury (Hahm and Mishkin 2000, 25; Chopra et al. 2001, 13–17).

With the crisis unfolding swiftly, it was no surprise that Kim Dae-Jung, the most entrenched critic of the so-called Korean Inc. model, finally managed to win the late-1997 presidential elections, on a ticket to reform the *chaebols*, end their symbiotic relationship with the state, and to support small- and mid-sized enterprises (SMEs) instead. The *chaebols* were signalled as the main culprits of what was becoming a crisis of large, previously unseen proportions. Incumbent Kim Young-Sam, in turn, was being hurt by the emergence of a scandal, always coming to surface in Korea under such circumstances, relating his son to the irregular activities of a collapsing *chaebol* (Noland 2000, 205).

During the first half of 1998, liquidity in international credit markets dried up sharply for ‘emerging markets’ like Korea. The net inflow of loanable capital, which had been positive since the early 1990s, became considerably negative. The short-term maturity of most of Korean capital’s external debts then created a large imbalance in the foreign-exchange market, resulting in a substantial devaluation of the Won. This further restricted the capacity of local firms to service their debts in foreign currency, crucially those selling in the domestic market and those suffering from sluggish external demand and falling prices. On 31st March, the Korean state had to oversee and guarantee an agreement with their foreign creditors to restructure the short-term external liabilities of Korean private banks (Chopra et al. 2001, 21).

With not enough resources to do otherwise, a mix of tight fiscal and monetary policies was implemented following the ‘advice’ of the IMF and the US Treasury. Public sector’s current and capital expenditures were cut while interest rates were increased to reach 35%. Yet, by middle of the year, these ‘recessionary’ measures began to be partly reversed. The debt-restructuring programme and the fall in global interest rates were expanding the room of manoeuvre of the newly elected Korean government which could thus afford to pursue some countercyclical macroeconomic policies, such as tax reductions, increase in unemployment subsidies and public-employment programmes. Moreover, the unintended consequences of the adjustment on recovery prospects and political stability had been far worse than expected. The IMF gave the necessary ‘approval’ for this correction, allegedly admitting that the adjustment previously ‘recommended’ had gone too far (Hahm and Mishkin 2000, 26–27; Graham 2003, 107–108; Jun 2004, 115–119).

Apart from these eclectic macroeconomic policies, the IMF-led bail-out came with other ‘conditions’ promptly accepted by the new Korean administration. Indeed, most of the reforms in question had either been unsuccessfully attempted by the Kim Young-Sam government or were being suggested by incumbent policy-makers (Noland 2000, 220–221; Chopra et al. 2001, 32–33). As in other ‘developing’ countries, ‘orthodox’ macroeconomic management was merely the form of realisation of the international financial crisis in the Korean economy. The deeper-level institutional changes that were required as a condition for the bail-out, though triggered by the crisis, expressed more fundamental transformations in the forms of realisation of the Korean process of capital accumulation. These included reforms in the financial, corporate and public sectors and in the labour market, and the complete liberalisation of international trade and capital movements (Chopra et al. 2001).

The reform of the financial system involved several key institutions. First, the KCB gained ‘independence’ to pursue monetary policy. Second, the Financial Supervisory Commission was created to regulate and supervise the entire financial sector, introducing

'prudential' and 'oversight' regulations more in line with internationally accepted practices. Third, public institutions were created to clean up and recapitalise the sector, de facto nationalising private debts. Fourth, consolidation was pursued through closures of unprofitable institutions and mergers of inefficient but potentially viable ones (Noland 2000, 223–224; Graham 2003, 113–116; Jun 2004, 128–130).

Corporate-sector reforms targeted the *chaebol*. As many times before, these were stimulated, through soft loans, tax credits and political pressure, to concentrate on their core businesses by swapping assets and closing down unviable operations, to sharply reduce their debt-equity ratios, to improve management practices, and to avoid cross-guaranteeing their debts. These practices had been allegedly related to *chaebol* overexpansion and over-borrowing in the period up to the financial crisis. As in the past, corporate-sector reform slowed as soon as growth returned (Noland 2000, 226–233).

The Kim Dae-Jung government also targeted the public sector for harsh restructuring, reducing the number of central- and local-government departments as well as its workforce, and accelerating the privatisation of state-owned firms (Chang and Chae 2004, 430–441). Not only was the Korean state in need of fresh funds to get through the financial crisis. Extended state ownership was no longer needed for these individual capitals to attain world-market scales of production. Nor did their customers required subsidised inputs to valourise normally.

Labour markets were also 'reformed', allegedly to help industrial capital's restructuring. To find political support for this, the Tripartite Commission – including state officials, business-sector representatives and trade-union leaders – was formed to sign a 'social pact' under which the burden of the crisis would supposedly be shared 'fairly' by all sectors of Korean society. Its proposals, which became policy, entailed a combination of labour-market 'flexibilisation' and social-security reform. Labour laws forbidding 'unjustified' lay-offs and the transformation of permanent employment contracts into temporary terms were completely scrapped (Koo 2001, 202–203; Choi and Kim 2004, 221–222). The open economic crisis managed to accomplish fully what had been only partly achieved by the previous government when its first manifestations were becoming apparent. In return, trade unions gained the right to participate in party politics. This time, organised reactions to those policies and the wave of lay-offs that ensued were crushed with old-style, violent state repression (Chang and Chae 2004, 438–439). On the other hand, the welfare system was enlarged and deepened. A relatively wide web of 'safety nets' was created to soften the impact of the crisis and of the reforms that followed it. Nevertheless, state expenditures in social security remained limited as a large part of 'welfare services' continued being provided by employers. Self-employed, 'temporary' and small-firm workers were, in most cases, not covered by such systems (Shin 2003, 182–185, 202–205; Chang and Chae 2004, 434–435).

On the external sector, the trade and capital accounts were fully opened. As the Korean Won became strongly undervalued, import restrictions and tariffs were no longer needed and were completely removed. Limits on long-term overseas borrowing and direct investment inflows were also lifted, leading to large-scale purchases of local industrial firms by foreign companies. The crisis, and the related strong exchange-rate devaluation, resulted in the reduction of the price of Korean assets, making them particularly attractive to foreign investors (Noland 2000, 233–234; Graham 2003, 111–112). It became apparent, then, that extended local (including state) ownership of industrial capital had been but a moment (i.e. a form of realisation) in the historical development of the Korean process of capital accumulation.

Apart from these macroeconomic and regulatory measures, the Korean state also embarked in a major drive to upgrade local technological capabilities, seeing this as a crucial step to overcome the structural weaknesses that had allegedly led to the 1997–98 crisis. In particular, it undertook, and pushed the private sector for, investments in infrastructure – especially transport, ports and telecommunications – and knowledge acquisition with the declared aim of transforming Korea into a logistics, financial and innovation hub for the entire Northeast Asian region (Lee 2004; Suh and Chen 2007).

5. Post-crisis developments

By early 1999, after a negative growth of 9% during 1998, eleven of the largest thirty *chaebols* had collapsed, while sixteen out of thirty merchant banks had shut down. There was further consolidation through 1999 and 2000, when the number of financial institutions dropped again. Unemployed and underemployed added up to 10% of the workforce while urban-sector poverty increased to 24% of the population (Noland 2000, 219; Graham 2003, 113–114). Still, despite these negative trends, in mid-1999 the Korean economy unexpectedly entered a new period of fast export-led growth, only interrupted ten years later, when the global financial crisis exploded.

Yet, notwithstanding the many reforms and state initiatives implemented in the aftermath of the crisis and its seemingly unlimited potential, post-crisis economic growth has been sustained on the same specific accumulation bases as pre-crisis developments. The reproduction of these bases, however, has taken new forms that further express not only the potentialities of this specific modality of capitalist development, but also its limitations and intrinsic contradictions. To begin with, though relatively robust during 1999–2002, despite weak international demand, Korea's economic growth became increasingly feeble thereafter, even when global markets recovered. While exports grew 14% average p.a. during 2003–2008, GDP and industrial value-added expanded at an average of 2.8% and 4.1%, respectively, well below pre-crisis performance.

Second, the strong growth of industrial exports during the post-crisis period has been, unlike in previous periods, supported by a heavily undervalued currency product of state interventions in the foreign-exchange market (see Aizenman and Glick 2008; Figure 2). To fund purchases of foreign exchange, and push up its price, the state has borrowed, through different financial instruments, resources from domestic economic agents (Moon and Rhee 2009, 62–65). The accumulated foreign-exchange reserves have been subsequently lent to foreign governments and firms, thus further sustaining demand for Korean manufactures. Though helping the export-led recovery, this policy is inherently unsustainable. To pursue it, the Korean state has had to find 'spare' financial resources in the domestic economy. Though a portion of these has been made of pension savings, the bulk has been raised from private sources that have, consequently, needed to extend their own borrowing activities to fund their normal operations. Domestic credit increased substantially, jumping from 60% to 110% of GDP between 1997 and 2007. Moreover, as the financial cost of local resources borrowed by the KCB is higher than the returns on its foreign assets, this policy has had an immediate negative fiscal impact. And, whenever KCB's interventions do not keep up with the inflow of foreign exchange and the Won appreciates, this strategy results in capital losses (Moon and Rhee 2009, 63–65).

Third, as a result of the reforms introduced in the labour market and the further weakening of inter-industry union solidarity, the process of wage differentiation amongst factory workers, incipiently initiated in the early 1990s, accelerated in the post-crisis period. This time labour-market segmentation has taken new forms, no longer being mainly

based on gender attributes, as in the past. Direct wages paid to temporary (i.e. non-permanent) workers fell from 60.7% of those paid to their permanent colleagues in 1998 to 56.7% in 2004, a figure around which it stabilised thereafter. The gap in terms of indirect wages grew ever larger. As this happened, capital's use of lower-cost, non-permanent workers expanded strongly (Choi and Kim 2004, 224–230; Chang 2006, 42–44; Hwang 2006, 7; Jones and Urasawa 2013). Working conditions have also worsened for this kind of workers as their lack of union membership and the discrimination and stigmatisation received from their 'regular' colleagues have reinforced the hierarchical structure of Korean industrial relations (Lee 2003, 281; Koo 2001, 205–209; Chang and Chae 2004, 443–444). Moreover, as the *chaebol* began to concentrate on their core activities, wage disparities between those working for SMEs and those employed by large firms increased sharply, partly due to the formers' more extended use of non-regular workers. In 1986, wages paid to workers in the former sector were 90% of those earned in the latter, falling to 70% during the 1987–1990 labour upheaval, a figure around which they remained until 1998. Thereafter, wages paid in SMEs fell continuously to be only 58% of those paid in large companies in 2004 (Hwang 2006, 4). The payment system has also become more 'flexible' through the increasing use of 'merit' and 'performance' related indicators to determine wages (Chang and Chae 2004, 436–437; Kong 2013). Thanks to these transformations, average wages paid in the industrial sector and economy-wide fell strongly between 1996 and 2001, helping sustain capital's valourisation. Yet, when demand for labour-power strengthened and wages began to recover thereafter, the total production of surplus-value collapsed and industrial capital's valourisation fell back to crisis levels (see Figures 3, 4 and 5).

Fourth, though the export-led recovery has been riding on the strong expansion of high-technology production, this has not implied the transformation of the bases of the Korean process of capital accumulation. Effectively, although the post-1999 process of industrial deepening has manifested itself in a sharp increase in the levels of R&D expenditure and personnel, this process has taken forms different from the experiences of those countries where vanguard scientific and technological development occurs. Like in Japan, and in contrast to other industrially-advanced countries, most Korean R&D expenditures are privately undertaken, mainly in the electronics industry. Hence, they have tended to be concentrated in the development of applied technologies rather than basic scientific knowledge, which is an essential condition for a national social capital to be at the vanguard of the development of global society's productive forces and valourise normally (i.e. participate in the formation of the general rate of profit). In 2006, 78% of Korean researchers were employed in the private sector, which accounted for 77% of the expenditures. In Japan the corresponding figures were 68% and 77%, whereas in the European Union, they were 49% and 63%, respectively (OECD Research and Development Statistics).

These general trends are observed in different sectoral experiences. In the motor-vehicles industry, for instance, the 1997–1998 crisis gave place, as the early 1980s crisis had done, to a large-scale process of rationalisation and consolidation characterised by two main features, both involving the further expansion of foreign-owned firms' participation in the sector. First, Kia and Daewoo Motors went bankrupt and were absorbed by Hyundai and General Motors, respectively. The former remained 'independent' but sold 10–15% of its shares to Daimler-Chrysler who itself owned a third of Mitsubishi with whom Hyundai had a technological partnership. Samsung, which was finally allowed into the passenger cars market in association with Nissan during the peak of the mid-1990s expansion but came on stream one year before the crisis, also collapsed and was bought by Renault, Nissan's new owner (Ravenhill 2001, 5; Graham 2003, 96). These alliances

helped the Korean automobile industry to acquire the know-how further to improve design capabilities and product quality, and to be able to expand into higher market segments than previously. Second, leading first-tier component producers, like US's Delphi, Germany's Bosch and Japan's Denso, also managed to establish plants to produce in Korea, taking advantage of the effect of the undervaluation of the Won on the value of domestic industrial assets (Noble 2005, 15). In addition, Hyundai and Daewoo accelerated their relocation of productive activities to lower-wage countries, like India, China, Romania and Poland, to produce the lower end of their product range (Ravenhill 2001, 2; Lautier 2001, 238–258; Lansbury et al. 2007, 53–54; Kong 2013, 13) while expanding the use of low-cost 'temporary' workers or subcontractors in Korean plants (Lee and Frenkel 2004; Chung 2005, 13). Helped by these transformations and the post-1997 strong undervaluation of the exchange rate, Korean production of motor-vehicles rebounded sharply, doubling from 2 to 4 million units between 1998 and 2007, with sales in foreign markets accounting for around half of total output. Yet, though Korean manufacturing capabilities have finally reached world-market standards, only Hyundai-Kia, the single independent producer, engages in vanguard R&D, a large part of which is still done in its design centres in the USA, Germany and Japan, even if the local supply of highly-skilled engineers has increased dramatically and these type of activities have been simplified through the use of computer-assisted techniques. Moreover, with the partial exception of Mobis, a Hyundai spin-off, Korea's home-grown producers of auto-parts have lagged far behind those of any other major automobile manufacturing country (Noble 2005, 15, Doner et al. 2006). This particularity is far from trivial. Since the early 1980s, technological improvements in product design and production processes, including the development of industrial robots, have been increasingly undertaken in the parts and components sector. In fact, Korean producers' cost advantage in the motor-vehicle industry has continued being based on the cheapness of its workforce (Noble 2005, 18) relative its productivity, partly thanks to the strong undervaluation of the national currency.

In the microelectronics industry the story has been relatively similar. Semiconductors manufacturing, the leading export sector, also underwent a major consolidation in the post-crisis period. Hyundai and LG merged into Hynix which was later bought by world-market leader US's Micron. Only Samsung remained 'independent' due to its world-leadership in consumer electronics where most of its output has ended. On these bases, Korean semiconductors production expanded sharply in the period following the slump, with firms getting increasingly involved in the design of their own microchips. Yet, continuities with the previous period are also striking here. To begin with, standardised devices like memory chips remained at the centre of Korean firms' product mix despite their efforts to reverse the trend. Second, though local design capabilities improved significantly, this was largely the product of the further automation and modularisation of design activities which has resulted in the simplification/standardisation of *specific* stages and *types* of the design process (Ernst 2005; Brown and Linden 2005, 299–315). Indeed, the continuous automation of microchip design has not only facilitated the international separation of the R&D and fabrication stages, as had begun to occur during the 1990s. More recently, this process has also tended to simplify several parts of the design engineering work, making possible its modularisation and international fragmentation. Taking advantage of these developments, and of the improvement in telecommunication technologies and the local availability of low-cost engineers, industrial capital began by the late 1990s to relocate to Asia some parts of the now simplified design work. Due to the large local supply of labour-force with engineering skills and their experience in microchip

manufacturing, Korean capitals have been at the forefront of this new transformation in the IDL in the semiconductors industry (Ernst 2005). However, the local production of design software, chip architecture and advanced manufacturing equipment, as well as the capacity to design and produce complex semiconductors like microprocessors and application specific integrated circuits, have lagged behind world-market leaders (Joo 2005, 21).

The experience in consumer electronics does not seem to differ from these patterns either. As in the past, the international competitiveness of Samsung, the 'national champion', appears to be based more on cost advantage (in product engineering as well as in manufacturing) than in vanguard technological/design leadership. As in most other cases, post-crisis restructuring in this union-free *chaebol* included not only a drive towards skills acquisition, but also large-scale lay-outs combined with outsourcing to enforce wage compression through differentiation (Chang 2006, 45–46; Kong 2013, 13–15).

Hence, the policy changes and state initiatives pursued in the aftermath of the economic crisis of 1997–98 have not entailed any transformation of the specific bases of valorisation of capital in Korea; they have simply reproduced them under new forms. Despite the impressive post-crisis catching-up process, it still remains to be seen whether or not the global process of capital accumulation will ever determine Korea as a producer of vanguard scientific knowledge and technology – in other words, whether or not capital in Korea will *actively* participate in the production of relative surplus-value on a global scale. Becoming a 'hub' for the region would not necessarily imply this. In fact, the industrial sectors in which Korean firms currently excel (e.g. memory chips, consumer electronics, motor-vehicles, shipbuilding) are not the ones pushing the boundaries of technological development and, hence, generating the so-called 'quasi-rents' (e.g. software, pharmaceutical, biotechnology, defence, materials, robotics, aerospace, etc.). The transformation of a process of capital accumulation based on the use of *relatively* cheap and highly disciplined labour-power into one that is based on the vanguard development of scientific knowledge by doubly-free workers is not a straightforward process. It requires not only massive investments in research equipment and the widespread and extensive upgrading of labour's skills. It also requires the transformation of other of the latter's underlying productive characteristics. Wage-labourers performing vanguard research in basic sciences and frontier technologies need to perceive themselves as completely free individuals who are not tied to any hierarchy and who are able to express their unrestricted creative individuality in the labour-process they perform. Though no structural barrier exists against this development, those characteristics are somehow in contradiction to the ones that have made the Korean economic 'miracle' possible. Moreover, capital's increasing inability to produce surplus-value and to valorise normally in Korea rises doubts about the potentialities of such transformation.

6. Summary and conclusions

This paper examined processes leading to the Korean financial-cum-economic of 1997–1998 as well as the country's subsequent recovery. For that purpose, the paper first analysed the specific characteristics of Korean long-term capitalist development, finding that, as a result of contemporary *tacit-skill-replacing* technical changes, capital has accumulated there since the 1960s, as in other East Asian countries, through the production industrial goods for world markets using the relatively cheap and highly disciplined labour-power local workforce. This analysis challenged mainstream views that attribute

Korea's structural transformation to those state policies implemented there since the 1960s.

Hence, the Korean crisis of the late 1990s and the post-crisis recovery were seen in this paper as expressions of the limits and contradictions inherent to this type of process of capitalist development. First, as a result of the specificity at stake, industrial capital in Korea has tended to concentrate in the production of 'commoditised' goods with prices that tend to be particularly sensitive to demand fluctuations, crucially to slowdowns in economic activity. Second, the dynamics of the NIDL sooner than later eroded the bases of valourisation of capital in several branches of Korean industry. In this sense, with the ascent of Southeast Asia and China, the Korean economy suffered during the 1990s what the Japanese had 10 years earlier when Korea and Taiwan began to emerge as competitors in world markets of industrial goods. During 1993–1997, while the global economy expanded relatively rapidly thanks to the large availability of low-cost credits, these weaknesses remained hidden and only manifested themselves in the increased recourse to external loans to fund investment projects. However, when the global process of capital accumulation began to take form in a new limited crisis and those resources dried up sharply while global demand contracted, the contradictions manifested themselves openly in a sharp economic crisis. Though the Korean economy recovered in the post-crisis period, the process of capital accumulation there began to reproduce on yet more contradictory and somehow unsustainable bases.

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Notes

1. See [Figure 1](#) for the evolution of GDP and industrial value added.
2. O'Neill and Stupnytska (2009).
3. See [Figure 2](#) for the movement of exchange rates around their purchasing power parity.
4. See [Figure 3](#) for the evolution of industrial-sector wages and labour productivity.
5. This section is based on the works by Carrera (2008, 2014), Grinberg and Starosta (2009) and Grinberg (2013, 2014).
6. It should be noted that the points made here contrast with the World-Systems approach. Though some of the authors working within this framework recognise the 'ontological' primacy of the world-system over the nation-state (Chase-Dunn and Grimes 1995), hardly any of them sees capital, the reified general social relationship amongst commodity producers, as its concrete subject. Rather, they point at an abstract 'international division of labour' in the context of 'capital accumulation'. As a result of this methodological weakness, World-Systems analysis of concrete national developmental processes invariably signals the political forms through which the uneven development of global capital accumulation comes about as the driving forces of the process.
7. This section summarises Grinberg (2014, 721–729).
8. See [Figures 4 and 5](#) of the evolution of the production of surplus-value in Korea and of the rate of profit of industrial capital in Korea and the USA.
9. Effectively, since the early 1970s, the global economy has been undergoing a process of over-production of capital, whose resolution in a general crisis that re-establishes the balance between social production and consumption has been postponed through the expansion of credit by nation-states sustaining global demand. This expansion, however, has not been constant. Rather, it has taken shape in the succession of periods when cheap-credit policies support global growth with periods when, as a result of relatively more stringent state actions addressing inflationary pressures, limited crises take place, eliminating a portion of the fictitious capital that develops in this process and thus slowing the growth of credit and aggregate

demand. Each new cycle has reproduced on increasingly weaker and unsustainable bases; hence, the limited crises of overproduction taking place at the end of periods of relative prosperity have been increasingly extended (Brenner 2006; Carrera 2008, 181–233). See Figure 6 for the evolution of credit growth, GDP growth and interest rates in the USA.

10. In 1996, for instance, there were 2200 scientist and engineers working in R&D per million people in Korea while there were 5000 in Japan where total population was three times larger (OECD Research and Development Statistics).

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References

- Aglietta, M. 1979. *A Theory of Capitalist Regulation*. London: New Left Review Editions.
- Aizenman, J., and R. Glick. 2008. "Sterilization, Monetary Policy, and Global Financial Integration." *Working Paper No. 2008-15. Working Paper Series*. Federal Reserve Bank of San Francisco.
- Balconi, M. 2002. "Tacitness, Codification of Technological Knowledge and the Organisation of Industry." *Research Policy* 31: 357–379.
- Bello, W., and S. Rosenfeld. 1992. *Dragons in Distress*. London: Penguin Books.
- Bray, F. 1986. *The Rice Economies: Technology and Development in Asian Societies*. Oxford: Basil Blackwell.
- Brenner, R. 2006. *The Economics of Global Turbulence*. London: Verso Books.
- Brown, C., and B. Campbell. 2001. "Technical Change, Wages, and Employment in Semiconductor Manufacturing." *Industrial and Labor Relations Review* 54 (2A): 450–465.
- Brown, C., and G. Linden. 2005. "Offshoring in the Semiconductor Industry: A Historical Perspective." In *Brookings Trade Forum, Offshoring White-Collar Work*, edited by S. Collins and L. Brainard, pp. 279–322. Washington, DC: The Brookings Institution.
- Burnham, P. 1994. "Open Marxism and Vulgar International Political Economy." *Review of International Political Economy* 1 (2): 221–231.
- Castells, M. 1992. "Four Asian Tigers with a Dragon Head: A Comparative Analysis of the State, Economy, and Society in the Asian Pacific Rim." In *States and development in the Asian Pacific rim*, edited by R. Appelbaum and J. Henderson, pp. 33–70. Thousand Oaks, CA: Sage Publications.
- Chang, D.O. 2006. "Samsung moves: A portrait of struggles." In *Labour in Globalising Asian Corporations: A Portrait of Struggle*, edited by D.O. Chang, pp. 215–246. Hong Kong: Asia Monitor Resource Centre.
- Chang, D.O., and J.H. Chae. 2004. "The transformation of Korean Labour Relations Since 1997." *Journal of Contemporary Asia* 34 (4): 427–448.
- Chang H.J., H.J. Park, and C.G. Yoo. 1998. "Interpreting the Korean Crisis: Financial Liberalisation, Industrial Policy and Corporate Governance." *Cambridge Journal of Economics* 22: 735–746.
- Chase-Dunn, C., and P. Grimes. 1995. "World-Systems Analysis." *Annual Review of Sociology* 21: 387–417.
- Chopra, A., K. Kang, K. Meral, L. Hong, M. Henry, and A. Richards. 2001. "From Crisis to Recovery in Korea: Strategy, Achievements, and Lesson." In *IMF Working Paper, WP/01/154*. Washington, DC.
- Choi, Y.K. and D.I. Kim. 2004. "Changes in the Labor Markets and Industrial Relations." In *The Korean Economy beyond the Crisis*, edited by D.K. Chung and B. Eichengreen. Cheltenham: Edward Elgar.
- Chung, M.K. 2005. "Is it New Paradigm? Modular Production System in Hyundai." Paper presented at the Thirteenth International Colloquium on 'Productive Organisations – Employment Relationships – Financialisation: Specificities of the Automobile Industry', Paris, June 16–17.

- Coriat, B. 1992. *El Taller y el Robot* [Workshop and Robot]. Madrid: Siglo XXI.
- Corsetti G., P. Pesenti, N. Roubini. 1998. "What Caused the Asian Currency and Financial Crisis?" <http://www.ny.frb.org/research/economists/pesenti/whatjapwor.pdf> Corsetti.
- Doner, R.F., G.W. Noble, and J. Ravenhill. 2006. "Industrial Competitiveness of the Auto Parts Industries in Four Large Asian Countries: The Role of Government Policy in a Challenging International Environment." In *World Bank Policy Research Working Paper No. 4106*. Washington, DC: The World Bank.
- Ernst, D. 2005. "Complexity and Internationalisation of Innovation – Why is Chip Design Moving to Asia?." *Innovation Managements* 9 (1): 47–73.
- Fröbel, F., J. Heinrichs, and O. Kreye. 1980. *The New International Division of Labour: Structural Unemployment in Industrialised Countries and Industrialisation in Developing Countries*. Cambridge: Cambridge University Press.
- Graham, E. 2003. *Reforming Korea's Industrial Conglomerates*. Washington, DC: Institute for International Economics.
- Green A. 1992. "South Korea's Automobile Industry: Development and Prospects." *Asian Survey* 32 (5): 411–428.
- Grinberg, N. 2011. "Transformations in the Korean and Brazilian Processes of Capitalist Development between the Mid-1950s and the Mid-2000s: The Political Economy of Late Industrialisation." PhD diss., London School of Economics and Political Science.
- Grinberg, N. 2013. "The Political Economy of Brazilian (Latin American) and Korean (East Asian) Long-term Development: Moving beyond Nation-centred Approaches." *New Political Economy* 18 (2): 171–197.
- Grinberg, N. 2014. "From Miracle to Crisis and Back: The Political Economy of South Korean Long-term Development." *Journal of Contemporary Asia* 44 (4): 711–734.
- Grinberg, N., and G. Starosta. 2009. "The Limits of Studies in Comparative Development of East Asia and Latin America: The Case of Land Reform and Agrarian Policies." *Third World Quarterly* 30 (4): 761–777.
- Haggard, S. and J. Mo. 2000. "The Political Economy of the Korean Financial Crisis." *Review of International Political Economy* 7(2): 197–218.
- Hahm, J.H., and F. Mishkin. 2000. "Causes of the Korean Financial Crisis: Lessons for Policy." *Working Paper No. 7483*. Working Paper Series. National Bureau of Economic Research (NBER).
- Hart-Landsberg, M., S. Jeong, and R. Westra. 2007. "Introduction." In *Marxist Perspectives on South Korea in the Global Economy*, edited by M. Hart-Landsberg, S. Jeong, and R. Westra, pp.115–138. Aldershot: Ashgate.
- Hasegawa, H. 1996. *The Steel Industry in Japan: A Comparison with Britain*. Sheffield Centre for Japanese Studies/Routledge Series. London: Routledge.
- Howe, G.N. 1981. "Dependency Theory, Imperialism, and the Production of Surplus Value on a World Scale." *Latin American Perspectives* 8 (3/4): 82–102.
- Hwang, S.K. 2006. *Wage Structure and Skill Development in Korea and Japan*. Mimeo: Korea Labor Institute.
- Iñigo Carrera, J. 2008. *El Capital: Razón Histórica, Sujeto Revolucionario y Conciencia* [Capital: Historical Reason, Revolutionary Subject and Conscience]. Buenos Aires: Ediciones Cooperativas.
- Iñigo Carrera, J. 2014. "The Historical Determination of the Capitalist Mode of Production and of the Working Class as the Revolutionary Subject." *Critique: Journal of Socialist Theory* 42 (4): 555–572.
- Jones, R., and S. Urasawa. 2013. "Labour Market Policies to Promote Growth and Social Cohesion in Korea." *OECD Economics Department Working Papers*, No. 1068, OECD Publishing.
- Joo, D. 2005. "The Current State of the Korean Electronics Industry and Options for Cooperation with Taiwan." *KIET Industrial Economic Review* 10 (6): 14–26.
- Jun, J. 2004. "The Fiscal Policy Response to the Crisis." In *The Korean Economy Beyond the Crisis*, edited by D.K. Chung and B. Eichengreen, pp. 113–136. Cheltenham: Edward Elgar.
- Kong, T.Y. 2013. "Between Late-Industrialisation and Globalisation: The Hybridisation of Labour Relations among Leading South Korean Firms." *New Political Economy* 18 (5): 625–652.
- Koo, H. 2001. *Korean Workers*. Ithaca, NY: Cornell University Press.

- Lansbury, R., C.S. Suh, and S.H. Kwon. 2007. *The Korean Motor Industry: The Hyundai Motor Company's Global Strategy*. London: Routledge.
- Lautier, M. 2001. "The International Development of the Korean Automobile Industry." In *Going Multinational: The Korean Experience of Direct Investment*, edited by F. Sachwald, pp. 207–273. London: Routledge.
- Lee, B.Y. 2003. "Globalization and Industrial Relations in Korea." *Korea Journal* 42 (1): 261–288.
- Lee, K.K. 2004. "Korea, Northeast Asian Economic Hub Country?: A Critical Study on the New Government Strategy." *Ritsumeikan International Affairs* 2: 1–25.
- Lee, B.H., and Frenkel, S. 2004. "Divided Workers: Social Relations Between Contract and Regular Workers in a Korean Auto Company." *Work, Employment and Society* 18 (3): 507–530.
- Marx, K. 1973. *Grundrisse: Foundations of the Critique of Political Economy*. Harmondsworth: Penguin.
- Marx, K. 1976. *Capital: Volume I*. London: Penguin.
- Mathews J., and D. Cho. 2000. *Tiger Technology*. Cambridge: Cambridge University Press.
- Moon, W., and Y. Rhee. 2009. "Financial Integration and Exchange-Rate Coordination." In *Fostering Monetary & Financial Cooperation in East Asia*, edited by D.K. Chung and B. Eichengreen, pp. 51–72. Singapore: World Scientific.
- Noble, G. 2005. "Reshaping Corporatism: The Japanese and Korean Auto Industries in a Globalizing World Economy." Paper presented at the annual meeting of the American Political Science Association, Washington, DC, September 1.
- Noland, M. 2000. *Avoiding the Apocalypse: The Future of the Two Koreas*. Washington, DC: Institute for International Economics.
- OECD Research and Development Statistics. www.oecd.org/sti/rds.
- O'Neill, J., and A. Stupnytska. 2009. "The Long-Term Outlook for the BRICs and N-11 Post Crisis." Global Economics Paper No. 192, New York, NY: Goldman Sachs.
- Perrin, S. 2001. "Korean Direct Investment in North America and Europe: Patterns and Determinants." In *Going Multinational: The Korean Experience of Direct Investment*, edited by F. Sachwald, pp. 77–126. London: Routledge.
- Postone, M. 1996. *Time, Labor and Social Domination*. Cambridge: Cambridge University Press.
- Radelet, S., and J. Sachs. 1998. "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects." *Brookings Papers on Economic Activity* 1: 1–90.
- Ravenhill, J. 2001. "From National Champions to Global Partnerships: The Korean Auto Industry, Financial Crisis and Globalization." *Working Paper No. 01.04. MIT Japan Program*. Massachusetts Institute of Technology.
- Shin, D.M. 2003. *Social and Economic Policies in Korea: Ideas, Networks and Linkages*. London: RoutledgeCurzon.
- Smith, T. 2006. *Globalisation. A Systematic Marxian Account*. Leiden: Brill.
- Suh, J., and Chen, D. 2007. *Korea as a Knowledge Economy*. Washington, DC: Korea Development Institute and The World Bank.
- Wade, R. 1998. "From "Miracle" to "Cronyism": Explaining the Great Asian Slump." *Cambridge Journal of Economics* 22: 693–706.
- Williams, K., C. Haslam, J. Williams, S. Johal, and A. Adcroft. 1994. *Cars*. Providence: Berghahn Books.
- World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy*. Oxford: Oxford University Press.