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# ESSAYS ON GROWTH AND DEVELOPMENT IN POST-SOCIALIST COUNTRIES

DISSERTATION SUBMITTED TO THE DOCTORAL SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN INTERNATIONAL STUDIES/INTERNATIONAL ECONOMICS TRACK

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## Abbreviations

СВ	Currency Board		
CEE	Central and Eastern Europe		
CEECs	Central and Eastern European Countries		
CIS	Commonwealth of Independent States		
CME	Coordinated Market Economy		
CPE	Comparative Political Economy		
DME	Dependent Market Economy		
EBRD	European Bank for Reconstruction and		
	Development		
FSU	Former Soviet Union		
IFAD	International Fund for Agricultural		
	Development		
IMF	International Monetary Fund		
IPM	Institute for Privatization and Management		
LME	Liberal Market Economy		
MITI	Ministry of Foreign Trade and Industry of		
	Japan		
MNC	Multinational Company		
NPF	National Privatization Fund		
OECD	Organization for Economic Cooperation and		
	Development		
SME	Small and medium sized Enterprise		
SOE	State-owned Enterprise		
TFP	Total Factor Productivity		
VoC	Varieties of Capitalism		

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### Abstract

This dissertation seeks to contribute to the ongoing debate on the variety of postsocialist developmental trajectories by analyzing specific country cases and factors. The origins of distinct development paths are traced to early policy decisions, formation of tax regimes, and the shifting balance between demand for, and supply of, redistribution. An important feature of the transition economies is the varying propensity of policy-makers to control the speed of market reforms. Policy discretion has been restricted by self-imposed economic transnationalization, i.e., the opening of the financial and production sectors to the penetration of foreign capital. Post-socialist economies have varied with respect to the timing of their transnationalization and to the strength of the associated monetary and financial discipline, which have far-reaching implications for their competitiveness.

The examination of existing cases of delayed reforms, such as in Belarus, further uncovers the nuances of formation of divergent post-socialist trajectories. This process is riddled with an inescapable conflict between backward and advanced sectors. Domestic social forces are often unable to reach a negotiated, consensual solution to this conflict, thus opening an avenue for transnationalization. If this conflict is left unresolved, dual economies tend to emerge, and are characterized by the coexistence of a sector of subsidized enterprises with a sector of profit-making and more efficient companies.

In order to trace the dynamics of dual economies, the dissertation develops two analytical models encapsulating the factors behind the inter-sectoral conflict and the policy instruments, including taxation and financial repression in the form of directed lending. A continuous use of these policy instruments has clear-cut implications for investment and economic growth over the long run. A case is made to show the conditions under which dual economies are sustained over prolonged periods, but do not necessarily become more efficient and stable. The first model predicts that – *ceteris paribus* – the speed at which dual economies converge to the income level of the most advanced countries is reduced by the legacies of industrial employment and ideological hostilities towards reforms. The second model, which captures some important properties of the Chinese economy, demonstrates that in dual economies financial repression can lead to economic growth, but it occurs at the expense of savers' well-being.

## Introduction

This dissertation is devoted to the study of economic transformation in post-socialist countries. After more than two decades of systemic transformation, the process of transition from plan to market seems to be well-studied. The current research seeks to contribute to the ongoing debates on transition by analyzing the experience of reform laggards. The analysis of their performance provides additional insights into the process of economic transition in general. If more advanced countries show less advanced reformers the images of their own future, then laggards are merely locked in the stages passed by the others.

Thus, early reform experience is worth to re-examine as the present situation can be understood through a careful analysis of the policy choices made at the beginning of transition. This is the subject of the first chapter of the thesis. Important policy decisions were made by technocratic elites, which were exposed to particular sets of beliefs and ideas. Although the impact of ideas is difficult to quantify, they seem to be an important contributor to policy decisions. Ideas provide the necessary optics through which responses to economic challenges are formulated by economic advisors and political leaders. Moreover, policy decisions bear a stamp of subjectivism: after the collapse of state socialism there were no coherent plans on how to restructure large industrial complexes. Thus, the major uncertainty was which industries should be destroyed immediately, which could be left to operate, and which would simply fall in competitive battles. An important aspect of early phase of transition was the emergence of 'unintended', passive industrial policy, stemming from the complexities of dealing with the inherited industrial legacies.

The ways these legacies were dealt with by policy-makers have contributed to the diverging outcomes, including the orientation and structure of exports, institutional designs, and foreign penetration in banking and industry. One of the key aspects of post-socialist

capitalisms is their considerable economic 'transnationalization', or exposure to the inflows of foreign capital into finance and production for the purpose of upgrading domestic economy and, subsequently, gaining international competitiveness. The second chapter discusses the causes of economic transnationalization, which can be interpreted as a tool to discipline domestic economic agents and to enhance policy credibility. Transnationalization has farreaching implications for economic development of the countries in question.

Naturally, the transformation agenda contains multiple elements. This dissertation focuses only on one of them, namely an issue of industrial development. The vast majority of the former socialist economies were heavily industrialized. Thus, transformation – among other aspects – has been about reforming the enterprise sector. This reform is important to address the work and welfare problems. The role of banking is invoked peripherally. Also, the role of the crisis of 2008–2009 is considered only marginally because its consequences are yet to be comprehended, while governments are actively searching for efficient solutions.

While the first two chapters set the context and provide the necessary details of systemic transformation, chapters three and four focus on the experience of reform laggards. In order to understand their performance, it seems relevant to apply Lewis' concept of dual economy. It is hypothesized that virtually all transition economies have experienced a dual-economy stage of development, characterized by the coexistence of profit-making and loss-making enterprises. While in some of post-socialist countries this period was rather brief, in others – including Belarus – dualism has lasted much longer.

Dualism is observed in other post-socialist countries, including China. There are at least two dualisms. The dividing lines can be drawn first between China's FDI and non-FDI economies, and, second, between urban and rural regions of the country. From the 1990s, Chinese authorities have favored the urban regions, while the rural sector has been heavily taxed and financially repressed. Cities have been provided with directed, preferential loans to implement large-scale infrastructural and manufacturing projects. In fact, financial repression is a common feature of dual economies of China and Belarus.

In European post-socialist countries, dualism arises out of the inherited industrial structures and the fears of social costs of reforms. In order to trace the dynamics of dual economies, the dissertation develops two analytical models encapsulating the factors behind the inter-sectoral conflict and the policy instruments, including taxation (Chapter 3) and financial repression in the form of directed lending (Chapter 4). A continuous use of these policy instruments has clear-cut implications for investment and economic growth over the long run. A case is made to show the conditions under which dual economies are sustained over prolonged periods, but do not necessarily become more efficient and stable.

## **Chapter 1**

# Theories and Realities of Early Post-Socialist Reforms

### 1.1 Introduction

This chapter analyzes early reform experiences of post-socialist countries. This is to demonstrate how the present situation can be understood through a careful analysis of the policy choices made at the beginning of transition. Initially, reform paths were broadly classified as either shock therapy or gradualism. Subsequently, this dichotomy has been crowded out by focusing on institutions. Discussions on institutional relevance range from the efficient designs of pension and healthcare systems to the roles of history and path-dependencies in the transformation process.

The speed of transition is linked to the length of experiences with capitalism or socialism, long before the transformation process started. For instance, Estonia and Slovakia had functioning markets before they had become socialist. It is argued that their market experience has played a role in their relatively quicker (re)construction of markets, compared to the majority of the former Soviet Union republics (Carlin, 2010).

But the Soviet Union had its own *New Economic Policy* (NEP) in the 1920s. This policy, apart from giving birth to a whole entrepreneurial class, allowed for an inflow of foreign machinery and technology (Jacobson, 1994). It was a process of building markets after the war and the revolution. Moreover, at the end of the 1920s, the Soviet government started to encourage the transfer of Western technologies to develop capital-intensive industries, including automobile, aircraft, chemical, electro-technical and machine-building (Sutton, 1971). These developments had a lasting influence.

There is another case of path-dependence. In the late 1980s, unofficial markets were widespread in the Soviet economy. Some of the production facilities, which were formally owned by the state, had been virtually privatized by 'the crypto-private producers, the guildworkers, [and] shoppers' (Grossman, 1998, p. 112).

These facts illustrate the problem of factor selection: which institutional histories or inherited legacies matter for transition outcomes. Given this problem, there is a reason to explore the details of early policy decisions and to evaluate their roles in shaping the subsequent processes of transition. In many respects, transformation has been driven by 'conscious policy choice of reformers and a state capable of implementing them' (Bohle & Greskovits, 2007a, p. 109). Crucial economic policy decisions were made by technocratic elites, who controlled the strategic levers of the economy and the state at important moments in history. Reformers were exposed to particular sets of ideas and beliefs, available at the beginning of transition. The impact of ideas is difficult to quantify and to substantiate formally<sup>1</sup>. Nevertheless, they seem to be an important factor behind policy decisions. These decisions were taken by policy-makers in the environment of uncertainty and disillusionment with the socialist economic order.

It has to be stressed that the fundamental changes in the former socialist countries are not unique. Some Latin American (e.g. Chile and Peru) and East Asian countries (e.g. Japan, South Korea, and Taiwan) faced similar challenges. Thus, it is useful to make selective comparisons between these countries and post-socialist states.

As for the countries' coverage, the chapter refers to Central and East European countries (CEE), mainly the Visegrád States, and former Soviet Union economies (FSU), with the exception of the Central Asian republics. The choice of countries is motivated by the following reasons. First, they represent a group of countries that went through systemic

<sup>&</sup>lt;sup>1</sup> At the same time, it is difficult to analyze the early phases of economic transition in quantitative terms. For instance, real GDP statistics was of poor quality, especially under high and variable levels of inflation (Berglöf & Bolton, 2002).

changes roughly around the same time. Second, the challenges and suggested ways of reforms were similar, but policy reactions and the final outcomes are different. Thus, despite important differences in economic structures, sufficient socio-economic parallels can be drawn. These analytical similarities form a background to a brief comparative discussion of policy choices.

### 1.2 Conceptual underpinnings of transition

Typically, studies of systemic change recognize the strong influence of external advisors, including the IMF, the World Bank, and the Harvard Institute of International Development, on the reform process (Wedel, 2001). These institutions advocated what are called 'neo-liberal reforms'. 'Most transition strategies' have been influenced by 'the broader global context of neo-liberal ideology' and policy (Bohle et al., 2007, p. 82), which were not of choice of or making of post-socialist countries.

There is no need to restate the arguments on how post-socialist policy-makers were lured by 'the shining commandments' of the Washington Consensus. At the very end of *The General Theory*, Keynes (1964[1936], p. 385) underscored that much of policy making is influenced by ideas of defunct economists. The political-economic landscapes are often shaped by the beliefs, ideas and general economic orientations of policy-makers (McNamara, 1999). Responses to economic crises are refracted through 'the intellectual lenses through which economic advisors and political leaders perceive the crisis and the available [policy] options' (Nelson, 1990, p. 20). Thus, a relevant question in the post-socialist context is why a policy package of the Washington consensus was perceived as suitable more than the other policy alternatives.

A somewhat simple answer is to point to the dominance of neoclassical economics at that time. The collapse of the socialist bloc undermined the attractiveness of left-wing and statist ideas (Appel, 2004). For the post-socialist societies, neo-liberalism provided a

simplified technocratic advice in hard times (Pickel, 1997). The bodies of academic knowledge and policy advice were strongly influenced by the mainstream economics and its version of political economy (Schmidt, 2000). The Washington consensus had 'the common core of wisdom embraced by all serious economists: this core has made the orthodox reform package a 'universal convergence programme' (Williamson, 1993, p. 1334).

Neoclassical ideas took a command on the prepared stage and a fertile ground for policy experimentation. There were secret admirers and sympathizers of market economy in the state socialist countries, especially in Central and Eastern Europe. Dissident intellectuals and mid-rank professionals in the public bodies were 'secretly translating and discussing [the works of] Hayek and Milton' (Eyal et al., 1998, p. 90). They hoped that one day their 'sectarian' dreams would come true, as freedom is superior to serfdom. The same happened with Milton Friedman and other fellows of the Mont Pèlerin society in the early 1970s. Once they were a small group discussing free market ideas in the world dominated by Keynesianism. But the crisis affecting the Western economies in the 1970s, together with Thatcher's and then Reagan's ascendancy to power, gave this group a chance to acquire voice, strength, and influence. This rise is associated with the partial inability of Keynesian policies to address the problems of unemployment and inflation (Hemerijck & Schludi, 2000).

Neo-liberalism is typically promoted as a solution, which is necessary to destroy the outdated state-crafted economic institutions and to replace inefficient policies. In the UK, followers of neo-liberal ideas emphasized the need to dismantle the welfare state, while in Latin American countries they underscored the necessity to break with import-substituting industrialization. In Britain, Thatcherism, 'an ideology armed with a set of (mainly economic) theories' (Desai, 1994, p. 34) produced largely 'ideologically-driven' welfare cuts (Huber and Stephens, 2001, p. 219), particularly in the light of 'modest' retrenchment in European economies (Pontusson, 2005, p. 183), which was induced by a rise of unemployment. The

roots of Thatcherism can be traced to the activities of a network of think-tanks, including the Institute of Economic Affairs and the Centre for Policy Studies. These 'second-hand dealers in ideas' served 'to collect, distill and preserve certain strands of ideas and diffuse them more widely' (Desai, 1994, pp. 28, 31).

In Latin American countries, a similar process of 'ideological escalation' once occurred (Hirschman, 1979, p. 85). Jilberto (1993) refers to the Brazilian economist Jose Serra, who argued that a number of Latin American countries, namely Colombia, Venezuela, and Chile (during the Frei Presidency of the years 1964–1970), initially tried to resolve the problem of industrial stagnation by less decisive, but still market-oriented, means. Among these countries, the case of Chile is paradigmatic in terms of imposition of neo-liberal discipline upon the society by the military government led by Pinochet. This imposition was assisted by the 'Chicago Boys inspired by Friedman's ideas' (Friethof, 1999, p. 1050). Chilean technocrats can be seen as intellectuals and practitioners giving the dominant military group sufficient degrees of 'homogeneity and awareness of its only function, not only in economics, but in social and political fields' (Gramsci, 1971, p. 79).

For the former socialist economies, the applicability of the Washington consensus policies was contrasted to the shortcomings of the 'Chinese third way', which might look an attractive alternative. Sachs and Woo (1994a, 1994b) argued that Chinese gradualism is largely a product of the specific structure of the Chinese economy and Chinese politics. In contrast, post-socialist gradualism is related to the problem of alleviating the social costs incurred by temporary losers. In the past, China was confronted with a typical development problem of moving from lower-productivity agriculture to higher-productivity industry, with benefits for the majority of the population.

In contrast, transition economies faced a problem of structural adjustment: inefficient and subsidized enterprises should be ousted by efficient and profit-making companies. Latin

American countries had to solve the same problem in the 1970s and 1980s. Structural adjustment is not 'Pareto-improving', because the process of change becomes conflictual as 'workers in the declining sector fight to maintain their previous status and living standards' (Sachs & Woo, 1994a, p. 110). However, in the context of post-socialist economies, 'a movement towards productivity-enhancing' institutions seemed to be more important: the application of the notion of Pareto improvement appears to be a 'too stringent' criterion (Bardhan, 2005, p. 522).

This problem of structural change was not entirely new for the former socialist states. Throughout the 1980s, the late socialist governments, particularly in the former Yugoslavia, Poland, and Hungary, were trying to improve the functioning of their economies. They have reacted to economic problems accumulated in the years preceding transition. These attempts resulted in the creation of 'two-track systems', in which a small non-state sector was permitted at the periphery some socialist economies. For instance, by 1989, in Hungary and Poland, the share of workers employed in the private sector amounted to 20 percent and 37 percent, respectively (Borish & Noël, 1996, p. 87).

Nevertheless, these experiments had not improved the performance of state socialist economies. Resources continued to remain in the state sector rather than to flow to potentially more productive non-state activities. Moreover, reforms occurred 'within the state sector alone', disallowing the arguably more efficient coexistence of 'a private sector with nationalized enterprises' (Myant, 1993, p. 60). At the same time, external environment was not very favorable due to the impact of two oil shocks and subsequent recession in the developed economies.

Fundamentally, late-socialist economic experiments had been insufficient to tackle inherent economic flows. Lavigne (1999, p. 92) points to the problem of declining growth in the late socialist period. This problem was caused by low productivity of labor and capital and

slow pace of implementation of technical progress. As a result, the standards of living and consumption in the socialist bloc countries 'were mediocre'. Easterly and Fischer (1994) stress the 'systemic inability' to substitute capital for labor: while capital was growing, labor force per unit of capital was not declining, thus dampening the rate of return to new investment. Gross and Steinherr (1995, p. 73) aptly summarize economic malaises of the socialist system: 'human skills, market knowledge, distributional systems, consumer satisfaction, rapid change, development of services are all features of a modern, advanced economy' for which the socialist countries were 'not geared up'.

The inability to intensify production, even with the increase of foreign loans and limited access to Western high technology reflected the situation when 'the institutions of society', and not only the economy, were 'insufficiently flexible in adjusting to crisis tendencies that had been concealed for too long' (Altvater, 1993, p. 23). Also, by the 1980s, the second economy – an unauthorized diversion of socialist-owned materials, labor, machine time, etc., – bloated to its 'dysfunctional' stage, thus contributing to a loss of productivity of the whole economy (Treml & Alekseev, 1994).

Distorted economic structure and failed gradualism in the late 1980s were used to advocate one-size-fits-all policies. In addition, the awareness that a political conflict could intrude transition economies more deeply than China supported the argument in favor of a speedy change. There seemed to be no credible alternative to a withdrawal of assistance to the large state sector. The core task of the state was – whether realistic or not – to become insulated, as much as it is possible, from the vested interests of protection-seeking industrialists and redistributive demands of workers.

The argument about the inapplicability of politically-controlled gradualism did not only closely correspond to the logic of the Washington consensus policies, but also informed the beliefs and some policy actions at the beginning of transition. The package of

'stabilization, liberalization, and privatization' (World Bank, 1996) was urged to get rid of the system of subsidization and redistribution as quickly as possible. First and foremost, macroeconomic stabilization was nearly equated to reducing money supply, so cheap loans became scarce or unavailable. The small state suited this purpose. Second, liberalization had to ensure that competition occurs to crowd out poor and loss-making enterprises. Third, privatization was necessary to create a class of private owners, whose presence minimizes the statist backlash.

As for institutions, surprisingly little was advised, with the exception of the reliance on the Coase's theorem of distribution of property rights irrespective of the mode of distribution itself. Regarding redistributional arrangements, a warning was issued: do not convert a 'premature' socialist welfare state into a mature Western European welfare state (Kornai, 1997). Some (supposedly short-run) social pains were seen as necessary to achieve welfare gains in the future. These austerity proposals strongly resonate with the debates held in the Western academia about the 'overshooting' of welfare state in the advanced economies.

This overshooting has been explained by institutional rigidity (Iversen & Eichengreen, 1999). Once institutions conducive to a particular type of economic structure are installed, it becomes very hard to dismantle them. In particular, in Western Europe, centralization of wage bargaining and the expansion of the welfare state helped to resolve distributional conflicts and overcome short-termism in the years of post-war reconstruction. Wage moderation – delivered by centralized trade union organizations – was congruent with accommodating monetary policy and generous welfare state (see Chapter 2 for details). But since the 1970s, when Fordist methods of mass production gave way to the differentiated production and service economy, labor market institutions and welfare state were seen as hampering macroeconomic performance<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> In particular, centralization of wage bargaining tended to delivered wage compression, which was acceptable in an economy where workers possessed relatively uniform skills. Technological developments created demand for

As for the former socialist countries, their mode of production only resembled Fordism and did not develop into its 'full-blown', genuine version (Altvater, 1993). An efficient conjoining of mass production with a system of rationalized mass consumption was not achieved. In Western countries, the international division of labor changed after the introduction of a new generation of production technologies. The former socialist countries were unable to match these developments (Sapir, 2002). Some countries, including Poland, Hungary, and Bulgaria, opted for importing technology from the West by using foreign loans to pay for these imports, in order to upgrade domestic industry (Lavigne, 1999). However, this strategy has not delivered expected outcomes, except the accumulation of foreign debts. Enterprise sector required more profound reforms.

### 1.3 Competing visions of enterprise reform

What kind of production structure had the post-socialist reform programs envisaged? It appears that, if fully implemented, orthodox reforms would be conducive to the creation of a market of small-scale producers competing with each other, at least in the initial phase of economic transformation. This claim can be illustrated by referring to Shafer's (1994) concept of sectoral-industrial development.

This concept views economic development as critically depending on the competitiveness of 'the leading sector through which' the state 'is tied to the international economy' (Shafer, 1994, p. 2). Each sector is characterized by a distinctive combination of four variables – 'capital intensity, economies of scale, production flexibility, and asset/factor flexibility'. These variables, taken together, produce 'distinctive state structures and capabilities, external and internal distributions of power, and sets of societal actors' (Shafer, 1994, pp. 10, 23).

highly-skilled workers, who were unwilling to have their wages negotiated at central level by unions mainly representing unskilled workers.

Two sectoral strategies appear to be relevant for post-socialist countries. One strategy is the reliance on what is labeled as 'low/low sector's firm production' (Shafer, 1994, p. 13). This strategy focuses on the development of small, atomistic production units vigorously competing with each other domestically and, possibly, internationally. Light industry is a good example. In this case, the burden on the state is minimal, and the economy is in much better position to adjust to market downturns. It is this profile that was consonant with the Washington consensus policies.

In contrast, economies with concentration of 'high/high' sector(s) are in more vulnerable position due to their dependence on 'few critical firms' (Shafer, 1994, p. 13). This is the profile that the former socialist economies were developing for decades. Sector specificity is characterized by 'the long-term difficulty of reallocating resources' (Shafer, 1994, p. 24), implying the 'intractability' of restructuring. This is the case of heavy industry. The maintenance of 'high/high' sectoral composition can be very costly, because the survival of the economy and the fiscal position of the state are conditioned upon the performance of several large companies. If these companies lose competitiveness, the state has to deploy substantial resources to keep them afloat. Also, this strategy contains the multiple risks, given the strong competitive positions of multinational corporations (MNCs). MNCs continuously 'scan' the globe, searching for beneficial tax systems and low wages.

For Shafer, the risks of integration into the international economy through a high/high sector profile in most cases outweigh the advantages of policies aimed at enhancing 'local firms' competitiveness' (Shafer, 1994, p. 30). It appears that the chief recommendation for firms in developing and transition economies would be to compete – at least initially – in 'low/low sectors', (e.g. light industry and similar labor-intensive branches). This is because developmental risks are small and manageable, while the state is able to assist to the

deepening of this kind of specialization. In addition, very few opportunities for lobbying and rent-seeking are created, so the insulation from the vested interests is achieved.

Both Schafer (1994) and Sachs/Woo (1994a; 1994b) warn about the risks of excessive state interference in the process of restructuring and development. Initially, it is more appropriate to concentrate, for instance, on the production of apparel or footwear. This was done by Japan after the Second World War and East Asian economies in the 1960s. In 1993, the World Bank's study of East Asia claimed that 'sectoral industrial policies were largely ineffective' and warned that 'promotion of specific industries generally did not work and therefore holds little promise for other developing [and transition] countries' (World Bank, 1993, pp. 312, 354).

Strikingly enough, a year after this study was published, the Taiwan semiconductor firm, *United Microelectronics* signed a pact to transfer its 0.8-micron processing technology to a German firm *Thesys Microelectronik*. In addition to transferring its processing technology, equipment specification and management expertise, the company offered to the German firm manpower training in the area of wafer testing (The Free China Journal, 1994, p. 8).

The case of Taiwan is illustrative to what happened in a number of East Asian countries, where the states managed the process of economic development, including the insertion of their economies into the international division of labor (Wade, 1990). The early paradigmatic case of such policy is Japan (Woo-Cumings, 1999), where government's support for emerging industries was responsible for much of economic growth, and especially for transformation from a low-tech to a heavy industry and, later, to a high-tech economy (Pekkanen, 2003). In the late 1960s, the Ministry of Trade and Industry of Japan (MITI) picked up winners with the help of a council of experts from leading corporations, banks, universities, and trade unions. The MITI controlled the allocation of foreign exchange and used it to favor targeted industries, which were sheltered from imports by non-tariff barriers

(Johnson, 1982). Without government guidance and assistance, it is very unlikely that Japan would be as strong internationally as it is now in semiconductors, machine tools, telecommunication equipment, and fiber optics.

The cases of South Korea and Taiwan complement the case of Japan. But economic policies of developmental states should not be equated with (semi-)autarchy, although strong nationalism provided a powerful forge on which legitimate political power could rise and guide economic development (Wade, 1990; Woo-Cumings, 1999). The variable exposure of different sectors to world market competition was a characteristic feature of many developmental states<sup>3</sup>.

Importantly, the governments of Taiwan and South Korea supported the development of 'infrastructural sectors', including steel and basic chemicals 'not only to promote productivity growth in those sectors, but also to acquire spillover benefits on the users of steel and basic chemicals' (Wade, 2005, p. 105). Therefore, possible losses generated by these sectors were not a problem *per se*, until their functioning helped the expansion of more efficient industries. Alternatively, the 'rents' and subsidies offered to less efficient sectors paid off, since steel, energy and other inputs were made available at low prices to the benefit of more competitive sectors. This combination represents a benign dual-economy structure, where sectors with different productive capacities coexist in a productive, not a parasitic symbiosis. The latter is observed of Belarus, where economic dualism overshoots its 'optimal term', if any<sup>4</sup>.

Bell and Pavitt (1993) consider industrial policies of developmental states to be an integral part of the 'national systems of innovations' created in Taiwan and South Korea. The 'sectoral policy' component of these systems offered incentives for R&D and functioning of small and medium-sized enterprises. For instance, in Taiwan, the government sponsored

<sup>&</sup>lt;sup>3</sup> However, as Wade (2005, p. 103) notes, 'Korea and Taiwan did not have a uniform level of protection. Within manufacturing, different sectors had different levels of protection'.

<sup>&</sup>lt;sup>4</sup> The concept of dual economy is explained and applied to study of post-socialist economies in Chapter 3.

public R&D laboratories and stimulated the implementation of research results by private sector companies. This could serve as an illustration to what Woo-Cumings (1999, p. 21) calls 'synergies' between business and the state. Their interaction is such that 'each side has used the other in a mutually beneficial relationship to achieve development goals and enterprise stability'.

The experience of East Asian developmental states contrasts to what happened in both CEE and FSU. Instead of fully-fledged R&D and industrial policies, post-socialist governments resorted to some temporary, often unintended, 'fixes'. Policy reactions were not planned despite the complexities and uncertainties associated with drastic economic change.

#### 1.4 Building market economies in the real world

Whatever the degree of romanticism of early reformers, their ability to benefit from the 'patience' of populations (Greskovits, 1998), and beliefs in seemingly immaculate economic doctrines, where 'helicopter flies and throws out the money' (Friedman, 1969, p. 4), policies had to be taken in concrete environments. The major uncertainty was which industries should be destroyed immediately, which could be left to operate, and which would simply fall in competitive battles.

The key policy problem was to decide about the fate of whole branches of economy and of particular enterprises. A problem of 'too big to fail' appeared almost immediately due to the average size of industrial plant in the socialist economies and the overindustrialization of the socialist economies. For instance, in Poland, in 1990, manufacturing sector employed 19 percent of workforce and provided 60 percent of fiscal revenues, while its share in GDP amounted to 30 percent and in exports – 85 percent (Commander & Coricelli, 1992, pp. 26–31; Winiecki, 1993).

There was a more fundamental problem of 'too many to fail', a possible simultaneous fall of too many companies, which were linked to each other through production chains

(Mitchell, 2001). From the outset, output collapse was not predicted. Most likely, it is because of the belief that the unfettered operation of market forces would automatically restore equilibrium by means of macroeconomic stabilization (Ellman, 2005). It was assumed rather than proved that the private sector was more productive by default, while the industrial sector, if subsidized, would simply waste resources and become a parasite on the body of its more efficient, private counterpart (Sachs & Woo, 1994b). This argument was mainly informed by the unsuccessful gradualist experiments under state socialism.

An alternative view suggests that 'in the early stages of transition...a significant number of inherently viable state-owned enterprises existed'. Inherited skill profile was considered an asset along with 'existing base of industries, especially mid-tech facilities' (Amsden et al., 1994, pp. 7–9). At the same time, at the beginning of transition, no comprehensive assessments existed about what fraction of fixed capital had to be destroyed, transformed, or preserved. One of the later studies (Izyumov & Vahaly, 2008) claim that at least about one-third of the fixed capital in the former Soviet Union had to be destroyed as being completely uncompetitive. The same study estimates that about 40 percent of capital in the former USSR could be left undestroyed to operate in the new market environment. Thus, in the absence of a comprehensive assessment of the quality of inherited capital, a space was open for subjective treatment, or a more or less voluntary choice by policy-makers<sup>5</sup>.

There was another important aspect. Initially, reform packages did not contain any explicit proposal concerning the design of a social safety net, except stating that it should be 'adequate' (Bird & Wallich, 1993). If construction of the market economy is seen as a Polanyi's (1957[1944]) 'double movement', then liberalization is to be followed by compensatory measures to losers. In fact, the construction of market economy in the former socialist states could be compared with the 19<sup>th</sup> -century process of economic liberalization in

<sup>&</sup>lt;sup>5</sup> Such subjectivity played was notable, for instance, in Latvia. See Chapter 2 for details.

England. The phrase 'nothing similar had ever been witnessed before' applied by Polanyi (1957[1944], p. 12) to the 19<sup>th</sup>-century England, was repeated many times in relation to the processes of systemic change in the former socialist states.

Three tenets of 'laissez-faire' capitalism seem to be unchanged in principle, despite fundamental historical and contextual differences. First, 'Poor Law Reform' of 1834 abolished the provisions for the paupers. The poorhouses were transformed into abodes of 'shame and mental torture to which even hunger and misery were preferable' (Polanyi, 1947, p. 56). National market for labor was created by offering a simple dyad: 'starve or work'. In similar fashion, the closure of inefficient industries in the former socialist countries was proposed without explicitly specifying forms of social support for the at least temporarily unemployed and the new poor. Labor was supposed to find its place on the market, according to the skills acquired in the non-market past. Naturally, there was a sheer uncertainty about the applicability of those skills in the new conditions (Fernandez & Rodrik, 1991).

Second, in England, the Bank Act (1844) established the principle of gold standard. The making of money was removed from the hands of the government, regardless of the effect upon the level of employment and capital accumulation. This principle closely corresponds to the monetarist prescriptions of control over money supply and central bank independency for post-socialist economies.

Third, repeal of the Corn Laws (1846) exposed the unprotected peasant-farmers to the whims of the market. Along with reformed land laws, it contributed to the creation of a world pool of grain. The equivalent idea for the post-socialist states was the package of liberalization policies, including of domestic economic activity and especially of foreign trade. Free flows of goods were advocated irrespective of the consequences for the domestic industries.

In fact, the former socialist economies, which were located in-between the Third World countries and developed Western societies, were initially induced to develop laborintensive industries with minimal spillover effects on the remaining industries. Amsden et al. (1994, p. 2) put it very bluntly: 'the laissez-faire model may have succeeded in overthrowing mercantilism and creating cottage industry in rural England, but it has incurred high social costs and low rates of return when applied to the project of restructuring Eastern Europe' and the former Soviet Union.

However, apart from the zeal characterizing the early reformists, they had to operate in rapidly changing and uncertain economic environment. Moreover, the pre-existing actors and structures did not vanish immediately, but continued to exercise a lasting influence. As Gramsci (1971, p. 106) reminds us, 'no social formation disappears as long as the productive forces which developed within it find room for further movement'. These forces are also carriers of ideas, which under certain circumstances, can ascend from a status of being narrow, 'economico-corporate' to the dominant in a given society (Gramsci, 1971, pp. 180, 195).

### 1.5 Ideas meet realities: the invention of subterranean subsidization

In CEE countries, 'technocrats and dissidents quickly discovered that their plans for economic transformation stood little change of materializing without the support of the managers of individual firms' (Eyal et al., 1998, p. 99). Industrial managers had knowledge of their enterprises, their assets and liabilities, commercial partners, and so on. For monetarists, what is going on inside enterprises was largely a 'black box'. All black boxes looked alike: there was no need to differentiate among them. Thus, enterprises had to be subjected to the uniform mechanisms of financial control and of self-adjusting money supply.

Naturally, managers of state-owned enterprises wanted – at least temporarily – protection from foreign competition, as they realized that many Western companies were

largely superior in terms of technology, organization of production, and management techniques. Similar attitudes were observed in other economies.

In Chile, a 'laboratory' of neo-liberalism in the mid-1970s–early 1980s, state initially allied with certain business groups and assisted them economically. Silva (1993) distinguishes among three phases of Chilean neo-liberal restructuring. Radical policies had been implemented in the second phase of the fundamental reorganization of society, lasting from 1975 to 1982. Prior to that, from 1973 to 1975, those, who later became the 'Chicago Boys', did not have a free hand' (Silva, 1993, p. 536). They initially represented the interests of the 'gradualist coalition' dominated by 'internationally competitive producers for domestic markets' (Silva, 1993, p. 539). This coalition, supported by one of the industry's peak associations (abbreviated as SFF) and an umbrella organization of peak associations, the Confederation of Production and Commerce (CPC), had a meeting in December 1973 to agree on the support of privatization, price deregulation, creation of private capital markets, and more gradual reduction in protectionism.

Later, private sector leaders met with government officials to discuss post-coup economic program. The 'Chicago Boys' had been promoted to positions of advisers in the Ministry of Economy and the government planning agency (ODEPLAN) with the help of the businessmen from the 'the Edwards conglomerate', who later had become the members of the leading civilian authorities under the military junta (Silva, 1993, pp. 538–539). Gradualist forces had soon become challenged by the 'radical internationalist' business groups that supported less gradual integration into the world economy. Authoritarian government had seen 'internationalists' as the only groups capable of stabilizing the Chilean economy. This is because of foreign connections these 'internationalists' had preserved even in the course of nationalization policies of 1971–1973, and the leading positions in the economy achieved by them through corporate acquisition strategies. The urgent requirement was to contribute to a

very low foreign exchange reserves and to resolve the problem of credit crunch (Silva, 1993, p. 544).

The experience of Chile shows that despite the rhetoric, reforms, even if they seem to be 'parachuted from above', are refracted via domestic economic structure and decisionmaking procedures. Ideas have to be applied in certain contexts that are capable of modifying original policy proposals. Also, change is hardly orchestrated immediately: initially, some efforts are put to maintain the inherited economic structure. For instance, in CEE countries, at the beginning of transition, state-owned enterprises remained under the control of national privatization funds (NPFs) (Young, 1996). These funds were state bodies searching real owners for the state properties. Therefore, at least for a while, state officials continued to engage in close, hands-on supervision of enterprises.

Under this supervision, a demand for subsidies resurfaced. But the state budgets had been increasingly incapable to deliver them. First, tax preferences were granted to newly created, private companies to encourage their growth. Second, many companies and individuals exploited existing opportunities for tax evasion. In contrast, state-owned enterprises were paying taxes on wage increases and on the value of their assets, which together constituted a major source of state revenue (Tanzi, 1992; Turley, 2005). Later, from the mid-1990s onwards, tax breaks were offered to foreign companies and investors, often on a case-by-case basis (Appel, 2006). Moreover, international financial institutions insisted on the maintenance of balanced budgets.

In this situation, a reliable way to continue subsidization was to channel preferential loans through commercial banks, either explicitly or implicitly. In CEECs, an implicit mode of subsidization existed for a short period of time. First, both banks and enterprises shared the interest of 'playing against the state'. In particular, banks were aware that enterprises were too big to fail and thus they could be bailed out. Second, newly created firms had no record of

operations, so it was difficult for banks to decide about loans to them (Berglöf & Roland, 1995). Commercial banks preferred to provide loans to state-owned enterprises rather than providing apparently riskier credits to newly created companies (Gorton & Winton, 1998).

It appears that post-socialist governments initially declined unbridled market forces to operate and decided 'to keep firms afloat through subsidies, additional credits at least implicitly guaranteed by the state, various kinds of tax relief, and tariff and non-tariff protection' (Van Brabant, 1994, p. 77). This was 'unintended, de facto industrial policy' (Nielsen, 1996, p. 73), which was clearly lacking the coherence and the comprehensiveness that were observed in the economies of East Asia.

In the former Czechoslovakia, after the liquidation of the State Planning Committee, two new ministries were established in 1990, namely the Ministry of Economy and the small Ministry of Strategic Planning. The creation of these bodies was inspired by Japanese-style developmental guidance. However, after the elections of 1992 they were seen as a throwback to communism and their activities were terminated (Nielsen, 1996). The often-quoted phrase by Poland's first post-socialist Minister of Industry, Tadeusz Syryczyk, captures a laissezfaire approach to industrial transformation: 'no industrial policy is the best industrial policy' (Birch & Mykhnenko, 2009, p. 369).

The absence of consistent industrial policies can not only explained by the ideologydriven abandonment of planning, but also by the fact that 'the targets and agents of a consistent policy were both overwhelmed by the magnitude of changes' (Hunya, 1997, p. 276). Moreover, the obligations accepted within the framework of the 'Europe Agreements' precluded the candidate countries (at least those aspiring to EU membership) from expanding state aids, protectionism and similar measures (Mayhew, 1998).

In addition, the emergence of post-socialist 'passive' industrial policy, which was lacking the strategic character of its East Asian counterpart, can be related to the initial weakness of institutions, particularly financial institutions, particularly banks. The role of banks was hardly recognized at all at the beginning of reforms (Csaba, 2009, 2011; Ellman, 2005). For banks, it was difficult to distinguish between enterprises worthy to give or to refuse a loan due to their inability to restructure. Before 1989, governments were locked into financial relationships with a large number of firms facing restructuring tasks (Berglöf & Bolton, 2002). In this situation, the state was supposed to provide banks with information by signaling them which industries or companies were to be supported.

A simplified story of the peculiar relationships among governments, banks, and firms in transition economies is as follows (Sherif et al., 2003). In order to prevent output collapse, governments limit the speed of enterprise restructuring by allowing some poorly performing companies to stay afloat. Authorities make decisions about the volume of funds available to enterprises and collective farms through the banking system. Banks, (co-)owned by the state or for the reasons described above, choose to accommodate state-induced demand for loans. If enterprises selected by the state are unable to pay off their debts – and this is often the case – banks experience solvency problems. Authorities then have to recapitalize banks by using budgetary funds and budget deficits grow (or if debt is monetized, inflation rises). If the state does not provide support, banks might run into severe portfolio problems because of the growing volume of unrecoverable loans. Bank insolvency can further increase the vulnerability of banks and 'hollow out' the banks' capital. In order to break a vicious circle of insolvency-recapitalization, banks should be allowed to get rid of bad loans, and both banks and companies should take for granted that bail-outs will not occur in the future.

In CEE in particular, the sales of domestic banks to foreigners have been used to limit the discretion described above and to pull lending decisions out of the realm of politics (Mihalyí, 2004; Sobol, 1998). As the Table 1.1 in the Appendix 1.A show, asset share of foreign-owned banks increased across the transition economies considerably by the end of the 1990s–early 2000s. At the same time, bank privatization has been positively associated with a growing size of the financial system (see Figure 1.1 in the Appendix 1.A). Broad money to GDP ratio is a conventional, widely used measure of financial development (Fry, 1995). As it can be seen from the left-had scatter of the Figure 1.1, greater share of foreign bank ownership is positively associated with the larger size of the domestic financial system. It implies that more savings are available for investment. This measure of financial development appears to be appropriate in the post-socialist context, where securities markets and non-bank financial institutions are not well developed (EBRD, 2005), in contrast to more mature market economies. The right-hand scatter of the Figure 1.1 shows that greater presence of foreign banks is negatively associated with the volume of non-performing loans, which are often a product of state intervention into the functioning of commercial banks.

In other words, there was a need for 'effective bonding devices', or mechanisms to transfer control over capital accumulation to non-state investors. Without such devices, firms had been 'confined to defensive cost-cutting measures and growth based on internally generated funds' (Berglöf & Bolton, 2002, p. 92). Fundamentally, 'transnationalization' of post-socialist economies in the form of penetration of foreign banks has contributed to a solution of the problem of 'chaotic hysteresis':

'[this is] a situation in which the economy is heavily influenced by events of the past and the inherited institutional structure undermines attempts to reform it. Poor macroeconomic performance thus arises endogenously, and the growth path will be unstable. In addition, inherited behavioral routines and existing institutional structures endogenously reproduce routines that lead to socially destructive outcomes, thus reinforcing poor macroeconomic performance' (Poirot, 2003, p. 34).

Åslund (2002) summarizes the whole transition experience by a simple phrase: 'the strife over subsidies'. This statement reflects the peculiarities of the presence of the state in the post-socialist economies at the early stages of transition and beyond. While in CEE

subsidization was abandoned by privatization of banks, in the former Soviet Union, it endured because of a specific presence of the state in the economy.

# 1.6 Protraction of subsidization and the emergence of dual economies

The unwillingness of the state to withdraw from the economy and to abandon its intended industrial policies did not only stem from underdeveloped financial institutions, but also reflected the difficulty of solving the problem of redistribution, that included the compensation for losers. Some political scientists warned that populations can be 'myopic' (Przeworski, 1991). Short-term negative distributional consequences can stall economic reforms (Hellman, 1998). There is a fertile ground for the emergence and consolidation of anti-reform coalitions because governments can not reduce inequality immediately.

Nevertheless, anti-reform social explosions did not materialize despite that postsocialist economic depression was very deep and wage cuts were larger than those experienced by labor in major countries hit by the Great Depression. Crowley and Ost (2001) outline several reasons why people abstained from militant actions. First, difficult economic times precluded individuals from protests. Second, there were collective action problems: when costs are evident and benefits are uncertain, people might refrain from collective actions (cf. Olson, 1965). Third, new private companies were characterized by the almost complete absence of trade unions. Fourth, international factors, such as the weakness of unions in the new global economy, affected labor in transition economies (Harrod, 2002). Fifths, there was limited, but continued reliance on resources provided by unreformed enterprises, supported by subsidies.

The 'patience' factor played a role (Greskovits, 1998). In CEE and the Baltic States populations seemed to be willing to suffer more for the sake of 'returning to normality' or 'becoming European in democratic-liberal tradition' (Laux, 2000, p. 78) than in the former

Soviet Union republics. Patience can be related to the notion of injustice, which was conceptualized by Barrington Moore (1978). According to Moore (1978), different societies are characterized by varying degrees of perception of injustice, including the ways people feel their sufferings as unavoidable. Anything that seems inevitable to people are tolerated as legitimate irrespective of pains it brings. This sense of inevitability determines the development of politically effective forms of moral outrage (Moore, 1978, p. 459)<sup>6</sup>.

At the same time, protests are usually spread by 'outside agitators', or social critics, who are the members of the 'army of preachers and militants to spread the good things of escape from the pains and evils of this world' (Moore, 1978, p. 472). There was no activist minority to promote new standards of condemnation, except, perhaps, some hard-core party apparatchiks and Marxist scholars. Social and cultural climate had turned to be very hostile to them.

The case of Polish 'Solidarity' is illustrative of the difficulties of making transition in a non-neoliberal, 'workers' way'. In 1980–1981, 'Solidarity', together with Polish intellectuals, elaborated the theoretical and practical foundations for transforming the state property to private and communal property. However, the 'shock therapy' plan did not reflect upon any of these early propositions. Moreover, by 1989, the strength of a movement that had reached a membership of 10 million weakened considerably<sup>7</sup>. As a result, internal social forces, such as Solidarity, 'failed to elaborate a consistent economic policy, which reckoned with the realities of the economy', although once they were powerful enough to weaken the existing system (Mirovits, 2010, p. 172)<sup>8</sup>. Foreign indebtedness and the overall poor condition of the Polish economy forced the government to launch a liberalization program. Also,

<sup>&</sup>lt;sup>6</sup> Moore considered state socialism as a form of dependence. Thus, its collapse requires the creation of new forms of solidarity and new networks of co-operation. If there was solidarity before, it requires redirection.

<sup>&</sup>lt;sup>7</sup> It has to be mentioned that the introduction of the Martial Law has weakened the movement. Also, internal divisions existed within 'Solidarity'.

<sup>&</sup>lt;sup>8</sup> Mirovits (2010) also stresses the influence of changes in economic policies worldwide, which guided the reform process in Poland.

opposition leaders, who participated in the roundtable talks, did not believe that transformation can be managed by workers and/or their representatives.

Aspiration to full EU membership is almost universally invoked in the studies of economic transition. It has played a role of 'external anchor', helping to reduce protests, to reward the patience of the populations and to make the reform process irreversible. In contrast, the republics of the former Soviet Union (with exception of the Baltics), did not have such an external anchor. Therefore, incentives of political and economic actors were different. There were also different attitudes towards market economy (see Figure 3.1 in the Appendix 3.B of Chapter 3).

Nevertheless, many countries actually implemented similar economic reforms. For instance, in Russia the design of the privatization program – one of the central elements of the transformation process – was similar to that of the Czech Republic, i.e., voucher-based privatization<sup>9</sup>. Estonia, Armenia, and Russia are classified as 'liberal market economies' ahead of Hungary, Poland, and Czech Republic in terms of labor market flexibility, redistribution, and business regulation (Knell & Srholec, 2006, p. 60). Typically, former Soviet Union economies are characterized by smaller welfare states and larger income inequality (with the exception of Belarus) than their CEE counterparts (see Chapter 2). These factors might indicate that the withdrawal of the state from the economy occurred on a larger scale in the post-Soviet countries than in CEE countries. Nevertheless, there is evidence that the state's presence has been preserved.

The collapse of the Soviet Union left workers and managers unprepared to accept the reduction in real income caused by the initial price jump (Burawoy & Krotov, 1993). In the early 1990s, in the former Soviet Union republics nominal wages and remuneration for managers, bonus payments and the like increased sharply and led to a rapid wage-price spiral.

<sup>&</sup>lt;sup>9</sup> However, Russia experienced three waves of privatization: 1992–1994 (small businesses), voucher-based for some large businesses (1993–1995), and notorious 'shares-for-loans' (1995–1996).

During the early period of post-Soviet transformation, demands for increased wages and referential loans were accommodated. As Table 1.2 in the Appendix 1.A indicated, the FSU economies were characterized by the higher values of the Okun misery index (i.e. the sum of inflation and unemployment rates) than other transition economies <sup>10</sup> (Table 1.1. in the Appendix 1.A).

The banking systems were initially passively satisfying the credit demands. Soft credits were financed by the state branches of the central bank of the Soviet Union. Branches of the central bank in Ukraine, Belarus, Kazakhstan, etc., granted nearly unlimited credits to the local enterprise sector and to local governments. Attempts to limit credit expansion led to an increase in arrears and barter among enterprises<sup>11</sup>. It can be said that in the former Soviet Union there was the lack of a coherent transformation strategy, and, more crucially, a complete lack of coordination among economic actors. In the absence of centralized authority or of any significant inter-enterprise coordination, the macroeconomic costs of demand for loans tended to be externalized, undermining any incentives for enterprises to exercise credit restraint. Accordingly, when the external value of the national currencies went into free fall, interrelated spirals of depreciation-inflation and of wages and prices emerged. Conflicts escalated and culminated in the decision by a large number of the former Soviet Union republics to issue their own currencies. Estonia was the first country to introduce a national currency in 1992<sup>12</sup>. The bulk of the former states of the Soviet Union followed suit in 1993. This was a step towards the implementation of functional monetary policies.

In Estonia, and two other Baltic States, reforms were aimed at destroying the old institutions and even production facilities to create market economies anew (see Chapter 2). In the Baltic States, dual economy had not emerged on a scale comparable to CEECs, not to

<sup>&</sup>lt;sup>10</sup> The distinction between the Baltic States, other FSU republics, Slovenia, and the Visegrád States is justified in Chapter 2 of the dissertation.

<sup>&</sup>lt;sup>11</sup> Poser (1998, p. 170) reports that, after the price liberalization in the Russian Federation in 1992, interenterprise arrears rose from a negligible amount to two-thirds of the GDP in the first six months of that year.

<sup>&</sup>lt;sup>12</sup> Estonia also set up a currency board to secure its macroeconomic stability.

speak of the former Soviet Union countries. In the latter, and particularly Russia, Belarus, and Uzbekistan, different attitudes prevailed. In Russia in particular, there was 'a set of informal institutions that permit the production and exchange of goods that are value subtracting' (Gaddy & Ickes, 2002, p. 5). As a result, a virtual economy' emerged, where value-adding companies – 'value pumps', such as Gazprom – coexisted with value-destructing companies. The latter were preserved for several reasons, including: (i) bankruptcy was not used against town companies because whole communities depended on their existence; (ii) private sector companies helped the economy to grow and to generate subsidies; (iii) barter and arrears allowed restructuring to be postponed.

'Survival without restructuring' was a specific business model, utilized in Russia and some other former Soviet Union republics, including Belarus and Uzbekistan. In Russia, it started to flourish after the tightening of monetary policy roughly in 1995. The use of this model required reliance on 'relational capital', as Gaddy and Ickes (2002) label a skillful begging for subsidies from local authorities, who were also keen to keep existing enterprises afloat. Nevertheless, the use of 'relational capital' was only possible due to the existence of value creators (e.g., Gazprom, oil-exporting companies), injecting sufficient amounts to offset destruction of value by inefficient enterprises. If subsidization was halted, enterprises may be forced into bankruptcy. The 'virtual economy' created a new reality and complicated market reforms<sup>13</sup>. Prevention of enterprise restructuring resulted in asset stripping<sup>14</sup>, a rise in the public debt, and, finally, a stifling of economic growth. Advancement of reforms required political centralization to hit local bargains, based on 'relational capital'<sup>15</sup>.

<sup>&</sup>lt;sup>13</sup> It has been estimated that in 1996 and 1997, explicit and implicit subsidies to manufacturing enterprises were between 15 and 20 percent of GDP (Poser, 1998).

<sup>&</sup>lt;sup>14</sup> Similar process occurred in Bulgaria. See Chapter 2 for details.

<sup>&</sup>lt;sup>15</sup> Centralization indeed occurred in Russia, but resulted in the accumulation of economic power in the hands of the state. The second recommendation by Gaddy and Ickes (2002) was to undervalue the ruble. This measure would boost exports, helps market-oriented firms to survive, and reduces the size of the virtual economy, more oriented towards the domestic market.

The economy of two realities, where productive and unproductive enterprises coexist, has not been a phenomenon of Russia alone. In Belarus and Uzbekistan, political decentralization never reached Russia's scale. Instead, political centralization occurred much faster. In these countries, the state continued to intervene in the economy, also by providing direct support to certain sectors and even to individual enterprises. Financial systems have been 'repressed': banks provide directed loans to favored enterprises<sup>16</sup> (see Chapter 4 for details). Thus, political centralization and associated economic controls have resulted in the split of the economy into two distinct segments. One segment is populated by state-owned enterprises, which are subsidized by the state, while the other is comprised of profit-making companies, whose incomes are taxed to support firms of the first segment. The workings of these dual economies are further analyzed in Chapter 3.

### 1.7 Conclusion

This chapter has analyzed the early phase of economic reforms in the post-socialist countries. This period was characterized by the influence of multiple path-dependencies, which have to be accounted in the studies of systemic change in the former socialist countries. Experiences with both capitalism and socialism matter, so it is hard to distinguish which path-dependency has played a dominant role in shaping the transformation process. At the same time, decisions made at the onset of transformation had a lasting influence. Although developmental paths began to diverge after the mid-1990s (see Chapter 2 for discussion), earlier patterns and policy choices were not dissimilar.

Although there are important differences between Latin American countries and transition economies regarding their experience with markets, this comparison is still useful to gain additional insights into the challenges policy-makers had been facing and to stress that, at least initially, they prefer not to alter considerably existing systems of institutions and

<sup>&</sup>lt;sup>16</sup> See Chapter 4 for details.
incentives. In Chile in the 1970s and Peru in the 1980s, policy-makers, being unable to reject competing demands for redistribution, nearly 'bankrupted' their economies and thus left no options to experiment further with statist policy regime.

In the former socialist countries, despite the comprehensive character of suggested monetarist packages, some essential policy elements were missing. In a situation of uncertainty, the state was supposed to assist investment decisions, because banks themselves were unable to judge about the quality of loans and to develop long-term financing strategies. Under the centrally planned system, the state was the only investor. After that the state abandoned this role, an institutional vacuum appeared. Capital markets were non-existent and unable to emerge quickly. Domestic private capitalists were hesitant to invest or possessed insufficient funds. Also, there was the problem of assessing the value of assets. Fundamentally, policy-makers had to decide about the fate of assets: which should be destroyed, restructured, left with/without state support, or sold to foreign investors. These decisions contained a great deal of subjectivism.

At the same time, inherited legacies could not vanish immediately. In case the government refused to finance debt-burdened state-managed enterprises, both banks and enterprises could go bankrupt. Instead of comprehensive industrial policy, which seemed to be at least a policy option, temporary solutions emerged. One of them was implicit subsidization of underperforming SOEs, which later required costly recapitalizations of commercial banks.

At the same time, state assistance to the banks – despite the accumulation of 'bad debts' – contributed to fill the institutional vacuum regarding redistribution. The reinvention of subsidization, albeit implicit, can be seen as a part of Polanyi's 'double movement'. Politicians were not 'suicidal', in the sense that they were unwilling to put the majority of society on the edge of misery in order to build some 'notional' market economy. The limits of

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patience of populations were immeasurable and unknown despite the initial willingness to suffer for the sake of 'returning to normality' of market economy and democracy, mainly in the CEECs and the Baltic States.

Therefore, the early phase of post-socialist reforms was characterized by the presence of at least two interconnected features. The first feature was the transformation of socialist plan bargaining into the subsidy bargaining between politicians and enterprise managers. The second feature was the reliance on temporary compensation to potential losers. It is difficult to establish unambiguously what went wrong: state-owned enterprises were hit by the demand shock and were unable to adjust, or whether there was a lack of strategic vision in restructuring policies, with banks and enterprises acting as short-termist. In any case, the outcome was the emergence of dual economies, in which some enterprises were dependant on state support at the expense of more productive firms.

In CEE, dualism ceased to exist rather quickly. In contrast, dual economies survived, if one moves eastwards. In Russia, the coexistence of 'value pumps' and 'value subtractors' turned to be a business model, realized at the regional levels. The Belarusian and Uzbek economies are still characterized by dualism, where profit-making and subsidized enterprises coexist. For Belarus in particular, dualism has eventually become a model of economic development. The functioning of this model and its consequences are further analyzed in Chapter 3 of this dissertation.

### Appendix 1.A

Country/														
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bulgaria	2.4	4.2	1.9	3.8	21.6	65.3	76.7	79.7	80.9	90.9	94.0	93.8	95.0	94.5
Czech														
Republic	0.9	3.0	6.6	40.3	84.1	89.3	90.2	91.0	91.3	91.3	90.8	90.4	90.8	91.0
Estonia	19.0	23.3	26.4	38.4	65.4	89.1	85.8	86.3	98.0	99.4	99.1	98.8	98.2	98.3
Hungary	15.2	26.7	19.3	15.9	16.5	15.3	12.2	34.9	58.1	75.9	86.9	90.6	90.8	89.1
Latvia	na	18.3	35.8	16.5	24.6	32.7	50.4	61.2	70.1	73.6	71.5	58.7	72.0	na
Lithuania	51.5	70.6	79.1	74.0	74.4	65.2	42.8	53.0	48.6	57.9	63.3	63.8	65.7	69.3
Poland	na	na	22.4	34.4	39.8	34.9	36.7	35.2	33.6	19.6	22.9	24.8	31.6	41.0
Romania	14.4	16.0	17.4	49.3	72.6	72.2	70.7	71.5	71.3	74.3	74.2	75.5	76.5	72.3
Slovakia	0.2	0.6	0.5	0.4	0.5	13.2	27.0	38.4	37.7	66.0	78.7	75.5	75.3	na
Slovenia	12.7	19.3	23.7	24.1	42.7	78.3	84.1	96.3	96.7	97.3	97.0	99.0	99.2	91.6

Table 1.1: Asset share of foreign-owned bank in the selected transition economies, 1996–2009, percent of total volume of assets

*Source*: EBRD database, http://www.ebrd.com/pages/research/economics/data.shtml, viewed 20 April 2012.

Figure 1.1: Foreign bank ownership in the selected transition economies and broad money to GDP ratio (left-hand scatter) and the share of non-performing loans in total volume of loans (right-hand scatter), 1996–2009



*Source*: EBRD database, http://www.ebrd.com/pages/research/economics/data.shtml, viewed 20 April 2012.

Note: The sample includes 27 transition economies.

Misery Indexes	1992	1995	1999	2002	2006	2009	Average, 1995– 2009
Slovenia Average of the	215.6	20.7	13.6	13.8	8.0	6.8	12.6
Visegrád States Average of Bulgaria	81.4	31.2	19.5	17.1	13.1	11.9	18.6
and Romania Average of the	97.0	75.7	35.3	26.9	14.4	11.5	32.8
Baltic States Average of the CIS	1018.9	49.9	16.7	14.0	11.1	17.5	21.8
countries	1130.2	447.4	59.4	20.0	14.3	14.0	111.0

Table 1.2: The Okun Misery indexes in the selected transition economies, 1992–2009

*Source*: author's calculation on the basis of the EBRD data, taken from the EBRD database, http://www.ebrd.com/pages/research/economics/data.shtml, viewed 20 April 2012.

*Note*: The Okun misery index is the sum of inflation and unemployment rates. Higher unemployment and accelerating inflation create social costs for a country. For transition economies, the application of this index in the post-socialist is suggested by van Brabant as a 'makeshift discriminator' to differentiate economic performance. (1998, p. 13). In particular, higher values of this index in the CIS countries until the mid-1990s, in contrast to other transition economies, reflect dysfunctional monetary policies of the early 1990s.

## Chapter 2

## Varieties of Post-Socialist Capitalisms

#### 2.1 Introduction

The first chapter discusses initial policy choices and the factors that shaped them. Although post-socialist countries had to cope with similar economic problems, their policy reactions did not run along similar lines if a longer time span is considered. In fact, differences in policies have produced variations 'in almost every measure of economic performance' between EU newcomers and the CIS countries (Berglöf & Bolton, 2002). Political institutions also vary. On the CIS countries' side of the 'Great Divide', market economy and democracy are 'decomposed' (Bruszt et al., 2010), while capitalists exist without capitalism (Eyal et al., 1998).

Markets function differently within the sets of countries on the both sides of the 'Great Divide' (Bohle & Greskovits, 2007a, 2007b; Feldmann, 2006; King, 2007). For example, the economies of Estonia and Slovenia display the features which are characteristic of 'liberal market economies' and 'coordinated market economies', respectively (Feldmann, 2006). In the CIS, economies vary from statist regimes (as in Belarus and Uzbekistan) to those with limited economic presence of the state (as in Moldova) (Levitsky & Way, 2010).

The causes of these diverse politico-economic institutional configurations are of increasing interest for the scholars of post-socialist transformation and comparative political economy (CPE). CPE contains a well-developed approach to analyze the diversity of modern economies, that is, varieties of capitalism (VoC). In order to understand varieties of post-socialist capitalism(s), scholars either use the VoC framework (e.g. Knell & Srholec, 2006),

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or produce alternative conceptualizations (e.g. Bohle & Greskovits, 2001, 2007a, 2007b; Nölke & Vliegenthart, 2009). The VoC approach has originally been developed to study advanced political economies. Moreover, there is a fundamental unifying feature in the CEECs and the Baltics, namely their dependence on foreign capital. Such dependence is associated with economic 'transnationalization' (Hofmeister & Breitenstein, 2008). The concept of transnationalization refers to 'the growing role played by diverse forms of interactions between domestic and external actors in defining the direction and the content of the evolution of domestic institutions and policies' (Bruszt & Holzhacker, 2009, p. 3). In the field of economy, core elements of transnationalization are foreign ownership of banks and key parts of the manufacturing sectors, while many of the firms in these sectors form parts of MNCs' production chains (Bruszt & Holzhacker, 2009; Zysman & Schwartz, 1998).

A crucial role of foreign capital makes post-socialist economies in CEE and the Baltic region closer to 'hierarchical market economies' of Latin America (Schneider, 2009). In contrast, in the CIS, foreign penetration in industry and finance has occurred on a smaller scale. This chapter largely focuses on this divide between the new members of the EU and the CIS countries. The division within the group of the new member states is of lesser concern.

Chapter 1 of this dissertation argues that incoherent government intervention can be limited by the imposition of external discipline in the form of foreign ownership of banks. In this chapter, the causes and consequences of transnationalization are explored further. Postsocialist economies have varied in terms of timing of their transnationalization and the vigor of associated monetary and fiscal discipline, which have far-reaching implications for their competitiveness profile.

In order to trace divergent paths towards transnationalization, the cases of Latvia and Bulgaria are examined. Latvia has opted for a strongly neo-liberal strategy, including transnationalization of banking, with praise from international financial institutions. Initially, its economic success was paid in terms of in social pains, yet tolerated by its population. Later, the country has appeared to be little armed to combat the consequences of the global financial crisis of 2007–2009. In contrast, Bulgaria initially postponed transnationalization and attempted to base its economic growth on reviving domestic enterprises. Continuous support of these enterprises resulted in the accumulation of deficiencies culminating in the currency crisis of 1996–1997. These two cases provide additional insights into the causes of transnationalization.

#### 2.2 Varieties of capitalism: advanced market economies

The varieties of capitalism approach (VoC) represents a complex and original framework for 'understanding the institutional similarities and differences among the developed economies' (Hall & Soskice, 2001, p. 1). The VoC literature treats political economies as a more or less 'integrated systems' (Thelen, 2004) of interconnected 'institutional domains' (Iversen, 2000, p. 206), including industrial relations, financial sector, vocational education and training, and corporate governance. All these elements 'cohere' to make the best use of firms' productive assets (Hall & Gingerich, 2004). All major institutions are complementary to each other: an institution has to be understood in relation to other institutions.

Depending on how firms coordinate their activities with employees, banks, and governments, the distinction is drawn between liberal market economies (including the U.S., Britain, and Australia) (LMEs) and coordinated market economies (including the economies of Continental Europe) (CMEs). In the LMEs, actors rely on competition and formal contracting. In the CMEs, actors are involved in strategic coordination through non-market, hierarchical and negotiated mechanisms, including inter-firm networks, organizations of employers and unions at the sectoral and/or national levels.

According to Hall (2007), institutions address at least three types of problems: (1) the wage problem, (2) the work problem, (3) the problem of securing total factor productivity. To

these three, one can add (4) the problem of international competitiveness. Globalization makes domestic industries and workers increasingly exposed to competition from abroad. As a result, comparative advantages of countries change. These four problems are characterized by the need to balance competing demands of major economic actors. Conflicting interests of actors are accommodated through institutional arrangements that make bargaining under incomplete information possible and agreements enforceable (North, 1990; Williamson, 1985).

First, wage increases benefit workers and sustain the levels of demand, consistent with economic growth, but may hurt investment (the work problem). Accordingly, institutions of wage bargaining deliver wage moderation to avoid industrial conflict. Second, economic growth depends on employment, but those without work should be temporarily compensated. Hence, the work problem involves a trade-off between stimulation of employment and provision of social benefits for unemployed. Third, economic growth depends not only on factor inputs, but also on the efficiency with which labor and capital are put to work. This efficiency is not a function of the level of technology only, but is related to institutional factors. Institutions can erode or enhance the total factor productivity of the economy (Hall & Jones, 1999; Knack & Keefer, 2003). Last but not least, domestic firms increasingly face competition from abroad and particularly from low-wage locations. Governments may try to protect domestic jobs, but it may come at a price in terms of economic efficiency and a loss of a country's comparative advantage.

In the VoC framework, much emphasis has traditionally been put on wage coordination systems and their role in delivering wage moderation in the CMEs. In the LMEs, 'atomistic' labor markets and non-accommodating monetary policy are seen as effective tools to punish excessive wage demands by a rise in unemployment (Iversen & Soskice, 1999). Wage moderation, along with progressive taxation to penalize dividends and conspicuous consumption, contributed to higher investment levels and stimulated economic growth in

post-war Europe. The governments of continental European countries 'provided unemployment, health, and retirement programs – the institutions of the welfare state – to reduce workers' uncertainty about their future welfare and therefore their temptation to engage in short termism' (Iversen & Eichengreen, 1999, p. 124).

The wage problem overlaps with the work problem, which concerns the balancing of interests of employed and unemployed. Compensation to those without work is a part of income security programs. The emergence of these programs is often interpreted as 'decommodification', or maintenance of a 'livelihood without reliance on the market' (Esping-Andersen, 1990, pp. 21–23). Capital typically opposes social policies, while labor has a strong interest in expanding social insurance (Korpi, 1983; Shalev, 1983, p. 320).

However, in the CMEs, preferences of employers and workers with regard to the institutions of the welfare state have converged<sup>17</sup>. Competitive success of CMEs' firms depends on the acquisition of firm- and industry-specific skills by workers. Heavy investment in specific assets exposes both firms and workers to risks (Williamson, 1985): firms may lose investment in human capital, while workers may have difficulties in finding new jobs in case of unemployment. Welfare state provides insurance against such risks and thus stimulates the acquisition of 'asset-specific human capital' (Estevez-Abe et al., 2001; Iversen, 2005; Thelen, 2004). In contrast, in the LMEs, institutionalized social protection is weak. Market competition encourages economic agents to invest in general assets. Mobility of assets and their multi-purpose application provide insurance against the described risks.

Fundamentally, comparative advantages of national economies are thus formed by the export activities of firms, operating in distinct institutional environments. Firms in the CMEs rely on industry-specific skills to gain competitive advantage in standardized goods and machinery, while firms in the LMEs use a more general skills profile to specialize in either

<sup>&</sup>lt;sup>17</sup> Mares (2003) finds that in Germany in the 1920s employers pushed for the creation of a uniform, national system of unemployment and accident insurance.

'low-cost, mass-produced services' or 'new high-tech products' (Iversen, 2005, pp. 14–15). LMEs' firms are 'radical innovators' in sectors 'ranging from biotechnology, semiconductors, software, and advertising to corporate finance'. In contrast, CMEs' firms are 'incremental innovators' in 'capital goods industries, machine tools, and equipment of all kind' (Hancké et al., 2007, p. 5). Yet, the described patterns of international specialization of firms in the CMEs and LMEs do not comprise the whole of their economies (Blyth, 2003, p. 223). For instance, there are a variety of commodities and patterns of innovation within the same industry. Mass-produced services exist both in the LMEs and the CMEs.

Comparative advantages are grounded in institutional complementarities (Coates, 2000). Hence, a comparative advantage turns into a 'comparative institutional advantage' (Franzese & Mosher, 2002). Hall and Soskice (2001) claim that globalization does not undermine institutional configurations of the CMEs and LMEs. For instance, the EU's free trade policy does not force 'convergence on some brutal institutional, policy, and cultural minimalism', but 'champions the diversity' (Franzese & Mosher, 2002, p. 198).

Moreover, capital does not flee from expansive welfare states of the CMEs, while capital taxes do not converge to very low rates in both CMEs and LMEs. One may expect that in the CMEs, generous welfare states are funded by capital taxation, because the combination of left-wing governments and corporatist institutions typically favor the redistribution of wealth from capital to labor (Garrett, 1998). In similar vein, one should expect that the reliance on market mechanisms in the LMEs favor a greater freedom for capital and that the latter is taxed less than in the CMEs.

However, empirical evidence does not to corroborate these expectations (Cusack & Beramendi, 2006; Steinmo, 1989; Hay, 2001). There is a clear tendency in the LMEs to avoid heavy taxation of consumption and labor and to rely on capital for tax receipts. In the CMEs high rates are applied to labor taxation, and in particular to consumption outlays (Cusack and

Beramendi, 2006, p. 47). Over 1965–2000, the labor income average effective taxation rate (i.e. the ratio of taxes to actual base out of which taxes are taken) among the OECD countries increased (OECD, 2005). Therefore, a more productive factor is taxed more heavily.

Although the nature of core complementarities may remain unchanged, firms from both LMEs and CMEs change their behavior when they operate in different institutional environment. Firms do not necessarily seek to establish home-like institutions. Instead, they exploit available opportunities in host locations and often modify their internal incentive structures (Berger, 2000; Herrigel & Wittke, 2005). Moreover, some domestic institutions in the CMEs and LMEs have also changed. For instance, in the CMEs labor market dualism – the coexistence of regulated and unregulated domains – has become institutionalized (Palier & Thelen, 2010; Hassel, 2011).

With the above-mentioned observations, the dyad CME/LME represents two largely broad ideal types (Crouch, 2005). Nevertheless, the VoC offers an insightful conceptualization of how institutions address problems arising out of distributional conflicts in every economy. The relevance of the VoC framework 'for understanding the conflict generated by political-economic change' makes it attractive for 'analyzing economies beyond LME-CME archetypes' (Hancké et al., 2007, p. 8). If the majority of post-socialist countries reject the East Asian 'statist' developmental path, as it is discussed in Chapter 1 of this dissertation, then it is legitimate to expect that they may be closer either to a CME or a LME type. Moreover, given the elites' support for the neo-liberal model, an LME pattern is more likely to prevail.

# 2.3 Post-socialist varieties of capitalism: towards dependent market economies

A VoC-inspired research program for grappling with post-socialist varieties of capitalism starts with the identification of existing or potential institutional complementarities. As in the developed market economies, four problems, which concern wage, work, TFP, and competitiveness, have to be addressed. Among these, the problem of international competitiveness might prevail over other problems. Given the lack of internationally-competitive domestic capital (Nölke & Vliegenthart, 2009; Farkas, 2011), enterprises seek integration into international production networks. More reliance on market forces in the allocation of resources has social welfare implications. Hence, public outlays should be used – on a selective basis – to support sectors and groups particularly hurt by the restructuring process<sup>18</sup>.

The work problem has a skills mismatch component. Workers entering the competitive labor market may face uncertainty about their skills, accumulated in the socialist economy. Another aspect of the work problem is more or less similar across the post-socialist countries, that is, the high percentage of labor with high education facing a lack of demand for its skills, and – at the same time – shortage of workers in possession of the skills required by the firms (Rodriguez, 2009).

As for institution of wage bargaining, systems of employment protection have been weakened since 1990, while unions have lost much of their political influence<sup>19</sup> (Crowley & Ost, 2001). Even if wage bargaining is formally centralized, there are many possibilities to drift from it. Many employers, including SMEs and foreign firms do not necessarily follow

<sup>&</sup>lt;sup>18</sup> Compensation is necessary to weaken the 'blocking majority', which consists of unemployed, pensioners, and unskilled workers, i.e. all those who live on fixed nominal income that might be left unchanged as inflation occurs and those who cannot find a new place of work to employ their skills (Hellman, 1998).

<sup>&</sup>lt;sup>19</sup> Even in countries with high percentage of union membership, including Belarus, Russia, and Ukraine, trade unions do not play an active role. They are active at the enterprise level at best (Crowley & Ost, 2001b).

the guidelines suggested by such bargaining. Labor market regulations might look employeefriendly, but employers find the ways to bypass rules on minimal wages, job protection and social security through subcontracting, fixed-term labor contracts, and envelope wages (Cazes & Nesporova, 2007; Kapelyishnikov, 2001).

In terms of being closer to either the CME or the LME type, two opposite cases have been identified: Slovenia and Estonia, respectively (Buchen, 2005; Feldmann, 2000; Knell & Srholec, 2006). In Slovenia, unions have remained strong and business associations are encompassing. Workers exert influence through co-determination, including work councils, and presence in the boards of companies. State-funded vocational training system can help workers to acquire firm- and industry-specific skills.

In Estonia, workers are much less unionized, and there is no co-determination. However, the corporate governance system is not of LME type. This is because in Estonia enterprise restructuring required the presence of strategic investors, while in Slovenia companies were often privatized to managers and workers (Buchen, 2005). Although in both Estonia and Slovenia policy-markers had a strong sense of national identity, reforms were different. In particular, Estonian policy-makers were strongly concerned over the issue of national survival (Feldmann, 2000; 2006). Nation-building extended 'the period of extraordinary politics, [which] was particularly conductive to radical economic reform in Estonia and Latvia', while in Slovenia, a cohesive and nationalistic political elite was able to 'convert its pre-1989 institutions into a CME-type framework' (Feldmann, 2000, p. 14).

Moreover, Slovenian employers had a strong interest in establishing coordinated institutions, and 'well-timed' labor militancy strengthened the position of labor<sup>20</sup>. The emergence of coordinated institutions can be traced to the legacy of self-managed socialism in

<sup>&</sup>lt;sup>20</sup> Poland had a strong self-governing labor movement with a membership of 10 million people. In 1981, 'Solidarity' formulated a program of economic change, envisaging transformation of property. However, by 1989, it was weak to formulate and to advance a coherent alternative to a shock therapy model (see also Chapter 1 for discussion of early policy choices).

the former Yugoslavia (Crowley & Stanojević, 2009). Under socialism, Slovenia had developed a strong export-oriented sector dependent on skilled labor. Therefore, nationalist mobilization was grafted upon this favorable pre-1989 orientation of exports (Bohle & Greskovits, 2007a).

Other post-socialist countries are considered to be 'hybrids', or 'mixed market economies' than ideal types. For instance, in Poland and Ukraine the observed mixes of labor market institutions, financial intermediation, and corporate governance are unstable and 'partially coherent' at best (Mykhnenko, 2007). Such weakly coordinated market economies seem to be in a kind of institutional equilibrium, which is not necessarily dysfunctional. In contrast, there are even less coherent cases, such as the 'cocktail capitalism' of Romania, which are characterized by the lack of the institutions necessary for the efficient functioning of the economy or where these institutions are replaced by surrogates or arrangements typical to another model (Cernat, 2003).

According to the VoC logic, hybrids tend to underperform, and consequently their institutional constellations are subject to change. At the same time, there is a strong unifying factor that may lead to consider at least the economies of the Visegrád and the Baltic states as belonging to a distinct type, that is the 'dependent market economy' (DME). One of the characteristic features of DME is the dependence on foreign technology and capital to gain competitiveness and to maintain economic growth. DME can be considered 'a third basic variety', or 'transnationalized'<sup>21</sup> capitalist economy. DMEs have comparative advantages in the assembly, production, and exports of relatively complex machinery and consumer durables. DMEs' comparative advantages are based on institutional complementarities between skilled, but still cheap labor, the transfer of technological innovations within the production chains orchestrated by MNCs, and the provision of capital via FDI (Nölke &

<sup>&</sup>lt;sup>21</sup> The term 'transnational' covers increased interconnectedness of economies and actors inside them. In contrast, the term 'international' includes the interactions between governments of nation-states.

Vliegenthart, 2009, p. 672). A core element of economic transnationalization is international cross-ownership networks in banking and industry. Moreover, the great quantity of rules is of non-domestic origins, while regulatory powers are shared with or delegated to the EU bodies.

The emergence of external dependence is connected with a number of factors, including 'the lack of [internationally-competitive domestic] capital, weak civil society, and the impact of the European Union and other international organizations influencing the new member states' (Farkas, 2011, p. 20). To a great extent, orthodox strategies of macroeconomic stabilization paved the way to transnationalization. In particular, these strategies required strong currency, through which technologically advanced technologies were imported to break with backwardness (Carchedi, 1998). Strong currency can contribute to stabilization, but it can also make exports dearer. Hence, wage containment is needed to increase exports. Yet, this scenario fits more the cases of the Baltic States and Bulgaria than the CEECs. The former relied on currency boards or fixed exchange rate regimes. These exchange rate arrangements were conducive to flexible labor markets and lower wages, at least in the short run.

In the early 1990s, the Europe Agreements opened the EU market (with the exception of certain steel, textile, and clothing products) to the former socialist countries. The CEECs and the Baltic States have redirected their trade towards Western Europe. Initially, trade with the EU was dominated by labor-intensive manufacturing and goods with lower value-added (Zysman & Schwartz, 1998). This pattern was considered malign for long-term developmental prospects of post-socialist states (Pellegrine, 1996). Nevertheless, from the late 1990s, the new member states of the EU have managed to embark on a more promising developmental path by becoming exporters of more sophisticated, technologically-advanced products, including cars, electronics, chemicals, and consumer durables (see Figure 2.1 in Appendix 2.A), in contrast to the CIS countries. In the latter group of countries, fuel exports still play an important role (see Figure 2.2. in the Appendix 2.A).

An MNC appears to be a gatekeeper institution through which integration of postsocialist economies into the world economy occurs. Differences in the presence and the activities of MNCs in the post-socialist countries are translated into differential 'state capacities' 'to implement reform choices' and to shield against 'the volatility of global commodities and financial markets' to which the largest CIS countries are exposed to by being dependent on the exports of raw materials (Bohle & Greskovits, 2007a, pp. 89, 94).

Although both CEECs and the Baltic States are characterized by the dominance of Western banks in their financial systems, their capacities to cope with the consequences of the global financial crisis vary. Differences in the organization of foreign banking matter. In the Baltic States, international banking functions as cross-border business, while in CEECs, the banking systems are dominated by subsidiaries and branches of foreign banks. The latter were able to significantly contribute to stabilizing credit supply in CEECs<sup>22</sup> in contrast to the Baltic States (Dietrich et al., 2011).

#### 2.4 Not in the same game? Post-Soviet varieties of capitalism

In contrast to the CEECs and the Baltics, which represent varying versions of 'transnational varieties of capitalism', characterized by the active roles of foreign banks and multinationals, the CIS countries appear to be 'not in the same game' for attracting foreign capital (see Figures 2.3–2.4 in the Appendix 2.A). They are characterized by smaller volumes of accumulated FDI and a more modest presence of foreign banks in their national financial systems (see Table 2.1 in the Appendix 2.B).

 $<sup>^{22}</sup>$  This has occurred also thanks to heavy interventions in support of Western banks during the winter of 2008–2009.

Thus, the CIS countries appear to be less 'transnationalized' than the new member states, if judged by the volumes of FDI attracted and the presence of foreign banks in the national financial systems. Thus is not to say that foreign companies avoid the CIS countries. In Russia, multinationals set up production facilities to supplying consumer durables to the domestic market. As for exports, large CIS countries, including Azerbaijan, Russia, and Kazakhstan, benefit from the exports of raw materials. Smaller CIS countries are dependent on the energy supply from Russia and on its internal market as a destination for exports and for temporary labor migration. Thus, post-Soviet capitalisms are indirectly shaped – by varying degrees – by the economic and political situation in Russia.

In its turn, Russia has not broken its dependence upon raw materials exports, but retains its ambitions to follow a path of developmental states along the lines of South Korea and Taiwan. On this road of building a state-supported capitalism, the problem is how to secure 'the willingness of bureaucrats, managers, and politicians to forego large-scale rent-seeking and to refrain from devouring the units the state seeks to support' (Waterbury, 1989, p. 190). On the wake of the crisis of import-substituting industrialization in Egypt, India, Mexico, and Turkey, state capitalism was the 'the initial response to streamline and rationalize statist experiments' (Waterbury, 1989, p. 184).

A state-supported capitalism is not necessary signaling the presence of a strong state, but of a weak civil society (Holman, 1996). Bruszt et al. (2010) find that the variations in the strengths of pre-1989 civil societies, that had become evident during the last years of state socialism, have determined the success or failure of the politico-institutional change. In the Visegrád countries, socialist governments tolerated dissent more than in the former USSR republics. An oppressive stance toward civil society precluded the development of sound political institutions, economic reforms and democratization by giving rise to more bureaucratic-authoritarian regimes<sup>23</sup>.

Bureaucracy often rules together with clientalism, and can gradually become the same thing (Davidson, 1992). Nölke and Vliegenthart (2009) label the CIS capitalisms 'clan-based'. Clans can penetrate economic sectors (as in Ukraine), or even control the state apparatuses (as in Belarus and Uzbekistan)<sup>24</sup>. Investment decisions have become interwoven into a complex structure of favors and loyalties. In fact, the CIS countries are characterized by higher levels of corruption than the other post-socialist states (Transparency International, 2011). Corruption turns into 'a mechanism by which the legitimacy of the state is disseminated and wealth is distributed' (Bayart, 1993, p. 192). As long as the state remains a powerful means to pursue economic and political elevation in society, patron-client relationships can flourish<sup>25</sup>. Clientalism can be used by those who control instruments of power to keep the current leadership in the office (De Mesquita et al., 2003). Relationships can be differentiated between the groups of clients along the axes of 'exit, voice, and loyalty' (Hirschman, 1970). For example, authoritarian mobilization can be combined with paternalism (Standing, 1998)<sup>26</sup>.

In the economic sphere, a typical exit option amounts to migrate abroad, possibly only temporarily. As a result, remittances become an important source of household income (see Table 2.5 in the Appendix 2.B). At the same time, demand for redistribution declines. For the CIS countries, except perhaps for Moldova and Ukraine, Russia is a possible destination for

<sup>&</sup>lt;sup>23</sup> Pasynkova (2011) connects the institutional design of post-socialist political systems to the legacies of the previous regimes. Political regimes in the CIS countries are president-parliamentary or premier-president political systems with strong presidential powers. In contrast, in the Visegrád states, post-socialist transformations were negotiated, leading to parliamentary (Hungary, the Czech Republic and Slovakia) or premier-presidential (Poland) political systems.

 $<sup>^{24}</sup>$  A journalistic investigation of the Russian economy claims that Putin's rule in Russia resulted in the creation of a powerful economic clan, operating across different sectors of the economy. This clan controls 10–15 % of Russia's GDP (Albats & Ermolin, 2011).

<sup>&</sup>lt;sup>25</sup> Clientalism is orientated towards the consumption of government services without supplying the means for their production. The efficiency of clientalism is related to the ability of the state to deliver spoils for its clients. Support for the regime by its clients is exchanged for security and reward by the patron (Clapham, 1986).

<sup>&</sup>lt;sup>26</sup> In many CIS states, social stability is achieved by authoritarian practices. There is no possibility for a genuinely multi-party system to function. Also, chapter 3 demonstrates that reform delays can be used to secure paternalistic relationships with workers to gain political support in an authoritarian political setting (Way, 2005).

migrants. Temporary labor migration is also high in the Baltic States. This fact makes the cases of both the CIS and the Baltic countries look like the two sides of the same coin, which can be labeled as 'extreme reform solutions'. These solutions are either to liberalize radically to get rid of the inherited legacies or to construct varying mixtures of clientalism and markets.

Establishment of tax regimes has been conductive to the development of quasi-patronclient relationships between governments and enterprises in the CIS countries. These relationships also check the process of transnationalization<sup>27</sup>. In the new EU member states, taxes have been allocated away from corporations <sup>28</sup> and towards individual citizens. Moreover, the CEECs and the Baltics provided foreign companies with various 'fiscal sweeteners'. This pattern of taxation, reminiscent of a CME-type tax system (see Section 2.2), is observed regardless of the parties controlling the government<sup>29</sup> (Appel, 2006).

While tax systems in CEE and the Baltic countries draw more on 'new sources' of revenue, in the FSU republics tax systems are 'generally structured more around "old" revenue sources' (Gehlbach, 2008, p. 17). These 'old' revenue sources are taxation of enterprises, including large industrial enterprises and groups of enterprises, and of goods and services. The variation in tax structures is connected to 'a small number of initial conditions' (Gehlbach, 2008, p. 127), including inherited industrial structure, proximity to the West, and the level of economic development at the start of transition. In the FSU republics, encouragement of tax payments by large, sometimes monopolistic enterprises<sup>30</sup> – due to their better 'taxability', or easiness to tax – resulted in the disproportionate provision of collective goods to them, often at the expense of SMEs. As a result, the SMEs sector in the FSU lagged

 <sup>&</sup>lt;sup>27</sup> Chapter 4 sheds some light on how the relationships with investors are organized in one of the financially-repressed economies of the CIS.
<sup>28</sup> Reduction of corporate tax rates have been considered by some member states, including Germany, as 'tax

<sup>&</sup>lt;sup>2°</sup> Reduction of corporate tax rates have been considered by some member states, including Germany, as 'tax dumping'.

<sup>&</sup>lt;sup>29</sup> There is another important trend, namely the 'flattening' of income taxation. A number of post-socialist countries, including Romania, Ukraine, Russia, Slovakia, Serbia, Latvia, and Estonia, have imposed flat taxes. Such reductions had not necessarily been destructive: the state capacity to collect flat taxes is better. Nevertheless, flat tax might adversely affect the poor and benefit the rich.

<sup>&</sup>lt;sup>30</sup> In Russia and other large CIS countries, companies tend to create 'holdings' operating in different sectors. These holdings are similar to diversified business groups in HMEs of Latin America (Schneider, 2009).

behind its counterpart in the CEECs and the Baltics (Borish & Noel, 1996). Moreover, factors of production tend to be concentrated in the favored industries, rather than being smoothly distributed across sectors. This pattern is conducive to the maintenance of dual economy.

The reliance on enterprise taxation strengthens the interdependence between the state and selected, government-favored economic actors at the expense of truly private agents. Disproportionate support of important taxpayers makes them 'winners', who are capable of exerting economic and political influence. Apparently, these 'winners' have incentives to slow down market reforms, including restrictions on foreign competition, in order to extract rents from bureaucratically-regulated markets (Hellman, 1998; Sonin, 2003).

To summarize, the 'Great Divide' between the new EU member states and the FSU republics has persisted. There are also variations within both sides of this divide. Dissimilarities in the functioning of markets and institutions do not necessarily fit a CME/LME dyad. One of the crucial differences is related to the degrees of their 'transnationalization'. The CIS countries have not attracted comparable levels of FDI and not allowed foreigners to gain controls over their banking systems. On the one hand, their political systems contain the elements of clientalism, which has an economic backing. For instance, the CIS tax systems bear the stamp of patron-client relationships. The FSU governments prefer to tax familiar forms of economic activity, particularly large, monopolistic enterprises, at the same time provided with disproportionately large volumes of collective goods.

In order to get additional insights into the causes of transnationalization, two cases are discussed in the next section: Latvia and Bulgaria. Latvia was once a part of the Soviet Union and attempted to radically break with the past by conducting a large-scale liberalization program. In contrast, Bulgaria had been postponing reforms, but later had been forced to

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'transnationalize' its economy in order to cope with the consequences of its internal economic crisis.

#### 2.5 Case studies

#### The case of Latvia

The Republic of Latvia, with one percent of the population of the former USSR, was the third most industrialized region of the Soviet Union after the Moscow and Leningrad *oblasts*. Latvian factories produced minivans, radios, trams, automobiles, trains, ships, and airplanes, not to mention less complex commodities, including textiles and furniture (Frucht, 2005; Idzelis, 1984). The largest Soviet electro-technical enterprise, 'VEF', with 20,000 employees, was located in Latvia. A semiconductor plant, 'Alpha', produced electronics used in civil aviation and space industry (Ivanov, 2005). In the late 1980s, the Soviet planners upgraded Latvia's industrial facilities by renovating the installed equipment. When Latvia became independent in 1991, it had a strong industrial legacy, qualified workforce, and a network of 15 research institutions (Smirin, 1999).

However, the majority of employees of Soviet corporations located in Latvia were ethnic Russians (Izdelis, 1984). Among them, many supported the preservation of the Soviet Union<sup>31</sup>. Latvian political elites sharply opposed this view. In order to fight with its political foes, they had decided to simply shut down many of the industrial facilities to deprive Russian-speaking workers of their means of subsistence. According Graudiņš (2010), some plants could have been left to operate rather successfully by further upgrading equipment and software of NC-machines. For instance, in 1999, the Latvian authorities closed the Institute of

<sup>&</sup>lt;sup>31</sup> In fact, in the referendum of 1991, the majority of Soviet Union citizens voted for the preservation of the Soviet Union. However, the leaders of the three republics – Russian Federation, Belarus, and Ukraine – met in Belarus in December 1991 to sign a treaty to dissolve the Soviet Union.

civil aviation engineers, which trained students from all over the world, because it used Russian as a major language of instruction (Krasnov, 2011).

Latvian émigrés had been involved in designing Latvian reforms. In 1991, about 300,000 Latvians lived abroad (Krasnov, 2011). About 10 percent of them returned to claim their property back. According to Gaponenko (2011), the reform program was based on the condemnation of the Soviet past and the policy of 'Latification'. The latter included a peculiar concept of ethnic hierarchy: Latvian is the only language to be used officially, citizenship should be given to ethnic Latvians, and all those who settled in Latvia during the time of the Soviet Union are considered quasi-occupants. The application of the concept of ethnic hierarchy has implications for economic reforms (Turchaninova, 2011).

Since industrial facilities were seen as possessing little value, efforts were dedicated to develop the financial sector. The Latvian financial system played a role of quasi-offshore for capitals escaping from Russia. Latvian banks were used as a 'transit route' for capital flight. In the wake of the EU membership, Latvia was forced to change regulations of the banking system by considerably downgrading its quasi-offshore role. Apart from banking, capital went to the real estate sector. Throughout the 2000s, capital inflow to Latvia was quite high, leading to a credit boom. However, it is too much to claim that the Latvian industry was completely destroyed. Latvia still has competitive industries in such sectors as forestry, metal-working, and food<sup>32</sup>. Transit remains important, particularly the transit of Russian goods, including oil, corn, fertilizers, and coal.

Latvian reforms have limited capacity to address the work problem. Despite high labor market flexibility, employers and employees have preferred to go beyond formal arrangements. In particular, the share of envelope wages in Latvia is rather high in comparison with other EU member states (Zasova, 2011). Moreover, Latvian workers have

<sup>&</sup>lt;sup>32</sup> One of the important export products is sprats, which are exported to Russia and Ukraine.

been escaping their economy to find temporary jobs in Western EU countries. The census of 2010 recorded that population of Latvia decreased to 2.2 million from 2.7 million in 1989 (Straumanis, 2011)<sup>33</sup>. This large number of emigrants reduces the pressure for redistribution exerted on the Latvian state, which is increasingly losing its capacity to redistribute because of the global financial crisis.

In particular, the crisis of 2008–2009 has turned the Latvian economy into one of the most indebted in the region. By 2011, foreign debt increased to 130 percent of GDP. At the same time, GDP shrank by 25 percent, while unemployment level increased to 22 percent. The debt problem remains acute as in 2012 Latvia has to pay about EUR 630 million, in 2013 – EUR 720 million, and in 2014 – about EUR 1.8 billion (Kolyako, 2011). These figures are striking for an economy that started the process of economic transition with virtually no debt<sup>34</sup>. The IMF helped Latvia by providing loans amounting to EUR 7.5 billion (IMF, 2010).

Latvia can be seen as the case of willful, abrupt transnationalization, which has been driven by 'extraordinary politics'. In terms of addressing the four key problems, elites have been relying on neo-liberal policies, including financial transnationalization. The latter has made the economy vulnerable, without being conducive to the creation of internationallycompetitive industries.

#### The case of Bulgaria

The issue of nation-building was much less acute in Bulgaria than in Latvia. In February 1991, an orthodox macroeconomic stabilization program was launched. This program included liberalization of prices and foreign trade and tightening of fiscal and monetary policies. Bulgaria was heavily trading with other members of the Council for Mutual Economic

<sup>&</sup>lt;sup>33</sup> In fact, authorities used a statistical trick to report a bigger figure. In particular, census was partly conducted online. A special clause was applied for 'Latvian citizens living abroad for more than one year' (UN Statistics Division, 2011)

<sup>&</sup>lt;sup>34</sup> The debts of the USSR were all taken by the Russian Federation.

Assistance (CMEA), while the bulk of this trade was with the Soviet Union. Also, Bulgaria had accumulated substantial foreign debts<sup>35</sup>, as Poland and Hungary (Lavigne, 1999).

Despite the implementation of the orthodox reform program, the Bulgarian government continued to support enterprises with soft loans. As a result, banks started to accumulate bad debts. By 1996, the loss of confidence in the banking system provoked a bank run and sharply increased the demand for foreign currency. The Central Bank tried to defend the value of the national currency, the *lev*, but reserves were soon depleted.

The currency crisis of 1996–1997 brought a new political force, the Union of Democratic Forces, into the government. The newly-formed government asked for economic assistance from the international financial institutions. The IMF proposed to install a currency board (CB) in order to simultaneously resolve the problems of inflation and of external imbalances. The latter were to be corrected by downward wage adjustment and reduced demand for imports. The CB in Bulgaria was introduced jointly with the new Law on the National Bank on June 10, 1997 (Pavlov, 2009).

The CB created favorable conditions for 'the foreign-investment-led growth', which is at the heart of 'a specific variety of capitalism that features high share of foreign ownership of productive and financial assets, large and growing dependence on capital imports, and trade dependence' (Ivanova, 2009, p. 159). Ultimately, the CB has not been a very effective tool to bring down inflation, which reached double-digit rates in 2007. Moreover, the CB has not eliminated external imbalances. In 2007 and 2008, Bulgaria's current account deficit increased to alarming 25.1 percent and 25.3 percent of GDP, respectively, while the volume of foreign debt increased by more than three times from 2003 onwards.

At the same time, even temporary macroeconomic stability has not led to the inflow of FDI directed towards high-productivity sectors, as it happened in the Visegrád countries.

<sup>&</sup>lt;sup>35</sup> Debt servicing was suspended in 1990 and payments did not resume until 1995. In fact, debt burden was one of the factors that contributed to the Bulgaria's financial crisis of 1996–1997.

Although FDI inflows took off after Bulgaria jointed the EU in 2007, the major targets of FDI were real estate and construction. In 2007 and 2008, approximately 39 percent of foreign investment went into construction and real estate, 25 and 24 percent, respectively, went into financial intermediation, while manufacturing attracted only 11 percent of the total in 2007 and 13 percent in 2008 (Ivanova, 2009, p. 173). Investors exploited the low-wage advantage enjoyed by the Bulgarian economy. Over 1996–2008, Bulgaria's exports was dominated by unskilled labor-intensive manufacturing products. Development of labor-intensive production has not been conducive to the technological upgrading of the domestic industry (Bozhilova, 2010; Gradeva, 2010).

The case of Bulgaria shows that transnationalization was to a great extent the result of the need to resolve domestic economic problems. Although macroeconomic stabilization was accomplished, transnationalization has not helped the Bulgarian economy to develop new technologically advanced industries.

#### 2.6 Conclusion

This chapter continues the discussion of the diverging pathways of post-socialist countries. Comparative political economy offers a powerful analytical approach to understand the diversity of modern capitalism. However, institutional arrangements in post-socialist countries – with few exceptions – do not necessarily evolve into either a CME or a LME type. Varieties of post-socialist market economies are characterized by institutions only partially coherent and by peculiar mixtures of them.

At least in the economies of the CEECs and the Baltics, there is a strong unifying factor: foreign penetration in industry and banking. Foreign banks and multinationals have played an active role in shaping the developmental trajectories of these economies. In contrast, in the CIS countries, this penetration has occurred on a lesser scale. The dividing line between

these two sets of countries is thus between differences in the degree of exposition of their national economies to the inflow of foreign capital.

Transnationalization can be considered as a tool to limit policy discretion. In Chapter 1, it has been shown that CEECs opted for privatization of banking to avoid the problem of bank recapitalization. In the case of Bulgaria, the currency board has been a self-imposed, disciplinary mechanism to address accumulated domestic institutional weaknesses. In line with the argument outlined in the previous chapter, namely that policy-makers initially try to avoid profound reforms and tend to cling to the previous institutional routines, the case of Bulgaria indicates that such 'clinging' may endure unless the grips are loosened by the domestic economic crisis.

In some cases, elites may insulated themselves from the vested interest and do not wait for the crisis to occur. The case of Latvia shows that policy-makers had interpreted economic legacies as malign: for them, socialist times were more disastrous than radical economic reforms. The case of Latvia shows that ideologies can influence the speed of market reforms. These observations are incorporated in the model of Chapter 3.

The dividing line between the new EU member states and the CIS countries is found in other instances. One of them is the institution of taxation. In particular, in the CIS countries tax regimes have promoted the familiar forms of economic activity, including the operation of large, monopolistic enterprises. In contrast, the CEECs and the Baltics have modified their tax systems to promote new forms of economic activity, including the development of the SMEs' sector. Moreover, in the CIS economies, bureaucratic interventions stifle markets. Reforms have been stalled by clientalism and rent-seeking, which have checked the process of transnationalization.

Disadvantaged social groups have relied on 'exit' options, including temporary labor migration. Paradoxically, this feature is common to the Baltic States and other FSU republics. To a certain extent, both groups of countries went to the extremes in reforming their economies: the Baltics have traveled too far in 'disembedding' their neo-liberalisms, while other FSU republics have created peculiar combinations of clientalism, paternalism and authoritarian mobilization.

To summarized, first two chapters of the thesis set the necessary context for the discussion and analysis of performance of reform laggards. The factors at play appear to be similar across many post-socialist countries, but policy reactions differ. These differences are related to a number of factors. The chapters pay a close attention to one of them, namely the ways policy-makers have dealt with the industrial legacies. A brief comparative account shows that policy-makers, at least initially, try to exploit available industrial structures. However, in the CEECs, this exploitation had not been turned into a fully-fledged industrial policy of East Asian type. When policy-makers has extended the period of preservation of industrial legacies – as in the case of Bulgaria – policy change occurred after the crisis, caused by the accumulated dysfunctions. In order to tackle deficiencies, policy-makers opt for 'importing' discipline by opening economies to the inflow of foreign capital and encouraging foreign ownership of domestic banks.

### Appendix 2.A



Figure 2.1: Share of hi-tech exports in total manufactured exports, percent, 1996–2010 (selected years)

#### ■ 1996 ■ 2000 ■ 2005 ■ 2010

Country/Year	1996	2000	2005	2010
Slovenia	15.7	15.5	16.4	16.7
Visegrad States	13.9	17.6	20.6	24.9
Bulgaria and Romania	15.2	11.5	9.7	13.3
Baltic States	14.7	18.3	15.8	16.8
<b>CIS</b> Countries	8.3	5.5	4.8	6.7

*Source*: author's calculations on the basis of UNCTAD data taken from the online database (http://www.unctad.org/en/Pages/Statistics.aspx, viewed 25 April 2012). Exports of manufactured goods by degree of manufacturing (SITC 5 to 8 less 667 and 68) – manufactures with high skills and technology intensity. Goods include products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, machinery, and metalworking products.



Figure 2.2: Share of fuel exports in total manufactured exports, percent, 1996–2010 (selected years)

<b>1</b> 996 <b>1</b>	2000	2005	2010
1996	2000	2005	2010

Country/Year	1996	2000	2005	2010
Slovenia	0.9	0.7	2.1	3.5
Visegrad States	5.2	4.2	4.5	4.0
Bulgaria and Romania	0.9	10.1	10.7	8.7
Baltic States	10.4	12.6	16.5	13.4
<b>CIS</b> Countries	22.9	30.8	34.4	34.9

Source: author's calculations on the basis of UNCTAD data taken from the online database (http://www.unctad.org/en/Pages/Statistics.aspx, viewed 25 April 2012).

Country/														
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CIS														
countries														
(average)	8.8	11.5	21.3	20.3	21.3	22.7	19.5	23.6	20.3	21.2	22.1	26.3	29.7	33.4
Visegrad														
States														
(average)	5.4	10.1	12.2	22.8	35.2	38.2	41.5	49.9	55.2	63.2	69.8	70.3	72.1	73.7
Slovenia	12.7	19.3	23.7	24.1	42.7	78.3	84.1	96.3	96.7	97.3	97.0	99.0	99.2	91.6
Baltic														
States														
(average)	35.3	37.4	47.1	43.0	54.8	62.3	59.7	66.8	72.2	77.0	78.0	73.8	78.6	83.8
Bulgaria														
and														
Romania														
(average)	8.4	10.1	9.7	26.6	47.1	68.8	73.7	75.6	76.1	82.6	84.1	84.7	85.8	83.4
Source: EBRD database. http://www.ebrd.com/pages/research/economics/data.shtml_viewed														

Table 2.1: Asset share of foreign-owned banks (in per cent), 1996–2009

ուլ ag 20 April 2012.



#### Figure 2.3: FDI per capita in post-socialist countries, USD per year, 1996-2009



Figure 2.4: Accumulated FDI per capita, 1996–2010



Source: World Bank, World Development Indicators Database

Figure 2.5: Remittances to GDP in 2009, percent



Source: IFAD (2010)

## **Chapter 3**

# Dualism and Growth in Transition Economies: a Two-sector Model with Efficient and Subsidized Enterprises

#### 3.1 Introduction

The process of economic transition from centrally planned economy to market economy seems to be well-documented and studied. The essential elements of this process are privatization, liberalization of prices and of economic activities, along with the substantial reduction of state intervention into the economy. In the course of economic transformation, post-socialist countries have been able to generate economic growth and to increase their GDPs per capita, yet lagging behind the EU averages. However, some countries of the former Soviet Union – especially Belarus and Uzbekistan – have consciously put caps on economic reforms despite their benign consequences. They are still at the stage of 'economic dualism'.

At this stage of transformation, the elements of old economic order are still present, mainly in the form of uncompetitive, loss-making enterprises kept afloat with the help of subsidies and directed bank loans, while more efficient companies operate in parallel. Most transition economies in CEE successfully passed this phase, while other countries – including Belarus and Uzbekistan – appear to be virtually locked in at this stage, which has some similarities with the 'dual-economy' pattern observed across many developing countries (Lewis, 1954; Rada, 2007; Ocampo et al., 2009).

Why are slow reformers unwilling to speed up the reform process? This chapter focuses on two factors, such as industrial legacies and popular attitudes towards reforms, which give politicians *carte blanche* to put caps on economic changes. All former state socialist economies were characterized by concentration of industry. Policy-makers had to decide which enterprises should die, which should be privatized and/or restructured, and which should continue to function. Enterprise restructuring entails considerable social costs. Thus, politicians may delay economic reforms in order to minimize social pains.

Long before the process of economic transition has occurred, economic transformation of a similar nature was analyzed by Lewis (1954). The coexistence of backward and advanced elements in an economic system was captured by the concept of a dual economy. The concept of dualism has not yet been applied to study the course of economic transition and particularly the case of laggard reformers.

In this chapter, the persistence of economic dualism and its outcomes are illustrated by building the model of a dual economy. In the industrial sphere, a sizeable sector consisting of less efficient enterprises coexists with a relatively small, but viable modern sector comprised of more efficient companies and petty entrepreneurs. The dividing line between two sectors is differences in the efficiency of enterprises and not the ownership. In particular, a few exportoriented companies partially owned by the state and successfully operating in foreign markets, can be also included the sector of more efficient economic units. Fractions of profits of more efficient companies are converted into subsidies to less efficient enterprises. Moreover, ideological factors have played an important role in creating a climate not favorable to massive privatization and in support of the preservation of state controls over the economy.

#### 3.2 Dualism and post-socialist economic transition

A concept of dualism in economic development was originally proposed by Boeke (1953) to study the Indonesian economy and society. A typical dual economy consists of two sectors: a

small urban-industrial and a big rural-agricultural sector (Lewis, 1954). The traditional, backward sector supplies labor to the modern, advanced sector. Although in two sectors rules of accumulation differ, wages in the modern sector depends upon earnings in the traditional sector, which, in turn, are determined by the subsistence level of incomes and/or some unmodelled institutional features<sup>36</sup> (Lewis, 1954, p. 150). Accordingly, lower wages in traditional sector (e.g., due to the postponement of the introduction of new technologies) result in lower incomes in the modern sector. In addition, the limited supply of labor in manufacturing tends to compress wages in this sector. Thus, profits of the advanced sector growth and the net real product increases. The larger the size of the traditional sector and the lower its productivity, the better are the conditions for growth in the modern sector. As long as the backward sector supplies labor without limits, capital accumulation and economic growth are unlimited.

Lewis' paper stimulated a vast literature in the 1960s and 1970s<sup>37</sup>. One of the elaborations by Fei and Ranis (1966, p. 4)<sup>38</sup> emphasize two features. First, dualism is just a stage of development, superseded by 'maturity', where all producers maximize profits. Second, in dual economy growth can be constrained due to the scarcity of industrial capital. Industrial investment is financed by agricultural savings, which are volatile or limited.

<sup>&</sup>lt;sup>36</sup> Lewis (1992) explained his inclination towards economic dualism by pointing at a historical puzzle: in Britain, during the first fifty years of the industrial revolution, real wages remained more or less constant while profits and investment were rising. This is against the neoclassical prediction that all three variables should move together. As a matter of fact, Lewis' concept of dual economy is rooted in the classical approach of Smith and Ricardo, according to which there is a virtually 'unlimited supply of labor' that keeps wages low and profits high (Lewis, 1992, p. 397). The debates have been centered on the labor transfer problem and on the persistence (or shrinking) of the inter-sectoral wage gap in the course of economic development (Basu, 1997).

<sup>&</sup>lt;sup>37</sup> Some important contributions include Baldwin, (1966), Eckhaus, (1955), Fei and Ranis (1966); Jorgenson (1961), Harris and Todaro (1970), and Higgins (1956).

<sup>&</sup>lt;sup>38</sup> The mechanism described by Fei and Ranis (1966) is similar to the one by Lewis (1954). In the backward sector, labor is released as its institutional wage exceeds its marginal product. The latter begins to rise, while the release of labor leads to a loss of agricultural output. As a result, the relative prices of industrial goods fall, while the relative price of food grows. So the industrial wage in terms of industrial goods rise and the supply of labor rises in industry. Then, the marginal product in agriculture rises to reach the institutional wage rate. Consequently, labor in both sectors earns its marginal product, so the stage of 'maturity', corresponding to a fully-fledged capitalist economy, is reached.

In fact, virtually in every economy some degree of dualism exists. Even in the most advanced economies, there are sectors in which production 'techniques lag behind those of the most advanced sectors, and in which standards of economic and social welfare are correspondingly low' (Higgins, 1956, p. 106). Comparative institutionalism literature points to the emergence of dualism in the advanced economies (Hancke et al., 2007). For instance, in Germany, the split between regulated and flexible segments of the labor market has been gradually institutionalized (Hassel, 2011).

Contemporary models of dualism (Vollrath, 2009; Turnovsky and Basher, 2009; Rada, 2007) focus on factor market inefficiencies that lower overall productivity and income (Vollrath, 2009), bring about 'the recursive fiscal dilemma' (Turnovsky and Basher, 2009), but without canceling the possibility of sustainable employment and adequate output and productivity growth. It is argued that in developing countries the dual economy is likely to stagnate unless it is transformed (Rada, 2007).

Why to approach the analysis of economic transition with the concept of dualism? Fundamentally, dualism emerges from the legacies of heavy industrialization<sup>39</sup> and the related difficulties of coping with these legacies. Furthermore, populations can be unwilling to tolerate the social pains caused by enterprise restructuring.

The closure of large industrial enterprises in post-socialist countries would have led to mass unemployment and to a very deep recession, because a nascent private sector could not have absorbed redundant workers as quickly as their release would have occurred. Hence, it 'was politically impossible and economically pointless' to tolerate a chain of bankruptcies, at least at the early stages of transformation (Nielsen, 1996, p. 71). In this situation, many postsocialist governments – at least for a short period of time – re-softened the budget constraints

<sup>&</sup>lt;sup>39</sup> For instance, in Czechoslovakia, only 1.4 per cent of manufacturing workers were employed at enterprises with less than 500 employees as compared to 35 per cent in the United States in 1986, 47 per cent in West Germany in 1987, 70 per cent in Demark in 1987, and 79 per cent in Spain in 1987 (Myant, 1993; Nielsen, 1996). In Russia, in 1990, there were only 25,000 small enterprises; if the U.S. economy were taken as a benchmark, there should have been from 300,000 to 400,000 of such companies (Nielsen, 1996).

and postponed privatization of larger state-owned enterprises (see Chapter 1). In the yearly years of transition, the coexistence of viable private sector of small and medium-sized enterprises and unreformed industrial giants led to the emergence of a dualistic structure. It was not a dichotomy of rural-agricultural and urban-industrial sectors, but of sheltered and obsolete state-controlled industrial enterprises versus unsheltered modern private companies. However, dualism is not about division between private and public enterprises: there is evidence that state-owned companies can function efficiently, while private companies can make losses.

The governments of, to mention some cases, Poland and Czechoslovakia (and later Slovakia) delivered 'subsidies, additional credits at least implicitly guaranteed by the state, various kinds of tax relief, and tariff and non-tariff protection' to state-owned enterprises (Van Brabant, 1994, p. 77) in a rather *ad hoc* manner. It was not only the lack of resources that made the implementation of a fully-fledged industrial policy<sup>40</sup> problematic, but also the ideological stance against interventionism in general (Eyal et al., 1998). Governments were ware of the possibility of formation of special interest groups powerful enough to bargain for special treatment (Kaminski and Soltan, 1989; Hausner and Wojtyna, 1993).

Mounting fiscal deficits prevented post-socialist countries from insisting with this policy (Bonin et al., 2004): the volumes of taxes collected were insufficient to acquire funds for subsidization. In particular, preferential tax treatment was generally given to private firms populating the modern sector so as to stimulate their growth. More, the tax burden has been gradually shifted from enterprises to individuals (Gehlbach, 2008). In addition, there were numerous opportunities for tax evasion. Taking together, all these features assigned an important role in keeping obsolete industrial giants afloat to banks (Sherif et al., 2003). As a result, banks had begun to accumulate bad loans.

<sup>&</sup>lt;sup>40</sup> A fully-fledged industrial policy was conducted by East Asian 'developmental states', including Japan, South Korea, and Taiwan (Johnson, 1982; Woo-Cumings, 1999; Wade, 2005).
It follows that dualism – at least in the CEECs – could not last long. For subsidized enterprises, incentives were an obvious issue: as it is well known, the possibility of being bailed-out creates a moral hazard problem. Moreover, the higher tax rates – necessary to finance subsidies to less efficient enterprises – would have suffocated the development of dynamic private sector. Finally, banks could have become more vulnerable with more doubtful loans in their portfolios. As Myant (1993, p. 151) describes the situation:

'...in the view of the state budget and balance of payments problems, [the dual-track]...strategy depended either on very substantial external aid or on the acceptance of a budget deficit and possibly of some form of stronger restrictions on imports'.

Moreover, in order to continue with the massive subsidization of obsolete sectors would have been against the content and the spirit of the reform programs in CEECs and the Baltics and their goal of EU membership. In contrast, in the FSU, governments did not face the challenges of the EU membership, and thus had a greater freedom for maneuver in economic policy-making.

#### 3.3 Persistence of dualism: stylized facts

In the vast majority of transition economies, private sector dominates over the public sector (see Table 3.1 in the Appendix 3.B). The emergence of private sector is mainly related to privatization and enterprise restructuring. There is a positive correlation between EBRD indicators capturing these processes and GDP per capita (see Figure 3.1 in the Appendix 3.B). Nevertheless, countries that have displayed smaller progress with regard to enterprise restructuring and privatization have performed relatively well in term of economic growth, although lagged behind in terms of GDP per capita (see Table 3.1 in the Appendix 3.B). Among them, the case of Belarus is illustrative: its economy has been growing without substantial reforms. At the same time, the Belarusian economy can be considered as a dual economy.

In Belarus, 15 large state-owned enterprises generate approximately 55 percent of industrial output. Many of these enterprises pay taxes, which then are turned into subsidies for the others, which are less efficient. A small, but viable private sector is also playing a role of the donor for the sector of less efficient economic units. First, private companies - much more often than the state ones - are subject to heavy taxation and other confiscatory practices. The World Bank's report 'Paying Taxes-2010' constructs an index measuring tax systems from the point of view of a domestic company complying with different laws and regulations: among all the 183 countries considered in the report, Belarus is the country where companies are subject to the heaviest burden in terms of tax rates, amount of hours needed for accounting purpose and number of payments<sup>41</sup>. In general, Belarus is well ahead of other transition economies in terms of tax-to-GDP ratio (see Table 3.1 in the Appendix 3.B). Between 1994 and 2008, this ratio on average amounted to 47 percent, while in the Baltic States this figure was around 37 percent. Moreover, Belarus managed to preserve the old tax system, based on the taxation of enterprises, goods and services. In contrast, both CEECs and Baltics states diverged from that pattern by relying on personal taxes, thus bringing their tax systems in line with those of the West European countries (Gehlbach, 2008).

It is difficult to trace how tax revenues are translated into subsidies, due to the fact that the classification of budget expenditures has been changed several times. Nevertheless, one still counts that over the period 1993–1997, subsidies were at least 6.4 percent of GDP. Since 2006 onwards, they went up to 12–13 percent of GDP, or about a quarter of the state budget<sup>42</sup>. The IMF estimates that the quasi-fiscal expenditures in Belarus amount to at least 3 percent of GDP over the 1998–2000 period (IMF, 1999, 2000, 2001). According to the recent estimates

<sup>&</sup>lt;sup>41</sup> In Belarus, it is estimated that more than 900 hours per year are spent to calculate and to pay taxes (there are 107 different payments a company may be subject to), while the percentage of profit taxed is 99.7. In contrast, for Lithuania, these figures are 166 hours, 12 payments and 42.7 percent of profit, for Latvia 279 hours, seven payments and 33 percent of profit, and for Estonia 81 hours, 10 payments, and 49.1 percent of profit (World Bank, 2010a). Also, in 2009, about 12 percent of all employed in Belarus were accountants (about 400,000 people, while the number of tax inspectors were around 8,000) (Duben, 2010).

<sup>&</sup>lt;sup>42</sup> All the data here and thereafter are from various statistical bulletins published by the Ministry of Statistics of Belarus, later transformed into the Belarusian Statistical Committee, or Belstat.

made by the World Bank (2010b, 2011), the volume of state support to agricultural and industrial enterprises amounted up to 12–13 percent of GDP per annum over a period of 2005–2009. These figures include not only direct subsidies, but various indirect forms of support, including tax relief and lower energy prices. In 2010 - 2011, the volume of support was reduced. The currency crisis of March 2011 has forced the Belarusian authorities to revise the volume of subsidization. Nevertheless, it can be estimated that the volume of state support would amount at least to 3.7 - 4 percent of GDP in 2012.

The recipients of these subsidies are those state-owned enterprises that make losses or seek state support to fulfill production plans. The vast majority of loss-makers are concentrated in agriculture (see the Table 3.2 in the Appendix 3.B). On average, over the period of 1994–2008, about 17 percent of the enterprises in the Belarusian economy were loss-making, with total losses amounting approximately to 3.7 percent of GDP. Also, there have been sizeable stocks of unsold goods produced by inefficient enterprises, being unable to sell these goods and thus having troubles with debt repayment and the acquisition of needed amounts of circulating capital. Between 2001 and 2008, the average volume of stocks of unsold goods amounted to 58 percent of total monthly industrial output (or about 3.6 percent of GDP).

Why does the government go on with a policy of subsidization that requires an evergrowing volume of resources to accumulate and spent rather unproductively? This policy, indeed, is rather costly and might threaten macroeconomic stability. However, taxation and spending remain the most effective economic instruments in the hands of politicians to remain in power. As a matter of fact, politicians' decisions on taxes and subsidies inevitably reflect the effort to reach compromises and to build consensus among the various economic and social groups (Steinmo, 1993; Mares, 2006). Figures of public support for free market institutions in Belarus is less than those displayed by, for instance, the Baltic States (see Figure 3.2 in the Appendix 3.B). Indeed, even authoritarian governments cannot simply ignore public attitudes and impose their will in a top-down fashion. There is an ample evidence that autocracies hold elections and generally care about the support of the public (Linz, 2000; Gandhi and Przeworski, 2001; Cox, 2009; Miller, 2009). Also, at least in the initial phases of their existence, autocratic regimes tend to care about the imaginary medium voter by providing various public benefits. However, in the former Soviet Union countries these provisions tend to be rather 'paternalistic' (Standing, 1998). The latter means that governments have been unwilling to install modern welfare states, since they prefer to rely on various distorted forms of social protection, such as guaranteed employment, toleration of paid administrative leaves at loss-making enterprises, price controls, etc.(Kapelyishnikov, 2001).

The welfare state in Belarus used to be smaller than in other transition economies, and only in 2005 it slightly exceeded the levels of Latvia and Lithuania (see Figure 3.3 in the Appendix 3.B), which are considered to be the least generous in terms of welfare expenditure. This reflects a peculiar feature of the dual economy in Belarus, where maintenance of employment and social assistance are achieved by subsidizing inefficient industries. Thus, dualism is maintained in order to address work and welfare problem simultaneously. As a matter of fact, these enterprises employ people, who otherwise could have been unemployed. At the same time, some enterprises are clearly supported for the purpose of preventing poverty, especially in the so-called 'mono-towns' built in the former Soviet Union to serve one particular plant (Gimpelson & Lippoldt, 2001; Haiduk et al., 2004). Actually, their closure could lead to a chronic poverty in a region.

There is a problem in analyzing the phenomenon of economic dualist by a means of econometrics. This is because statistically it is difficult to distinguish between more and less

efficient enterprises, although there is an ample evidence for the existence of inter-sectoral differences. That is why analytical modeling is preferred over econometric one.

To summarize, economic dualism emerged in the course of transition from centrally planned economies to market systems because of the difficulties of coping with industrial legacies and unwillingness of the policy-makers and the population to bear considerable social costs. All transition economies passed this phase of transformation, but some managed to be locked in this phase for a longer period of time. The implications of this prolonged period of subsidization in terms of capital investment and economic growth are formally analyzed in the sections below.

#### 3.4 The basic model

In the economy under consideration, there is a sector consisting of profit-maximizing, more efficient firms that are taxed by the government, and a sector of subsidized enterprises that are managed in the interest of their employees. This arrangement can be explained by the fact that the workers of the subsidized firms are a key constituency for the ruling politicians, which are those who appoint the managers of these enterprises and decide on taxation and public subsidies.

In this economy, the workers consume entirely their earnings and can be employed in the sector of profit-maximizing firms or in the sector of subsidized enterprises, while the investors decide on the fraction of their income to devote to the accumulation of capital, and the government taxes more efficient companies for making transfers to the subsidized firms. Both types of firms produce the same product, and this single good can be used both for consumption and for capital investment. The market for this good is perfectly competitive. Also the market in which firms rent the capital that is accumulated by the investors is perfectly competitive. In contrast, the labor market is segmented: workers employed in the sector of subsidized enterprises cannot be replaced by outsiders and their wages are set so as to maximize their expected income, while in the private sector wage determination is perfectly competitive. Time is discrete and the time horizon is infinite. Finally, there is no source of random disturbances and agents' expectations are rational (in the sense that they are consistent with the true processes followed by the relevant variables), thus implying perfect foresight.

#### Profit-maximizing firms

There is a large number (normalized to be one) of identical firms that maximize their profits. In each period t, they produce the single good  $Y_t$  according to the following technology:

$$Y_{pt} = A_{pt} L_{pt}^{\alpha_p} K_{pt}^{1-\alpha_p}, \ 0 < \alpha_p < 1,$$
(3.1)

where  $Y_{pt}$  are the units of good  $Y_t$  produced by the private firms,  $L_{pt}$  and  $K_{pt}$  are, respectively, the labor input and the capital stock used by a private firm to produce  $Y_{pt}$ , and  $A_{pt}$  is a variable measuring the state of technology of a private firm. It is assumed that  $A_{pt}$  is a positive function of the capital installed in this entire sector of the economy:  $A_{pt} = K_{pt}^{\alpha_p 43}$ . This assumption combines the idea that learning-by-doing works through each firm's capital investment and the idea that knowledge and productivity gains spill over instantly across firms (see Barro and Sala-i-Martin, 1995). Therefore, in accordance with Frankel (1962), it is supposed that although  $A_{pt}$  is endogenous to the sector of profit-making firms, each firm takes it as given, since a single firm's decisions have only a negligible impact on the aggregate stock of capital of the entire sector.<sup>44</sup>

<sup>&</sup>lt;sup>43</sup> Consistently with this formal set-up, one can interpret technological progress as labour augmenting.

<sup>&</sup>lt;sup>44</sup> This amounts to say that technological progress is endogenous to the profit-making sector of the economy, although it is unintended by-products of firms' capital investment rather than the result of purposive R&D efforts.

In each t, the representative firm hires labor and rents capital so as to maximize its profits  $\pi_{pt}$ , where:

$$\pi_{pt} = (1 - \tau_t) Y_{pt} - W_{pt} L_{pt} - R_t K_{pt}, \ 0 \le \tau_t < 1,$$
(3.2)

where  $\tau_t$  is a value-added tax rate, and  $W_{pt}$  and  $R_t$  are, respectively, the wage rate paid by a private firm and the rental rate on capital. Notice that  $Y_t$  is a numéraire of this economy and that its price is normalized to be one.

#### Subsidized firms

There is a large number (normalized to be one) of firms that are subsidized by the government. In each period t, they produce the single good  $Y_t$  according to the following technology:

$$Y_{st} = L_{st}^{\alpha_s} K_{st}^{1-\alpha_s}, \ 0 \le \alpha_s < 1,$$

$$(3.3)$$

where  $Y_{st}$  are the units of good  $Y_t$  produced by the subsidized firms, and  $L_{st}$  and  $K_{st}$  are, respectively, the labor input and the capital stock used by a subsidized firm to produce  $Y_{st}$ . In the basic model, it is assumed that total factor productivity is time invariant. One may think that subsidization can undermine incentives to generate productivity gains (i.e. no learning-by-doing)<sup>45</sup>.

In each period t, the representative subsidized firm employs labor and rents capital so as to maximize the expected income of its typical employee,  $p_tW_{st}$ , where  $W_{st}$  is the wage rate paid by a subsidized firm, and  $p_t$  is the probability of employment in period t for a typical employee of a subsidized firm. This probability is defined by:

$$p_{t} \equiv \begin{cases} \frac{L_{st}}{M_{t}}, \text{ if } L_{st} \leq M_{t} \\ 1 \text{ otherwise,} \end{cases}$$
(3.4)

<sup>&</sup>lt;sup>45</sup> This assumption can be generalized by stating that even subsidized firms are able to generate productivity gains, but they are less efficient than profit-making firms in generating them.

where  $M_t$  are the employees of a subsidized firm in t (its workforce). The workforce of a subsidized firm is assumed to coincide with the workers employed by the firm in the previous period who have not retired:

$$M_{t+1} = (1 - \eta)L_{st}, \ 0 < \eta < 1, \ M_0 \text{ is given},$$
 (3.5)

where  $\eta$  is the fraction of the workers employed in the subsidized sector in each period that retire at the end of the period.

The representative subsidized firm is subject to the following budget constraint:

$$S_t + Y_{st} - W_{st} L_{st} - R_t K_{st} \ge 0, (3.6)$$

where  $S_t$  is the subsidy that a firm receives from the government in t.

#### Investors

There is a large number (normalized to be one) of identical investors. In each t, the representative investor chooses its sequences of consumption  $\{C_{In}\}_{n=t}^{\infty}$  and investment  $\{I_n\}_{n=t}^{\infty}$  in order to maximize its discounted sequence of utility:

$$\sum_{n=t}^{\infty} \theta^{n-t} \ln(C_{In}), \ 0 < \theta < 1,$$
(3.7)

subject to  $C_{It} + I_t \le R_t K_t$  and  $K_{t+1} = I_t + K_t (1 - \delta)$ , 0< $\delta$ <1, and K<sub>0</sub> is given,

where  $K_t$  is the investors' stock of capital in t,  $\theta$  is a time-preference parameter, and  $\delta$  is a capital depreciation parameter.

#### Government

In each period the government must balance its budget:

$$S_t = \tau_t Y_{pt} \tag{3.8}$$

Since the subsidy per employee of the sector of subsidized firms  $\left(\frac{S_t}{M_t}\right)$  tends to

diminish with  $M_t$ , while it is plausible that the pressure exerted on the political authorities by the employees of the subsidized sector tends to increase with their number  $M_t$ , it is reasonable to model the tax rate whereby the government finances the subsidies in favor of the statesupported firms as an increasing function of  $M_t$ :

$$\tau_t = f(\mathbf{M}_t, \gamma), \ \gamma > 0, \ f_{\mathbf{M}_t} > 0, \ f_{\gamma} > 0, \ f_{\mathbf{M}_t, \gamma} > 0, \ f(0, \gamma) = 0.$$
(3.9)

The parameter  $\gamma$  captures the propensity of the political system to favor the subsidized sector relatively to the sector of profit-making firms, which depends on values, ideologies (approximated by preferences for market reforms). In particular, the impact of a larger M<sub>t</sub> on  $\tau_t$  tends to be stronger whenever  $\gamma$  is greater.

A possible functional specification consistent with (3.9) is the following:

$$f(\mathbf{M}_t, \gamma) = \gamma \left[ \frac{\mathbf{M}_t}{N} - \frac{1}{2} \left( \frac{\mathbf{M}_t}{N} \right)^2 \right]$$
,  $M_t < N$  and  $0 < \gamma \le 1$ , where N is the size of the entire

working population (for simplicity, it is assumed to remain fixed in time).

#### Markets equilibrium

Equilibrium in the market for the single good requires:

$$C_{Wt} + C_{It} + I_t = Y_{pt} + Y_{st}, ag{3.10}$$

where  $C_{Wt}$  is workers' consumption in t (the workers consume entirely their earnings).

Equilibrium in the segment of labor market, where profit-making firms operate, requires:

$$L_{pt} = N - M_t, aga{3.11}$$

Equilibrium in the capital market requires:

$$K_{pt} + K_{st} = K_t, aga{3.12}$$

#### 3.5 The equilibrium path of the economy

Solving the agents' optimization problems (see the Appendix 3.A), the equations are obtained that, together with the market-equilibrium conditions (3.10)-(3.12), must be satisfied along an equilibrium path:

$$W_{pt} = \alpha_p [1 - f(M_t, \gamma)] K_{pt} L_{pt}^{\alpha_p - 1}, \qquad (3.13)$$

$$\mathbf{R}_{t} = (1 - \alpha_{p})[1 - f(\mathbf{M}_{t}, \gamma)] \mathbf{L}_{pt}^{\alpha_{p}}, \qquad (3.14)$$

$$W_{st} = \frac{f(M_{t}, \gamma)K_{pt}L_{pt}^{\alpha_{p}} + K_{st}^{1-\alpha_{s}}M_{t}^{\alpha_{s}} - R_{t}K_{st}}{M_{t}},$$
(3.15)

$$\mathbf{R}_{t} = (1 - \alpha_{s}) \mathbf{K}_{st}^{-\alpha_{s}} \mathbf{M}_{t}^{\alpha_{s}}, \qquad (3.16)$$

$$L_{st} = M_t, \tag{3.17}$$

$$\frac{\theta[R_{t+1}+1-\delta]}{R_{t+1}K_{t+1}-I_{t+1}} = \frac{1}{R_tK_t-I_t},$$
(3.18)

$$K_{t+1} = I_t + K_t (1-\delta),$$
 (3.19)

$$M_{t+1} = M_t (1 - \eta).$$
(3.20)

Equations (3.13) and (3.14) provide the optimality conditions of a profit-making firm with respect to the choice of labor and the choice of capital, respectively. Equation (3.15) is derived from the budget constraint of a subsidized firm. Equations (3.16) and (3.17) are derived from the solution of the optimization problem of a subsidized firm (see the Appendix 3.A to check that it is always optimal for a subsidized firm to employ its entire workforce). Equation (3.18) is derived from the Euler equation obtained from the solution of the investor's optimization problem (see the Appendix 3.A). Equations (3.19) and (3.20) provide the laws of motion of the capital stock and the workforce of the state-controlled sector, respectively.

Using (3.11), (3.14) and (3.17)-(3.20), one can obtain the two difference equations in  $M_t$  and  $Z_t \equiv \frac{I_t}{K_t}$  that govern the equilibrium path of the economy:

$$\Lambda(M_{t+1}, M_t) = M_{t+1} - M_t(1 - \eta) = 0, \qquad (3.21)$$

$$\Gamma(\mathbf{M}_{t+1}, \mathbf{Z}_{t+1}, \mathbf{M}_{t}, \mathbf{Z}_{t}) = \frac{\theta\left\{ (1 - \alpha_{p}) [1 - f(\mathbf{M}_{t+1}, \gamma)] (\mathbf{N} - \mathbf{M}_{t+1})^{\alpha_{p}} + 1 - \delta \right\}}{(1 - \alpha_{p}) [1 - f(\mathbf{M}_{t+1}, \gamma)] (\mathbf{N} - \mathbf{M}_{t+1})^{\alpha_{p}} - \mathbf{Z}_{t+1}} - \frac{1 + g(\mathbf{Z}_{t})}{(1 - \alpha_{p}) [1 - f(\mathbf{M}_{t}, \gamma)] (\mathbf{N} - \mathbf{M}_{t})^{\alpha_{p}} - \mathbf{Z}_{t}} = 0,$$
(3.22)

where  $g(Z_t) = Z_t - \delta = \rho_t \equiv \frac{K_{t+1} - K_t}{K_t}$  (see the Appendix 3.A for the derivation of the

equation (3.22)).

Given (3.21)-(3.22), one can demonstrate the following proposition concerning longrun growth in this economy:

**Proposition 1**: The asymptotic rate of real GDP growth depends neither on the initial size of the workforce employed in the subsidized sector nor on the propensity of the political system to favor this sector relatively to the profit-making sector, but only on the structural parameters of the economy.

*Proof* By inspecting (3.21), one can immediately check that along an equilibrium path  $\lim_{t \to \infty} M_t = M = 0, \text{ thus entailing: } \lim_{t \to \infty} L_{pt} = N \text{ (see equation (11)), } \lim_{t \to \infty} R_t = R = (1 - \alpha_p) N^{\alpha_p}$ (see equation (14)),  $\lim_{t \to \infty} K_{st} = K_s = 0$  (consider that  $R = (1 - \alpha_p) N^{\alpha_p}$  and see equation (3.16)),  $\lim_{t \to \infty} Y_{st} = Y_s = 0$  (consider that M=0 and K<sub>s</sub>=0, and see equations (3.3) and (3.17)). Hence, if  $Z_t \to Z$  as  $t \to \infty$ , equation (3.22) reduces to  $\theta[(1 - \alpha_p)N^{\alpha_p} + 1 - \delta] = 1 + Z - \delta$  as  $t \to \infty$ , thus giving  $Z = \lim_{t \to \infty} Z_t = \theta(1 - \alpha_p) N^{\alpha_p} - (1 - \theta)(1 - \delta).$ (3.23) Therefore, if  $Z_t \to Z$  as  $t \to \infty$ , one has  $\lim_{t \to \infty} \frac{Y_{t+1} - Y_t}{Y_t} = \lim_{t \to \infty} \frac{K_{t+1} - K_t}{K_t} = g(Z) = Z - \delta$ ,

where Z is given by (3.23) and depends neither on  $M_0$  nor on  $\gamma$ , but only on  $\alpha_p$ ,  $\delta$ ,  $\theta$  and N.

An implication of Proposition 1 is that economies sharing the same structural features, but differing because of the relative size of their subsidized sectors and of the propensity of their political system to protect the employees of the subsidized enterprises, should converge in the very long run to the same growth rate.

For studying the transitional path along which the economy moves from period 0 onwards, the system (3.21)-(3.22) is linearized around  $(M = 0, Z = \theta(1 - \alpha_p)N^{\alpha_p} - (1 - \theta)(1 - \delta))$ . The linearized system thus obtained has only one trajectory converging to  $(M = 0, Z = \theta(1 - \alpha)N^{\alpha_p} - (1 - \theta)(1 - \delta))$ , which is governed by (see the Appendix 3.A for the derivation)

$$M_{t} = M_{0}(1 - \eta)^{t}, \qquad (3.24)$$

$$Z - Z_{t} = \frac{M_{0}[1 - \theta(1 - \eta)](1 - \alpha_{p})(N^{\alpha}{}_{p}f_{M_{t}} + \alpha N^{\alpha_{p} - 1})(1 - \eta)^{t}}{\theta^{-1} - 1 + \delta}, \qquad (3.25)$$

where  $Z = \theta(1 - \alpha_p) N^{\alpha_p} - (1 - \theta)(1 - \delta)$  and the partial derivative  $f_{M_t}$  is evaluated at  $\left(M = 0, Z = \theta(1 - \alpha_p) N^{\alpha_p} - (1 - \theta)(1 - \delta)\right).$ 

Given (3.24)-(3.25), the following proposition holds:

**Proposition 2**: Along the transitional path, the rate of investment is lower if the initial size of the workforce employed in the subsidized sector is larger (larger  $M_0$ ) and/or if the political system has a more accentuated ideological propensity to protect the employees of the subsidized sector (greater  $\gamma$ ).

*Proof* By considering equations (3.23) and (3.25), one can easily check that  $\frac{\partial Z_t}{\partial M_0} < 0$  and

$$\frac{\partial Z_t}{\partial \gamma} < 0$$
 (recall that  $f_{M_t\gamma} > 0$ ).

Proposition 2 reflects the fact that in this economy everything that induces the policy makers to devote more resources to subsidize favored enterprises tends to depress the incentive to invest: it is only in the very long run (i.e., when the influence of the interests connected to the subsidized enterprises on the policy makers has faded away) that  $M_0$  and  $\gamma$  do not exert any downward effect on capital investment and growth.

Although Belarus lags in terms of per capita behind more advanced transition economies (see Figure 3.1 in the Appendix 3.B), it displays satisfactory growth rates, which exceed the rates of the majority of other transition economies (see Table 3.1 in the Appendix 3.B). Thus, the governments, being aware of the adverse effects of direct subsidization of the less efficient enterprises upon capital accumulation and growth, can resort to other policy instruments. One of such instruments is financial repression.

### 3.6 Conclusion

This chapter suggests that the experience of the transition economies can be productively understood in terms of dualistic development. In dual economies, an obsolete sector of less efficient, typically state-owned enterprises coexists along with a viable sector of relatively efficient, competitive firms providing tax revenues that the government utilizes to subsidy the loss-makers. The dividing line between two sectors is not in terms of ownership, but in terms of efficiency. This pattern has a political backing: politicians are reluctant to restructure due to their propensity to protect the employees of the obsolete enterprises and to their ideological preferences over the depth of market reforms. The policy-makers have capitalized on the public concern for job security, and converted this concern into a broader unreceptiveness towards neo-liberal reforms. Some countries have moved away from this trajectory rather quickly (the advanced reformers, especially Poland and the Czech Republic), while others (a number of former Soviet Union republics, and particularly Belarus) have not (yet) diverted from this path.

In essence, economic dualism appears to be inescapable in the course of the transition process, since (i) the high level of industrialization inherited from the socialist era made the social costs of restructuring quite severe; (ii) the need to prevent the economy from experiencing mass unemployment in the period necessary to construct a well-functioning market-based coordination mechanism justified the subsidization of selected enterprises or sectors; (iii) the existence of political preferences and public attitudes hostile – or at least not particularly favorable – towards market-oriented reforms obstructed the emergence of a pure market economy.

The model presented here shows that, in those economies where the policy makers are particularly concerned with the protection of the obsolete less efficient enterprises, capital investment and economic growth are dampened along the transitional path. Determinants of the policy makers' attitudes towards the subsidized enterprises are the fraction of the entire workforce that is employed in these industries at the beginning of the transition process and their ideological orientation with respect to market reforms. Therefore, the model predicts that – *ceteris paribus* – the larger is the initial share of the workforce that is employed in the stronger is the degree of ideological hostility towards a pure market economy widespread in the population, the lower is the speed at which a transition economy will converge to the income level of the most advanced countries.

## Appendix 3.A

# Solution of the optimization problem of the representative subsidized firm

By using (3.3) ad (3.6), the problem of the representative subsidized firm can be rewritten as

 $\max_{K_{st},L_{st}} p_t W_{st}, \text{ where } W_{st} = \frac{S_t + K_{st}^{1-\alpha_s} L_{st}^{\alpha_s} - R_t K_{st}}{L_{st}} \text{ and } p_t \text{ is given by (3.4).}$ 

The first-order condition for a maximum with respect to the choice of  $K_{st}$  is  $\frac{\partial p_t W_{st}}{\partial K_{st}} = 0$ ,

which entails  $(1 - \beta)K_{st}^{-\alpha_s}L_{st}^{\alpha_s} = R_t$ . In its turn,  $(1 - \beta)K_{st}^{-\alpha_s}L_{st}^{\alpha_s} = R_t$  implies that

$$\frac{\partial \mathbf{p}_{t} \mathbf{W}_{st}}{\partial \mathbf{L}_{st}} \bigg|_{\mathbf{L}_{st}} > \mathbf{M}_{t} = \frac{\beta \mathbf{K}_{st}^{1-\alpha_{s}} \mathbf{L}_{st}^{\alpha_{s}-1}}{\mathbf{L}_{st}} - \left[\frac{\mathbf{S}_{t} + \mathbf{K}_{st}^{1-\alpha_{s}} \mathbf{L}_{st}^{\alpha_{s}} - \mathbf{R}_{t} \mathbf{K}_{st}}{\mathbf{L}_{st}^{2}}\right] < 0.$$
(3.A1)

One can also check that

$$\frac{\partial \mathbf{p}_{t} \mathbf{W}_{st}}{\partial \mathbf{L}_{st}} \bigg|_{\mathbf{L}_{st}} \le \mathbf{M}_{t} = \frac{\beta \mathbf{K}_{st}^{1 - \alpha_{s}} \mathbf{L}_{st}^{\alpha_{s} - 1}}{\mathbf{M}_{t}} > 0.$$
(3.A2)

Given (3.A1) and (3.A2), it is necessarily the case that only  $L_{st}=M_t$  maximizes  $p_t W_{st}$ .

#### Solution of the optimization problem of the representative investor

The intertemporal problem of the representative investor can be solved by maximizing

$$\sum_{t=0}^{\infty} \theta^{t} \{ \ln(R_{t}K_{t} - I_{t}) - \lambda_{t}[K_{t+1} - I_{t} - (1 - \delta)K_{t}] \} \text{ with respect to } I_{t}, K_{t+1} \text{ and the Lagrange} \}$$

multiplier  $\lambda_t$ , and then by eliminating  $\lambda_t$ , thus obtaining (3.18) and (3.19). An optimal path

must also satisfy the transversality condition

$$\lim_{t \to \infty} \frac{\theta^{t} K_{t}}{R_{t} K_{t} - I_{t}} = 0.$$
(3.A3)

#### Derivation of the linearized system (3.24)-(3.25)

By linearizing the system (3.21)–(3.22) around  $(M = 0, Z = \theta(1 - \alpha)N^{\alpha_p} - (1 - \theta)(1 - \delta))$ , one can obtain:

$$\begin{bmatrix} -\mathbf{M}_{t+1} \\ \mathbf{Z} - \mathbf{Z}_{t+1} \end{bmatrix} = \begin{bmatrix} 1 - \eta & 0 \\ [1 - \theta(1 - \eta)](1 - \alpha_p)(\mathbf{N}^{\alpha_p} f_{\mathbf{M}_t} + \alpha \mathbf{N}^{\alpha_p - 1}) & \theta^{-1} \end{bmatrix} \begin{bmatrix} -\mathbf{M}_t \\ \mathbf{Z} - \mathbf{Z}_t \end{bmatrix}, \text{ from which one can}$$

compute the eigenvalues  $\omega_1 = 1 - \eta$  and  $\omega_2 = \theta^{-1}$ , where  $0 < \omega_1 < 1$  and  $\omega_2 > 1$  (saddle-path

stability). By using the eigenvectors 
$$\begin{bmatrix} e_{11} \\ e_{21} \end{bmatrix} = \begin{bmatrix} \frac{(1-\eta-\theta^{-1})Q}{[1-\theta(1-\eta)](1-\alpha_p)(N^{\alpha_p}f_{M_t}+\alpha_pN^{\alpha_p-1})} \\ Q \end{bmatrix}$$
, where Q

is a constant whose value has to be determined, one can find the system governing the saddle path:

$$-M_{t} = \frac{(1 - \eta - \theta^{-1})Q(1 - \eta)^{t}}{[1 - \theta(1 - \eta)](1 - \alpha)(N^{\alpha_{p}}f_{M_{t}} + \alpha_{p}N^{\alpha_{p} - 1})},$$
(3.A4)

$$Z - Z_t = Q(1 - \eta)^t$$
. (3.A5)

By setting t=0 in equation (3.A4), one can use the initial condition  $M_0$  to compute:

$$Q = \frac{M_0 [1 - \theta (1 - \eta)] (1 - \alpha_p) (N^{\alpha_p} f_{M_t} + \alpha_p N^{\alpha_p - 1})}{\theta^{-1} - 1 + \eta}.$$
(3.A6)

Finally, by using (3.A6) for substituting Q in (3.A4)–(3.A5), one obtains (3.24)–(3.25).

# Appendix 3.B

# Performance indicators of transition economies

Country/ Indicator	GDP growth rates, average of 1994–2000	GDP growth rates, average of 2000–2008	GDP growth, average of 2008– 2010	Private sector share in GDP, per cent in 1994	Private sector share in GDP, per cent in 2009	GDP per capita, USD in 2009	Average of three EBRD indicators of enterprises restructuring*, 2009	Tax to GDP ratio, per cent in 2008
Albania	6.9	6.1	4.7	50.0	75.0	3795.8	3.3	32.1
Armenia	5.4	11.2	-1.1	40.0	75.0	2653.7	3.3	19.6
Azerbaijan	1.1	15.8	9.7	20.0	75.0	5119.1	2.6	27.6
Belarus	1.4	7.9	5.6	15.0	30.0	5122.9	1.9	52.7
Bosnia and								
Herzegovina	24.9	5.8	1.3	n.a.	60.0	5122.3	2.7	44.8
Bulgaria	0.2	5.7	0.6	40.0	75.0	6400.0	3.6	36.5
Croatia	4.1	4.3	-1.6	35.0	70.0	14241.4	3.6	46.7
Czech Republic	2.2	4.2	0.0	65.0	80.0	20411.7	4.0	42.4
Estonia	5.0	6.9	-5.5	55.0	80.0	13461.6	3.3	40.9
FYR								
Macedonia	1.7	3.0	1.6	35.0	70.0	4542.6	3.4	37.1
Georgia	2.8	7.0	-0.1	20.0	75.0	2429.0	4.0	37.1
Hungary	3.5	3.6	-1.6	55.0	80.0	12818.8	3.0	34.1
Kazakhstan	-1.1	9.4	3.5	20.0	70.0	6921.6	3.2	25.7
Kyrgyz								
Republic	0.4	5.0	2.4	30.0	75.0	1766.2	3.7	29.6
Latvia	4.0	7.3	-7.7	40.0	70.0	853.3	3.8	39.5
Lithuania	2.2	7.1	-3.8	60.0	75.0	11436.7	3.0	37.2
Moldova	-2.0	5.9	1.1	20.0	65.0	11023.1	3.1	41.6
Poland	5.6	4.2	3.4	55.0	75.0	11313.4	3.3	43.3
Romania	0.4	5.6	-0.6	40.0	70.0	7504.3	3.1	34.5
Russia	-1.1	7.0	0.6	50.0	65.0	8681.6	2.9	35.4
Serbia	2.2	5.5	1.3	n.a.	60.0	5889.2	4.0	43.1
Slovakia	4.3	5.8	1.8	55.0	80.0	16244.5	3.4	n.a.
Slovenia	4.5	4.4	-1.1	45.0	70.0	24366.5	2.8	43.6
Tajikistan	-4.5	8.6	5.6	15.0	55.0	766.2	3.3	27.5
Turkmenistan	-0.1	14.8	9.2	15.0	25.0	2842.6	1.4	15.1
Ukraine	-6.3	6.9	-3.0	40.0	60.0	2492.5	3.1	45.0
Uzbekistan	1.6	6.3	8.4	20.0	45.0	1070.3	2.6	32.7

#### Table 3.1: Economic Indicators of the Selected Transition Economies, 1994–2010

\* Three EBRD indicators are large-scale privatization, small-scale privatization, and enterprise restructuring. These indicators reflect the depth of enterprise reform. The higher the score, the more enterprise sector is reformed.

*Source:* EBRD database, http://www.ebrd.com/pages/research/economics/data.shtml, viewed 20 April 2012.

Table 3.2: Share of loss-making	enterprises in Bela	arus, 1995–2011,	percent of the	number of
enterprises				

<b>1</b>									
Industry/Year	1995	2000	2005	2006	2007	2008	2009	2010	2011
Total in the economy	17.9	22.3	3.5	8.5	6.5	5.1	7.6	5.5	6.5
Industry	11.6	18.4	5.5	16.4	13.7	11.6	15.1	10.7	31.5
								3.1	
Agriculture	13.2	418	07	14	2	12	22	(54.4)*	91(315)*

\* From 2010, Belstat reports two figures: a smaller one is the recorded number of loss-making enterprises in agriculture, including all those that receive state support; while the larger figure accounts for all those companies that would be loss-making without state support. Thus, state aids are used to avoid large-scale losses in agriculture. At the same time, no comparable figure is provided for the industry.

Source: Belstat, various publications

#### Table 3.3 Government support to industry, 2004–2011, percent of GDP

Indicator/Year	2004	2005	2006	2007	2008	2009	Average,	2010	2011
							2004-		
							2009		
Tax benefits	1.9	3.0	3.2	3.7	3.2	3.0	3.0	1.8	1.1
Non-interest budget subsidies	3.0	3.6	3.6	7.7	8.3	6.7	5.5	3.3	2.8
of which subsidy to oil suppliers				2.4	4.0	3.3			
Budget investment grants	1.2	0.3	0.4	0.4	0.4	0.2	0.5	0.1	0.1
Budget interest rate subsidies	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.5	0.6
Implicit subsidies under the budget		0.1	0.0	0.0	0.1	0.5	0.1	-	-
credit programs, including from extra-									
budgetary funds									
Budget spending on repayment of	0.4	0.6	0.7	0.9	0.7	0.8	0.7	0.6	0.4
guaranteed credits (called guarantees)									
Bank recapitalization program	1.0	1.1	1.0	0.6	1.5	0.0	0.9	-	-
Other programs			0.1	0.6	0.2	0.3	0.3	-	-
Total government support (including	7.6	8.7	9.0	14.0	14.5	11.7	10.9		
subsidy to oil suppliers)									
Total government support (without	7.6	8.7	9.0	11.6	10.5	8.4	9.3	6.3	5.0
subsidy to oil suppliers)									

*Source*: World Bank (2010b) for the years 2004-2009, for 2010 - 2011 – author's calculations on the basis of the data taken from the Belstat and the Ministry of Finance.

Figure 3.1: Average economy-wide wages in Belarus and some other transition economies, December 2011, EUR



Source: respective statistical agencies of countries presented



Figure 3.2: Support for free market institutions, average of 1991–1997, percent

Source: EastEurobarometer, subsequent years





Source: author's calculation on the basis of IMF's International Financial Statistics Database

# **Chapter 4**

# A Model of Financial Repression and Growth in a Dual Economy

# 4.1 Introduction

What are the effects of financial repression on long-run growth in a dual economy? Although numerous scholarly studies detect a negative correlation between financial repression and GDP growth, there are few exceptions. The latter include post-war Japan and South Korea in the 1970s, Mexico and India in the 1980s, and, currently, China and Belarus. This chapter focuses on the cases of Belarus and China. These are financially repressed economies that display satisfactory rates of economic growth at least over the last decade and a half (see Table 4.1 in the Appendix 4.B)

The rationale of the governments to financially repress their economies is to boost capital accumulation and to ensure designated industries and sectors have access to capital at a cost lower than the market one. The latter is seen as particularly important in the context of many post-socialist countries. Socialist economy has left profound legacies in the form of large industrial enterprises whose restructuring could easily endanger the growth prospects and also cause painful social costs. The governments are maintaining controls over the allocation of financial resources and by that making transition to a market economy a controlled and smooth, rather than a chaotic and spontaneous, process.

In Belarus, financial repression is indirectly contributing to the maintenance of excessive employment at loss-making enterprises. The latter play a role of 'centers for social welfare provision' in the absence of meaningful policies of supporting the unemployed in the

economy characterized by a low pace of restructuring and therefore slow job creation and destruction. For bureaucrats, which are a part of political *nomenklatura*, financial repression can be a way to reap private economic benefits from public policies. For example, officials who manage state-owned enterprises can collect rents by exploiting the preferential treatment provided to domestic producers. Moreover, the fact that certain enterprises or sector have access to capital at a cost that is kept artificially low through policy interventions has obvious distortionary effects on resource allocation. At the same time, financial repression may create a potential conflict between savers and workers, because the latter might benefit from a policy that lowers the cost of capital for the enterprises.

This chapter explores the possibility that financial repression has more positive effects on economic growth than the direct subsidization of enterprises via the state budget. However, growth may occur at the costs of repressing savers, who may be a class of pure *rentiers* or who may be households that both save and work. Hence, it is worth to assess the distributive implications of this policy, which is studied in this paper under the simplifying assumption that the population is divided between *rentiers* and workers.

# 4.2 Financial repression and growth

Financial repression can be defined as 'a set of policies, laws, regulations, taxes, distortions, qualitative and quantitative restrictions and controls which do not allow financial intermediation to operate their full technological potential' (Roubini & Sala-i-Martin, 1995, p. 277). Policies of financial repression typically include interest rate ceilings, high bank reserve requirements, credit ceilings or restrictions on directions of credit allocation, and direct control of the banking system by the government.

One of the key reasons for the use of financial repression is to generate revenues for governments at artificially low costs by maintaining low interest rates and without legislative complications (Giovannini & Melo, 1993, p. 953). For instance, high ratios of reserve

requirements, earning no interest, function as an implicit tax on banks and also restrict banks from allocating a certain portion of their portfolios to more productive loans and investment. Required liquidity ratios are a variant of this policy, when banks are demanded to hold a fraction of their deposits as low-return government securities. If high reserve requirements are coupled with interest rate ceilings, savers receive lower real interest rates than could be provided by the market.

Governments may also meet their fiscal needs by imposing, formally or informally, to banks to hold a fraction of their deposits in the form of low-return government securities. Similarly, governments can artificially reduce the elasticity of money demand through inflationary financial repression practices and thus increase government revenues via the inflation tax. Financial repression is often associated with higher inflation rates and higher base money per capita (Roubini & Sala-i-Martin, 1995, p. 18). This is the second-best strategy of taxing population instead of taxing banks and financial intermediaries (Fry, 1995, p. 19).

Low interest rates do not only imply low costs of servicing government debt, but also can be a powerful way to encourage investment. In the early 1960s, development economics literature recommended central banks to act as development banks and keep interest rates low to favor investment (Oman & Wignaraja, 1991). This policy was supported by the argument that 'myopic' markets tend to keep the rate of accumulation below what is socially optimal.

Financial repression can be also conceived as a tool of industrial policy, aimed at ensuring stable provision of capital to designated sectors and industries of the economy. Government guidance includes orders to invest in particular projects. One of the cases of such policy is post-war Japan (Johnson, 1982) and South Korea in the 1970s. Without directed loans, there is a danger that banks would 'not allocate funds to those projects for which the social returns are the highest' (Stiglitz, et. al, 1993, p. 45), for instance, to building necessary infrastructure that facilitates trade (roads, communications, etc.). In India, the argument in favor of the 'social control' policy (that included directed lending) was the necessity to break 'too close ties' of commercial banks with industry established at the expense of 'agriculture and other essential sectors of the economy' (Patel, 2002, p. 126).

The problem is that low interest rates encourage the implementation of low-returns projects. Moreover, if savers are not compensated with 'feasible rates of return' (Shaw, 1973, p. 80), they respond by reducing their money holdings well below 'socially optimal levels' (McKinnon, 1973, p. 69).

Numerous scholarly studies find a negative correlation between financial repression and long-run economic growth<sup>46</sup>. The McKinnon-Shaw thesis is that financial repression reduced the real rate of growth due to diminishing productivity of capital (Shaw, 1973, p. 6). If financial intermediaries are operating more closely to a competitive free-market equilibrium level, then a positive effect on the growth rate is being generated.

Traditional growth theory relates financial intermediation to the level of the capital stock per worker and to the level of productivity, but not to their respective growth rates. Endogenous growth literature demonstrated that financial intermediation can have not only level effects, but also growth effects. However, even in a simple AK model<sup>47</sup>, it can be shown that financial repression influences both the behavior of banks<sup>48</sup> and the equilibrium growth rate of the economy through its impact on the amount of resources devoted to accumulation and on the average product of capital stock (Pagano, 1993). By using a three-period overlapping-generations model, Bencivenga and Smith (1991) show that high reserve requirements reduce the steady-state values of the capital stock, output, and bank deposits.

<sup>&</sup>lt;sup>46</sup> See, for instance, Gelb (1989), King and Levine (1993), and Fry (1995).

<sup>&</sup>lt;sup>47</sup> In this model, the economy's growth rate depends positively on the average product of capital and the proportion of resources devoted to capital accumulation.

<sup>&</sup>lt;sup>48</sup> Similarly, Demetriades and Luintel (2001) argue that the centralized allocation of credit has effects beyond interest rates, i.e. upon behavioral characteristics of banks and depositors. Banks their policies by raising deposits by non-interest rates methods, while savers may change their willingness to supply their savings to the banking system. These changes affect financial depth and the level of GDP per capita. These conclusions are based on the premise that economic actors are rational and can foresee the long-term adverse effects of financial repression. In this situation, directed lending can be the tool to command the allocation of loans.

Although numerous publications find a negative relation between financial repression and economic growth, there are studies challenging that conclusion. In particular, Fry (1995, Ch. 9) maintains that the adverse effects of repression on growth are less pronounced when the total savings or the investment functions are examined. In similar fashion, directed lending to selected companies may generate positive spillovers to the economy as a whole (DeLong & Summers, 1991).

Dornbusch and Reynoso (1989, p. 206) warn that financial liberalization – an antipode of financial repression – does not automatically lead to higher per capita growth. Moreover, they find 'only episodic empirical support for the growth effects of a liberalized financial system'. The practices of financial repression do not necessarily hinder economic growth, so the removal of financial repression produces ambiguous results.

However, the positive effects of financial repression can evaporate over time, while demand for cheap loans remains protracted. Moreover, as Shaw argued (1973, p. 86), administrative credit allocation is not cost-effective because it requires expensive management procedures and creates opportunities for corruption. For instance, initially positive association between directed loans and growth has been reexamined because of its tendency to generate overinvestment (Demetriades & Fattouh, 2001), and in particular the continuous financing of low-productivity or loss-making projects in large industrial conglomerates (*chaebols*)<sup>49</sup>.

Inefficient investment creates a problem for both banks and economy: banks accumulate bad loans in their portfolios, while less capital is invested in profitable projects. Over time, resources available for investment necessarily shrinks as in the preceding period losses are generated by unproductive firms and then offset by using a fraction of revenues

<sup>&</sup>lt;sup>49</sup> In particular, they claim that 'in spite of the presence of unproductive credit, the banking system's contribution to TFP was significantly positive during the...three decades [before the Asian crisis], although TFP would have been greater had the proportion of 'unproductive credit' to total credit been smaller' (Demetriades & Fattouh, 2001, pp. 2–3).

collected from more productive firms. In India, in 1995, 50% of all loans provided to socalled priority sectors (about one-third of total portfolio of banks) were estimated to be nonperforming (Joshi & Little, 1998) after almost three decades of directed lending. Gupta (2001, p. 429) notes that directed credit came 'at the cost of the quality of loan portfolios of banks, the growth of overdues and consequent erosion of profitability of banks'.

In China, directed lending has allowed firms have better access to finance and helped to promote growth of both firms' value-added and total factor productivity (Demetriades et al., 2008). But at the same time, directed lending has been accompanied by increase in the share of non-performing loans (up to 40%) (Farrell & Lund, 2006). Lardy (2008) stresses that the continued manipulation of the interest rate structure could hinder the development of Chinese financial market and thus long term economic growth.

In Belarus, directed lending has been coupled with high rates of economic growth, and relatively low share of non-performing loans: around 5 percent in 2010 (World Bank, World Development Indicators Database). However, this figure might actually be higher due to the lack of accurate bank-level data, and reach even 20 percent by the end of 2012, according to Moody's estimates (Areshka, 2011). At the same time, economic growth has been recorded against the background of heightened inflation as the National Bank of Belarus has increased the volume of loans to banks.

#### 4.3 Directed lending in Belarus and China: stylized facts

Belarus and China are mixed economies with the strong interventionist states. They are also 'dual economies', although their dualisms differ. First of all, in China, there are at least *two* dualisms. The first dualism is related to the FDI versus non-FDI economy (Whalley & Xin, 2006). FDI-led industries tend to be concentrated on the eastern costal areas, which attract up to 85 percent of FDI (Funk, Izaka, & Tong, 2002). As a result, one part of the economy has become integrated in the world market, while the other part has remained less developed, with

few links to the more dynamic coastal areas. Although from the 1990s, Chinese authorities implemented policies to stimulate inflows of FDI into the interior regions of China and thus to prevent deepening of uneven regional development and regional disparities, FDI-based division persists.

The second dualism concerns the development of manufacturing sector, which requires reallocation of labor force from the rural to the urban regions. A conventional view of China's development portrays it 'a dual-track system', where large state-owned enterprises (assigned until the mid-1980s, at least partly, to a planning system) coexist with collectively-owned and private companies. Transition economies have been discouraged from following a Chinese 'dual-track system' (see Chapter 1 for details). Chinese gradualism was seen as a product of specific economic structure, which is akin to a typical developmental problem of moving from an economy based on lower-productivity agriculture to an economy relying on higher-productivity industry (Lewis, 1954; Ranis & Fei, 1966).

In contrast, transition economies faced a problem of structural adjustment, i.e. the restructuring of state-owned enterprises into efficient private companies. This task put the post-socialist countries closer to the Latin American rather than Asian states. Moreover, the former socialist economies had already experimented with gradualism in the late 1980s by trying to revitalize growth, such as plan bargaining, workers' self-organization, etc. (Lavigne, 1999). However, these experiments had not been unable to address inherent economic flaws of the socialist economies. Last but not least, there were concerns that transition recession could ignite political conflicts blocking the reform process. Gradualism is an avenue to make these conflicts entrenched so reforms should be carried out rather quickly to block the opposition from temporary losers (Przeworski, 1991).

Nevertheless, a number of transition economies (including Hungary, Poland, and the Czech Republic) had initially attempted to subsidize enterprise via the banking system, but

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soon abolished this after a series of costly recapitalizations (Mihalyí, 2004). In contrast, Belarus has continued to implement subsidization policies, while the private sector has never been allowed to become dominant in the economy. As a result, the Belarusian economy has been split into the two segments, one consisting of less efficient enterprises supported by the state, and the other consisting of more efficient companies, used as 'donors' to support their poorly performing counterparts. This pattern has similarities with the Chinese economy's divide, evolving since the 1990s: between the entrepreneurial, market-driven sector vis-à-vis the state-led sector.

A more nuanced account of Chinese economy provided by Huang (2008) attributes the development of this second kind of dualism to the policy reversal of the 1990s:

'A central mechanism of the growth model of the 1990s was to finance state-led, urban China by heavily taxing entrepreneurial rural China. The result was the urban boom...the entrepreneurial China paid the price...rural tax burdens were high and increased substantially. In addition, the state increased charges for providing basic services, such as education and health' (Huang, 2008, p. 43).

On the financial front, this heavy urban bias has been supported by directed lending. As a result, firms located in the rural areas<sup>50</sup> have to increase efficiency in order to survive, while the urban SOEs have no such incentives. This policy discrimination produced 'the efficiency differential [that] can be very large' (Huang, 2008, p. 19).

Since the beginning of the reform process in 1978–1979, China has registered impressive rates of economic growth, although the growth process has been cyclical (with the upswings in the mid-1980s and in 1992–1994). During the first years of reforms, growth was due mainly to the agricultural sector's performance, but subsequently, manufacturing and services became dominant (World Bank, 1996). The driver of economic growth in China has been 'high investment demand backed by a stable financial system leading to high aggregate demand, and at the same time, to increasing capacities and new technologies embedded in

<sup>&</sup>lt;sup>50</sup> These firms are not necessarily agricultural producers. They are simply located in the rural areas (Huang, 2008).

new investment' (Herr & Priewe, 2005, p. 204). Gross rates in gross capital formation as well as the proportion of gross capital formation in per cent of GDP have been relatively high in China, but not in Belarus.

Belarus initially suffered from transition recession, but since 1996 growth has resumed. Over the years, it has been driven by stimulation of domestic demand, although the availability of customs union with Russia played a great role between 1996 and 2002. Also, Belarusian authorities have been able to effectively bargain for discounts on imported gas, which is the core energy resource used in domestic production. At the same time, investment dynamics have been much weaker than in China (see table 4.2, Appendix 4.B).

In the 1990s, the employment and investment growth in the state sector of the Chinese economy had been supported by the government through cheap bank credits and money creation (or inflation taxes). Brandt and Zhu (2000) reported that between 1979 and 1993, on average of 84% of all new credits from the state banking system were allocated to the sector of state-owned enterprises. More than one-third of the loans in the economy were 'policy loans' financed by policy banks and/or People's Bank of China, which were often not repaid.

Allen et al. (2007, pp. 87, 92) point out that high bank concentration and the provision of policy loans resulted in the accumulation of non-performing loans, which still remains to be 'the most glaring problem for China's banking sector, and for the entire financial system' As a result, the most successful part of the financial sector appears to be 'a sector of alternative financing channels, such as internal financing and trade credits, and coalitions of various forms among firms, investors, and local governments'. This sector of alternative finance has expanded with the rise of the sector of small and medium-sized town and village as well as private enterprises. The government is aware of a greater efficiency of privately or individually owned firms, also partially owned by local governments, and it extracts resources from them to subsidize the state sector via the state-owned baking system.

As in China, state-owned banks in Belarus provide policy loans to selected borrowers at interest rates lower than market rates. Most often, it occurs within the framework of the so-called 'state investment programs' to support agriculture, industry, and housing construction. These programs are developed and implemented to realize the growth targets set for the economy and the industry<sup>51</sup>. These growth plans are perceived to be implementable as soon as there is an adequate volume of loanable funds in the economy. Thus, policy loans are used to ensure that necessary financial resources are available and, preferably, at low costs. Although the share of non-performing loans in Belarus is relatively low, they can resurface as the government withdraws supports to the state-owned enterprises. If so, at least some of the directed loans may become unproductive credit to finance low-return projects.

However, the important difference between Belarus and China lies in the mode and volume of savings. In Belarus, it is much lower than in China due to at least two factors. First, there are considerable differences in the provision of public services. In Belarus, population is covered by universal one-tier pension system, while many educational and healthcare services are provided for free. These features are considered as the core part of 'the social contract' between the state and the major social groups in Belarus (Haiduk et al., 2009). As a result, workers have fewer incentives to save.

Second, China is characterized by a much lesser degree of dollarization than Belarus, where dollarization has been an endemic feature of its monetary system (Haiduk et al., 2004). In Belarus, US dollars have been used as a store of value and, to a lesser extent, as a means of payment. Moreover, there is a wide gap between official and unofficial dollarization (Feige & Dean, 2004). The high stock of cash hoarding in foreign currencies – particularly US dollars – leads to a loss of the domestic credit supply. According to some estimations (Feige & Dean, 2004) more than 20 percent of financial wealth in Belarus is kept in foreign currency cash. As

<sup>&</sup>lt;sup>51</sup> Such planning occurs in the form of the five-tear plans adopted by the government. The experience shows these growth plans are largely implemented. The only parameter strongly 'violated' is the current account deficit.

Honohan & Shi (2003, p. 14) argue, dollarization 'does appear to shrink the availability of credit, as compared with a situation where the same amount of deposits are held onshore, but in local currency'. Thus, high degree of dollarization, including unofficial one, is one of the important determinants behind the enormous differences between domestic credit/GDP ratio in Belarus and China.

Chinese authorities seem to be aware of the credit shrinkage problem and prevent households from hoarding foreign cash. In China, bank deposits in national currency are the only asset available to Chinese households. Deposit interest rates are set administratively at a rather low level. Together with the absence of a universal social security system, this forces Chinese households to continuously accumulate savings. In contrast, Belarusian authorities are not brave enough to implement comparable steps..

A consequence of dollarization is that banks have to compete with the attractiveness of the US dollar as a store of value by offering higher deposit rates. Uncertainties about the economic situation have caused tiny bank runs, where national currency deposits were converted into foreign cash. One of such bank runs occurred at the beginning of 2007, when Russia reset the prices of energy.

The section below models one particular type of distortion, namely the provision of policy loans at a rate lower than the market rate. This can occur in different ways. This chapter considers the direct subsidization of favored firms' costs of capital by the government and their indirect subsidization through the intermediation of the banking system.

A greater weight assigned to the favored sector of the economy does not necessarily damage the GDP numbers, but it 'shows up in the welfare implications of growth' (Huang, 2008, p. xv). Since the early 1990s, household income has lagged behind economic growth, and overall social performance has deteriorated. Das (2012) connects the issue of overinvestment with the heavy urban bias of Chinese authorities described above. In particular, it is argued that a restart of growth in 2008–2009 in China has led to an increase in the volume of bad debts, like in the 1990s (Das, 2012). Artificial acceleration of investment leads to asset and property bubbles, which are translated into non-performing loans of banks. In turn, bailouts of banks imply a transfer of wealth and income from savers to other parts of the economy. Over the long run, this transfer – caused by a government-created distortion – could decrease the welfare of savers<sup>52</sup>.

#### 4.4 The basic model

In the economy under consideration, there is a sector consisting of more efficient, typically private, firms and a sector consisting of less efficient, typically state-owned firms that are subsidized by the government. Both types of firms produce the same product, and this single good can be used both for consumption and for capital investment. The market for this good is perfectly competitive. Also the market in which firms rent capital that is accumulated by the *rentiers* (the 'investors', or 'savers') is perfectly competitive, and the same is true for the labor market.

The government subsidizes the less efficient firms by paying a fraction of their cost of capital. It can be argued that the subsidized firms are less efficient because their managers – possibly appointed by the government – are not strongly motivated to organize the production process effectively. Hence, one may assume that the subsidized firms are those suffering from X-inefficiency (Liebenstein, 1966)<sup>53</sup>.

The government finances the subsidies to the less efficient firms by taxing the investors, which have to decide in each period what fraction of their disposable income to devote to the accumulation of capital rather than to consumption. In this economy, workers

<sup>&</sup>lt;sup>52</sup> For simplification of modeling, the risk of default is not considered.

<sup>&</sup>lt;sup>53</sup> Companies may strive to preserve outdated production facilities not only because of the subsidies, but also because of the availability of other forms of protection, such as import tariffs and non-tariff barriers, preferential access to government purchases, and so on.

consume entirely their earnings<sup>54</sup> and are all employed at the market wage. Time is discrete and the time horizon is finite. Finally, there is no source of random disturbances. Agents' expectations are rational (in the sense they are consistent with the true processes followed by the relevant variables), thus implying perfect foresight.

#### Firms

There is a large number (normalized to be one) of identical firms that operate in sector i, i=p,s. In each period t, they produce the single good Y<sub>t</sub> according to the following technology:

$$Y_{it} = \gamma_i A_{it} L_{it}^{\alpha_i} K_{it}^{1-\alpha_i}, \ 0 < \alpha_i < 1$$

$$(4.1)$$

and under the assumption that  $\gamma_p > \gamma_s$ , where Y<sub>it</sub> are the units of good Y<sub>t</sub> produced by the firms operating in sector *i*, L<sub>it</sub> and K<sub>it</sub> are, respectively, the labor input and the capital stock used by a firm operating in *i* to produce Y<sub>it</sub>, and A<sub>it</sub> is a variable measuring the state of technology of a firm operating in *i*. The assumption that  $\gamma_p > \gamma_s$  captures the fact that a typical firm operating in sector *p* (the 'efficient' sector) can produce more than its counterpart operating in sector *s* (the 'subsidized' sector) even if both firms use the same amounts of labor and capital, and are characterized by the same state of technology.

It is also assumed that  $A_{it}$  is a positive function of the capital installed in the sector where the firm operates:  $A_{it} = K_{it}^{\alpha_i 55}$ . This assumption combines the idea that learning-bydoing works through each firm's capital investment and the idea that knowledge and productivity gains spill over instantly across firms that operate with the same technology (see Barro and Sala-i-Martin, 1995). Therefore, in accordance with Frankel (1962), it is supposed that although  $A_{it}$  is endogenous to sector *i*, each firm takes it as given, because a single firm's

<sup>&</sup>lt;sup>54</sup> An extension can be made with at least a fraction of the workforce which saves.

<sup>&</sup>lt;sup>55</sup> Consistently with this formal set-up, technological progress can be interpreted as labor-augmenting.

decisions have only a negligible impact on the aggregate stock of capital installed in the sector where the firm operates.<sup>56</sup>

In each t, the representative firm hires labor and rents capital so as to maximize its profits  $\pi_{it}$ , where:

$$\pi_{it} = Y_{it} - w_t L_{it} - \sigma_i R_t K_{it}, \sigma_i = \begin{cases} 1, i = p \\ 1 - \varphi, 0 < \varphi < 1, i = s \end{cases}$$
(4.2)

In (2),  $w_t$  is the wage rate,  $R_t$  is the rental rate of capital, and  $\varphi$  is the fraction of the total costs of capital that is paid by the government as a subsidy to the less efficient firms.

#### Investors

There is a large number (normalized to be one) of identical investors. The representative investor chooses its sequence of consumption  $\{C_{It}\}_{t=0}^{\infty}$  and investment  $\{I_{It}\}_{t=0}^{\infty}$  in order to maximize its discounted sequence of utilities:

$$\sum_{t=0}^{\infty} \theta^{t} \ln(C_{it}), 0 < \theta < 1,$$

$$(4.3)$$

subject to:

$$C_{lt} + I_t \le R_t K_t - T_t \tag{4.4}$$

and

$$K_{t+1} = I_t + K_t (1 - \delta), \ 0 < \delta < 1, \ K_0 \text{ is given},$$
(4.5)

where re  $\theta$  is a time-preference parameter, K<sub>t</sub> is the investor's stock of capital in t, and T<sub>t</sub> are the taxes paid by the representative investor in t, and  $\delta$  is a capital depreciation parameter.

<sup>&</sup>lt;sup>56</sup> This amounts to say that technological progress is endogenous to the private sector of the economy, although it is unintended by-product of firm's capital investment rather than the result of purposive R&D effort.

#### Government

Government intervenes into the economy in order to subsidize the less efficient enterprises by taxing the investors:

$$T_t = \varphi R_t K_{st} \tag{4.6}$$

Notice that the amount of tax levied is equal to the subsidy that is provided to the less efficient firms.

#### Markets equilibrium

Labor and capital market equilibrium imply, respectively,

$$\mathbf{L} = \mathbf{L}_{\mathrm{pt}} + \mathbf{L}_{\mathrm{st}},\tag{4.7}$$

and

$$\mathbf{K}_{t} = \mathbf{K}_{st} + \mathbf{K}_{pt},\tag{4.8}$$

where L is the total endowment of labor (which is assumed to remain fixed over time).

Equilibrium in the good's market requires

$$Y_{pt} + Y_{st} = C_{It} + C_{Wt} + I_t,$$
 (4.9)

where  $C_{Wt} = (L_{pt} + L_{st})W_t$  is total workers' consumption at time t (it is assumed that workers consume their entire income).

# 4.5 Equilibrium dynamics and a balanced growth path

By taking into account the market-equilibrium conditions and by solving the optimization problems of the representative efficient and subsidized enterprises (see Appendix 4.A.1), one can verify that along an equilibrium path:

$$L_{pt} = f(\boldsymbol{\varphi}), \ \mathbf{f}(\boldsymbol{\varphi}) > 0 \tag{4.10}$$

$$\frac{K_{st}}{K_{pt}} = g(\varphi) \equiv \frac{\alpha_p \gamma_p [L - f(\varphi)]^{1 - \alpha_s}}{\alpha_s \gamma_s [f(\varphi)]^{1 - \alpha_p}}, g'(\varphi) < 0$$
(4.11)

$$R_{t} = h(\varphi) \equiv \gamma_{p} (1 - \alpha_{p}) [f(\varphi)]^{\alpha_{p}}, \ h'(\varphi) > 0$$

$$(4.12)$$

Given that all firms compete in an integrated capital market, a higher subsidization of the cost of capital in favor of the less efficient firms (a larger  $\varphi$ ) pushes the efficient firms to raise their marginal productivity of capital, so as to match the higher rental rate that the less efficient firms can pay thanks to the larger subsidy. Given the complementarity between capital and labor, the efficient firms can raise their marginal productivity of capital by increasing their labor input. Hence, it is not surprising that both L<sub>pt</sub> and R<sub>t</sub> increase with  $\varphi$ . Moreover, all firms compete in the labor market and must pay the same wage. Thus, the more efficient firms tend to compensate the tendency of their marginal productivity of labor to decrease because of the higher L<sub>pt</sub> by increasing their capital stock. This is why the ratio between K<sub>st</sub> and K<sub>pt</sub> declines with  $\varphi$ .

One can conclude from what is discussed above that the more efficient firms end up employing more labor and more capital as a result of the government subsidization of the cost of capital in favor of the less efficient firms. There is some evidence – both in Belarus and China – to support this argument<sup>57</sup>.

By using (4.10)–(4.12), one can derive the single difference equation in  $Z_t \equiv \frac{I_t}{K_{pt}}$  that

governs the motion of the economy along an equilibrium path (see Appendix 4.A.2):

$$z(Z_{t+1}, Z_t) = \frac{\theta[(1-\delta) + h(\varphi)]}{h(\varphi)[g(\varphi)(1-\varphi) + 1] - Z_{t+1}} - \frac{(1+\rho_t)}{h(\varphi)[g(\varphi)(1-\varphi) + 1] - Z_t} = 0,$$
(4.13)

where

$$\rho_{t} = \frac{K_{pt+1} - K_{pt}}{K_{pt}} = \frac{Z_{t}}{[1 + g(\varphi)]} - \delta.$$
(4.14)

Along a balanced growth path (BGP), one must have:

$$Z_{t+1} = Z_t = Z = [\theta h(\varphi) - (1 - \theta)(1 - \delta)][1 + g(\varphi)],$$
(4.15)

thus implying

$$\rho_{t+1} = \rho_t = \rho = \theta h(\phi) + \theta (1 - \delta) - 1 = \theta [h(\phi) + 1 - \delta] - 1.$$
(4.16)

By linearizing (4.13) around Z, one may easily check that

$$\frac{dZ_{t+1}}{dZ_{t}} \bigg|_{Z_{t+1}} = Z_{t} = Z = -\frac{\frac{\partial z(.)}{\partial Z_{t}}}{\frac{\partial z(.)}{\partial Z_{t+1}}} \bigg|_{Z_{t+1}} = Z_{t} = Z = \frac{g(\varphi)[h(\varphi)(1-\varphi)] + [(1-\delta)(1-g(\varphi))]}{(1+g(\varphi))\theta[(1-\delta)+h(\varphi)]} > 1,$$

which implies that the economy is instable in a neighborhood of its BGP. Hence, the only equilibrium path of the economy is characterized by  $Z_{t+1} = Z_t = Z$  and  $\rho_{t+1} = \rho_t = \rho$ ,  $\forall t$ . This

<sup>&</sup>lt;sup>57</sup> Allen et al. (2007) claim that over this period of time, the so-called 'hybrid sector', comprised of privately/individually owned firms (sometimes co-owned by local governments) has become dominant over the state sector in terms of employment and investment. The expansion of this hybrid sector has been supported by alternative financing channels (including internal financing and trade credits) and corresponding governance mechanisms. Moreover, the Chinese government has gradually allowed the privatization of state-owned banks to increase the efficiency of the banking sector and to reduce the volume of non-performing loans. Taken together, all these developments have contributed to China's overall economic growth.
means that in equilibrium the output grows at rate  $\rho$ . Therefore, by considering (4.16) and the fact that h'( $\varphi$ )>0, one can conclude that the equilibrium rate of economic growth is a positive function of  $\varphi$ . In other words, the government can boost economic growth by financing a reduction of the cost of capital for the less efficient firms through a lump-sum tax on investor's income, since in this way it increases the rental rate paid to the investors for their capital, thus stimulating capital accumulation.

#### 4.6 Welfare analysis

The subsidization of the cost of capital in favor of the less efficient firms has distributive implications. Workers – who are here supposed to not save – may benefit from financial repression since it delivers economic growth, while investors – who are here supposed to not work – may be negatively affected by such a policy. Although it is obviously a simplification to assume that a part of the population only works and does not save at all, while another part does not work at all and live on capital income, one can argue that this stylization sheds light on the different welfare effects that financial repression has on those who rely almost exclusively or predominantly on their labor income and on those for whom the returns from savings constitute an important share of their total income.

In order to assess the welfare effects of financial repression on workers and investors, the workers are assumed to have the same preferences that are attributed to the savers. Therefore, the discounted sequence of utilities of the representative worker is given by:

$$\sum_{t=0}^{\infty} \theta^t \ln(W_t), \tag{4.17}$$

Hence, considering (4.3) and (4.17), the following proposition can be formulated:

**Proposition 1**: The well-being of the workers increases with the increase in subsidization of the cost of capital in favor of the less efficient firms. The opposite is true for the well-being of the investors.

Proof: One can check that 
$$\frac{\partial \left[\sum_{t=0}^{\infty} \theta^t \ln(W_t)\right]}{\partial \varphi} > 0$$
 and  $\frac{\partial \left[\sum_{t=0}^{\infty} \theta^t \ln(C_{It})\right]}{\partial \varphi} < 0$  (see the Appendix

4.A.3).

The content of Proposition 1 may help explaining some stylized facts. As the allocation of resources is managed politically, certain actors have to bear a burden for this intervention. In China, returns on deposits, the major investment option for households, are used to be low and even negative in real terms. This implicit tax imposed on households is estimated to be around 4 percent of GDP in 2007 (Lardy, 2008, p.2). Given very limited redistribution and scarce investment opportunities, households have to self-insure themselves against various social risks by saving more and more.

While in China, financial repression is 'most clearly evidence from the point of view of households' (Lardy, 2008, p. 3), in Belarus, investors face a greater pressure. First, domestic (and sometimes foreign) investors are often required to fulfill some so-called 'social obligations', e.g. to finance infrastructural projects, provide funds for loss-making farms, etc. Second, after investment agreements are reached, authorities might impose further conditions on investors. However, it is difficult for investors to drop the project when some initial costs have been borne out. At the same time, investors still prefer to operate in this seemingly unfriendly business environment because competition is still limited. In particular, surveys and interviews made in Belarus with the representatives of small- and medium-sized businesses reveal that they value limited competition despite confiscatory inclinations of economic authorities (see Haiduk et al., 2009<sup>58</sup>).

#### 4.7 Subsidization through financial intermediaries

In this section, the basic model is modified by assuming that the reduction of the cost of capital in favor of the less efficient firms is not financed by the government by taxing the investors, but by allowing the financial intermediaries, which are possibly under direct control of the government, to charge a higher rental rate to the more efficient firms demanding capital. In the presence of actual or potential 'unproductive' loans caused by directed lending, banks have strong incentives to hedge against the risks associated with the accumulation of such loans in their portfolios by charging non-favored clients higher interest rates. This is one of the ways for commercial banks to balance their portfolios.<sup>59</sup>

In this way, the cost of capital for the less efficient firms is lower than the market rate, i.e. the rate required by the savers for supplying the capital, while the opposite is true for the more efficient firms. This arrangement is captured by rewriting equation (4.2) as:

$$\pi_{it} = Y_{it} - w_t L_{it} - \sigma_i R_t K_{it}, \sigma_i = \begin{cases} 1 + \omega_t, i = p \\ 1 - \varphi, 0 < \varphi < 1, i = s. \end{cases}$$
(4.2bis)

while the investor's budget constraint as

$$C_{lt} + I_t \le R_t K_t \tag{4.4bis}$$

and equation (4.6) as

$$\omega_t \mathbf{R}_t \mathbf{K}_{\text{pt}} = \boldsymbol{\varphi} \mathbf{R}_t \mathbf{K}_{\text{st}} \tag{4.6bis}$$

One can now verify that along an equilibrium path (see Appendix 4.A.4) that:

$$L_{nt} = m(\varphi), \ \mathrm{m}'(\varphi) > 0 \tag{4.10bis}$$

<sup>&</sup>lt;sup>58</sup> The owners of SMEs, who took part in focus groups, stressed that the benefits, which are derived from limited competition (see Haiduk et al., 2009).

<sup>&</sup>lt;sup>59</sup> Alternatively, non-favored borrowers can be credit-rationed given the limitations imposed by a size of individual bank's portfolio and the risks associated with too high interest rates. In particular, banks may face a reduction of revenues as firms would be tempted to engage in risky projects (Stiglitz & Weiss, 1993).

$$\frac{K_{st}}{K_{pt}} = \frac{\omega_t}{\varphi} = n(\varphi) \equiv \frac{\alpha_p \gamma_p [m(\varphi)]^{\alpha_p - 1}}{\alpha_s \gamma_s [L - m(\varphi)]^{\alpha_s - 1}}, \ n'(\varphi) < 0$$
(4.11bis)

$$R_t = \varepsilon(\varphi) \equiv \frac{\gamma_s (1 - \alpha_s) [L - m(\varphi)]^{\alpha_s}}{(1 - \varphi)}, \ \varepsilon'(\varphi) > 0$$
(4.12bis)

Notice that also in this case the rental rate paid to the investors increases with  $\phi$  (for the proof see Appendix 4.A.4)

The single difference equation in  $Z_t \equiv \frac{I_t}{K_{pt}}$  that governs the motion of the economy

along an equilibrium path is:

$$y(Z_{t+1}, Z_t) = \frac{\theta[(1-\delta) + \varepsilon(\varphi)]}{\varepsilon(\varphi)[n(\varphi)(1-\varphi) + 1] - Z_{t+1}} - \frac{(1+\rho_t)}{\varepsilon(\varphi)[n(\varphi)(1-\varphi) + 1] - Z_t} = 0, \quad (4.13\text{bis})$$

where

$$\rho_{t} \equiv \frac{K_{pt+1} - K_{pt}}{K_{pt}} = \frac{Z_{t}}{[1 + n(\varphi)]} - \delta$$
(4.14bis)

Along a BGP, one has:

$$Z_{t+1} = Z_t = Z = [\theta \mathcal{E}(\phi) - (1 - \theta)(1 - \delta)][1 + n(\phi)],$$
(4.15bis)

thus implying

$$\rho_{t+1} = \rho_t = \rho = \theta \varepsilon(\varphi) + \theta(1 - \delta) - 1. \tag{4.16bis}$$

By linearizing (4.13bis) around Z, one may check that

$$\frac{dZ_{t+1}}{dZ_t} \bigg|_{Z_{t+1}} = Z_t = Z = -\frac{\frac{\partial z(.)}{\partial Z_t}}{\frac{\partial z(.)}{\partial Z_{t+1}}} \bigg|_{Z_{t+1}} = Z_t = Z = \frac{n(\varphi)[\varepsilon(\varphi)(1-\varphi)] + [(1-\delta)(1-n(\varphi))]}{(1+n(\varphi))\theta[(1-\delta) + \varepsilon(\varphi)]} > 1,$$

Hence, the economy is unstable in a neighborhood of its BGP, thus implying that the only equilibrium path of the economy is characterized by  $Z_{t+1} = Z_t = Z$  and  $\rho_{t+1} = \rho_t = \rho$ ,  $\forall t$ . This means that in equilibrium the output grows at rate  $\rho$ . Therefore, by considering (4.16bis) and the fact that  $\varepsilon'(\phi)>0$  (see Appendix 4.A.4 for details), one can conclude that also in this case the equilibrium rate of economic growth is a positive function of  $\phi$ .

It follows that economic growth in a financially repressed economy depends on the ability to repress investors. Economic growth can be maintained if the number of investors grows and their funds are channeled into the state-controlled financial intermediaries. Interestingly, Belarusian authorities, when facing a currency crisis, partially caused by excessive subsidization of state-owned enterprises, referred to the Chinese experts, to formulate new policy proposals. Chinese experts advised to tackle dollarization by administrative measures, i.e. to force households to save in national currency at the national banking system.

#### 4.8 Conclusions

This chapter studies the case of a closed economy characterized by the coexistence of more efficient and less efficient firms. In this dual-economy context, governments may choose financial repression instead of direct subsidization of the less efficient enterprises, because the former may stimulate economic growth in contrast to the latter. Moreover, it has been shown that financial repression is likely to benefit the workers and to damage the savers.

The model of this chapter may contribute to better understanding of specific cases of post-socialist economies, such as Belarus and China. Both of them are characterized by financial repression, but used to display satisfactory rates of economic growth. As for China, this chapter models a particular type of dualism, that is, between the rural entrepreneurial and the state-led urban sector. The latter receives preferential loans, leaving the former credit-constrained and heavily taxed. Similar distortion is observed in Belarus.

However, it is legitimate to doubt that a policy aimed at artificially compressing the costs of capital in favor of the less efficient enterprises can be desirable in the long run. Crucially, this government-created distortion has substantial welfare consequences and accentuates the conflict between savers and workers. Such a policy distorts the allocation of resources and is instrumental to the survival of an inefficient sector consisting of poorly performing enterprises. The increasing awareness of the limits of this policy motivates the steps that China is making in order to reduce the political controls over the banking system and loans provision, and the attempts on the part of the Belarusian authorities to start reforming their investment strategies.

#### Appendix 4.A

# 4.A.1. Solution of the optimization problems of the representative efficient and subsidized enterprises

The first-order conditions for a maximum with respect to the choice of L<sub>i</sub> and K<sub>i</sub> are:

$$W_{pt} = \gamma_p \alpha_p L_{pt}^{\alpha_p - 1} K_{pt}; W_{st} = \gamma_s \alpha_s L_{st}^{\alpha_s - 1} K_{st},$$

and

$$R_t = R_{pt} = \gamma_p (1 - \alpha_p) L_{pt}^{\alpha_p}; \ R_{st} = \gamma_s (1 - \alpha_s) L_{st}^{\alpha_s}.$$

Given that  $R_{st} = (1 - \varphi)R_{pt}$  and applying the implicit function theorem, one obtains:

$$L_{pt} = f(\phi), f'(\phi) > 0.$$
(4.10)

By exploiting the assumption that  $W_{pt} = W_{st}$ , one obtains:

$$\frac{K_{st}}{K_{pt}} = g(\varphi) \equiv \frac{\alpha_p \gamma_p L_{pt}^{\alpha_p - 1}}{\alpha_s \gamma_s L_{st}^{\alpha_s - 1}} = \frac{\alpha_p \gamma_p [L - f(\varphi)]^{1 - \alpha_s}}{\alpha_s \gamma_p [f(\varphi)]^{1 - \alpha_p}}, g'(\varphi) < 0, \qquad (4.11)$$

and

$$R_{t} = h(\varphi) \equiv \gamma_{p} (1 - \alpha_{p}) L_{pt}^{\alpha_{p}}, h'(\varphi) > 0.$$
(4.12)

#### 4.A.2. Solution of the optimization problem of the representative investor

The intertemporal problem of the representative investor can be solved by maximizing

$$\sum_{t=0}^{t} \theta^{t} \Big\{ \ln[R_{t}K_{pt}(1+g(\varphi)) - I_{t} - T_{t}] + \lambda_{t}[I_{t} + (1-\delta)K_{pt}(1+g(\varphi)) - K_{pt+1}(1+g(\varphi))] \Big\},$$

with respect to I<sub>t</sub>,  $K_{pt+1}$ , and the Lagrange multiplier  $\lambda_t$ . By eliminating  $\lambda_t$ , one obtains the following equation:

$$\frac{\theta(R_{t+1}+1-\delta)}{R_{t+1}K_{pt+1}[1+g(\varphi)(1-\varphi)] - I_{t+1}} = \frac{1}{R_t K_{pt}[1+g(\varphi)(1-\varphi)] - I_t}$$
(4.A1)

From (4.A1), equation (4.13) can be obtained by defining  $\rho_t \equiv \frac{Z_t}{1+g(\varphi)} - \delta$  and  $Z_t \equiv \frac{I_t}{K_{pt}}$ , and considering that along an equilibrium path R<sub>t</sub> is given by (12).

#### 4.A.3. Welfare analysis

Workers

The real wage is equal to the marginal productivity of labor:

$$W_t = \alpha_p \gamma_p L_{pt}^{\alpha_p - 1} K_{pt}$$
(4.A2)

Considering that  $\frac{K_{pt+1}}{K_{pt}} = (1 + \rho_t)$  and that K<sub>0</sub> is given, then  $K_{pt} = \frac{K_0 (1 + \rho)^t}{1 + g(\varphi)}$ .

Hence, (4.17) can be written as:

$$\sum_{t=0}^{\infty} \theta^t \ln(W_t) = \sum_{t=0}^{\infty} \theta^t \ln\left\{\alpha_p \gamma_p [f(\varphi)]^{\alpha_p - 1} \frac{K_0 (1+\rho)^t}{1+g(\varphi)}\right\},\tag{4.A3}$$

where  $\rho = \theta[h(\varphi) + 1 - \delta] - 1$ 

By differentiating (4.A3) with respect to  $\varphi$ , one obtains:

$$\frac{\partial \left[\sum_{t=0}^{\infty} \theta^{t} \ln(W_{t})\right]}{\partial \varphi} = \frac{1}{(1-\theta)} \left\{ (\alpha_{p} - 1) \frac{f'(\varphi)}{f(\varphi)} + \frac{\theta}{(1-\theta)} \frac{\rho'(\varphi)}{1+\rho(\varphi)} - \frac{g'(\varphi)}{1+g(\varphi)} \right\}$$
(4.A3.1)

Expression (4.A3.1) is positive as soon as

$$\left\{\frac{\theta}{(1-\theta)}\frac{\rho'(\varphi)}{1+\rho(\varphi)} - \frac{g'(\varphi)}{1+g(\varphi)}\right\} > (1-\alpha_p)\frac{f'(\varphi)}{f(\varphi)} > 0$$
(4.A3.2)

Given that:

$$\rho'(\varphi) = \theta\{\gamma_p \alpha_p (1 - \alpha_p) [f'(\varphi)] [f(\varphi)]^{\alpha_p - 1}\},$$

and

$$g'(\varphi) = -f'(\varphi)g(\varphi) \left\{ \frac{1-\alpha_p}{f(\varphi)} + \frac{1-\alpha_s}{L-f(\varphi)} \right\}$$

Inequality (4.A3.2) becomes:

$$\left\{\frac{\theta}{(1-\theta)}\frac{\gamma_{p}\alpha_{p}(1-\alpha_{p})[f(\varphi)]^{\alpha_{p}-1}}{\left\{\gamma_{p}(1-\alpha_{p})f(\varphi)^{\alpha_{p}}+1-\delta\right\}}+\frac{g(\varphi)}{1+g(\varphi)}\left[\frac{1-\alpha_{p}}{f(\varphi)}+\frac{1-\alpha_{s}}{L-f(\varphi)}\right]\right\}>\frac{(1-\alpha_{p})}{f(\varphi)}>0\qquad(4.A3.3)$$

Inequality (4.A3.3) holds, thus implying that (4.A3.1) is positive.

Investors

A discounted sequence of utilities of the representative investor is given by (4.3), where in equilibrium  $C_{It} = R_t K_t - T_t - I_t$ 

Hence, (4.3) can be written as:

$$\sum_{t=0}^{\infty} \theta^{t} \ln(C_{tt}) = \sum_{t=0}^{\infty} \theta^{t} \ln\left[K_{pt}\left\{h(\varphi)(1+g(\varphi)) - (\theta h(\varphi) + (1-\delta)(\theta-1))(1+g(\varphi)) - \varphi h(\varphi)g(\varphi)\right\}\right] =$$

$$= \sum_{t=0}^{\infty} \theta^{t} \ln\left[K_{0}(1+\rho)^{t}\left\{(1-\theta)(h(\varphi) + 1-\delta) - \frac{\varphi h(\varphi)g(\varphi)}{1+g(\varphi)}\right\}$$
(4.A4)

By differentiating (4.A4) with respect to  $\phi$ , one obtains:

$$\frac{\partial \left[\sum_{t=0}^{\infty} \theta^{t} \ln(C_{h})\right]}{\partial \varphi} = \frac{\theta}{\left(1-\theta\right)^{2}} \frac{\rho'(\varphi)}{1+\rho(\varphi)} + \frac{1}{\left(1-\theta\right)} \frac{\partial \left[\left(1-\theta\right)(h(\varphi)+1-\delta\right) - \frac{\varphi h(\varphi)g(\varphi)}{1+g(\varphi)}\right]}{\left[\left(1-\theta\right)(h(\varphi)+1-\delta\right) - \frac{\varphi h(\varphi)g(\varphi)}{1+g(\varphi)}\right]}$$
(4.A4.1)

Expression (4.A4.1) is negative as soon as:

$$[(1-\theta)(h(\varphi)+1-\delta)] \left\{ \frac{\partial \left[\frac{\varphi h(\varphi)g(\varphi)}{1+g(\varphi)}\right]}{\partial \varphi} - h'(\varphi) \right\} + \theta h'(\varphi) \left[\frac{\varphi h(\varphi)g(\varphi)}{1+g(\varphi)}\right] > 0$$
(4.A4.2)

Inequality (4.A4.2) holds if 
$$\left\{ \frac{\partial \left[ \frac{\varphi h(\varphi) g(\varphi)}{1 + g(\varphi)} \right]}{\partial \varphi} - h'(\varphi) \right\} > 0$$
(4.A4.3)

Inequality (4.A4.3) can be transformed in the following way:

$$(1+g(\varphi))\left[g(\varphi)h(\varphi)+g(\varphi)\varphi h'(\varphi)-h'(\varphi)(1+g(\varphi))\right] > -g'(\varphi)\varphi h(\varphi)$$

$$(4.A4.4)$$

Both sides of (4.A4.4) are positive. For (4.A4.4) to hold, the following inequality must hold:

$$g(\varphi)h(\varphi) + g(\varphi)\varphi h'(\varphi) > h'(\varphi)(1 + g(\varphi)) + h(\varphi)$$
(4.A4.5)

Given that  $h'(\varphi) = h(\varphi)\alpha_p \frac{f'(\varphi)}{f(\varphi)}$ , (4.A4.5) becomes:

$$\left\{\frac{f'(\varphi)}{f(\varphi)}\alpha_p[(1-\varphi) + \frac{1}{g(\varphi)}] - \frac{\frac{g'(\varphi)}{g(\varphi)}}{\frac{1}{g(\varphi)} + 1}(\varphi)\right\} < 1$$
(4.A4.6)

As a numerical example, let  $\alpha_p=0.23$ ;  $\varphi = 0.63$ ,  $f(\varphi)=\varphi^2$ ,  $f'(\varphi)=2\varphi$ ;  $g(\varphi)=\varphi^{1/2}$ ;  $g'(\varphi)=1/2*\varphi^{-1/2}$ . One can check that these parameter values satisfy (4.A4.6) and thus (4.A4.1) is negative.

#### 4.A.4. Subsidization through financial intermediaries

The first-order conditions for a maximum with respect to the choice of L<sub>i</sub> and K<sub>i</sub> are:

$$W_{pt} = \gamma_p \alpha_p L_{pt}^{\alpha_p - 1} K_{pt}; W_{st} = \gamma_s \alpha_s L_{st}^{\alpha_s - 1} K_{st}$$

and

$$R_{t} = \frac{\gamma_{p}(1-\alpha_{p})L_{pt}^{\alpha_{p}}}{(1+\omega_{t})} = \frac{\gamma_{s}(1-\alpha_{s})L_{st}^{\alpha_{s}}}{(1-\varphi)}$$

By applying the implicit function theorem, one obtains:

$$L_{pt} = m(\varphi), m'(\varphi) > 0 \tag{4.10bis}$$

From (4.6bis), the following identity holds:

$$\frac{K_{st}}{K_{pt}} = \frac{\omega_t}{\varphi} = n(\varphi) \equiv \frac{\alpha_p \gamma_p [m(\varphi)]^{\alpha_p - 1}}{\alpha_s \gamma_s [L - m(\varphi)]^{\alpha_s - 1}}, n'(\varphi) < 0$$
(4.11bis)

and:

$$R_{t} = \mathcal{E}(\varphi) \equiv \frac{\gamma_{s}(1 - \alpha_{s})[L - m(\varphi)]^{\alpha_{s}}}{(1 - \varphi)}$$
(4.12bis)

By differentiating (4.12bis) with respect to  $\varphi$ , one obtains the following expression:

$$\frac{\partial \varepsilon(\varphi)}{\partial \varphi} = \frac{\gamma_s (1 - \alpha_s) [L - m(\varphi)]^{\alpha_s}}{(1 - \varphi)} \left\{ \frac{1}{(1 - \varphi)} - \frac{\alpha_s m'(\varphi)}{[L - m(\varphi)]} \right\}$$
(4.A4.7)

Expression (4.A4.7) is positive as soon as:  $\frac{1}{(1-\varphi)} > \frac{\alpha_s m'(\varphi)}{[L-m(\varphi)]} > 0.$ (4.A4.8)

As a numerical example, :  $\alpha_s = 0.2...08$ ;  $\varphi = 0.1...0.99$ ; m ( $\varphi$ ) = $\varphi^2$ , m'( $\varphi$ ) = $2\varphi$ . One can check that these parameter values satisfy (4.A4.8) and thus (4.A4.7) is positive.

### Appendix 4. B

			Visegrád		Baltic			CIS
Country/Year	Belarus	China	States	Slovenia	States	Bulgaria	Romania	countries
1996	2.8	10	4.3	3.7	4.80	-9.4	3.9	-2.2
1997	11.4	9.30	4.1	4.8	9.52	-5.6	-6.1	2.3
1998	8.4	7.8	3.4	3.9	6.34	4.0	-4.8	2.6
1999	3.4	7.6	3.4	5.4	0.50	2.3	-1.3	4.7
2000	5.8	8.4	3.8	4.1	7.04	5.4	0.0	7.9
2001	4.7	8.3	2.9	3.1	7.43	4.1	5.6	8.9
2002	5.0	9.1	3.3	4.0	7.09	4.5	5.0	7.7
2003	7.0	10	3.9	2.8	8.33	5.0	5.3	9.4
2004	11.4	10.1	4.8	4.3	7.75	6.6	8.5	9.9
2005	7.8	11.3	4.9	4.5	9.28	6.4	4.1	9.1
2006	10.5	12.7	6.3	5.9	10.21	6.5	7.9	10.3
2007	9.8	14.2	6.3	6.9	8.91	6.4	6.3	10.1
2008	11.3	9.6	3.6	3.7	-2.18	6.2	7.3	7.4
					-			
2009	0.2	9.2	-4.4	-8.1	15.56	-4.9	-7.1	-1.2
2010	6.6	10.4	2.5	1.1	0.6	0.4	-2.0	5.2

Table 4.1 Growth performances of selected post-socialist economies, 1996–2010

Source: EBRD, World Development Indicators Database

Indicator	Gross capital formation, per cent of GDP		Savings to GDP, per cent		General government final consumption expenditure, per cent of GDP		Domestic credit to GDP, per cent	
Country/Year	Belarus	China	Belarus	China	Belarus	China	Belarus	China
1996	24	40	20	41	21	14	15	93.3
1997	27	38	21	42	20	14	17	100.7
1998	27	37	22	40	20	15	35.2	113.1
1999	24	37	22	38	20	15	19.9	119.3
2000	25	35	23	37	19	16	19.2	119.7
2001	24	36	21	38	22	16	17.6	123
2002	22	38	20	40	21	16	18	143.5
2003	25	41	22	44	21	15	22.2	151.9
2004	29	43	24	47	21	14	21.2	140.4
2005	28	42	30	49	21	14	21.8	134.3
2006	32	43	28	52	19	14	27.2	133.5
2007	34	42	27	52	19	14	26.8	127.8
2008	38	44	29	53	17	13	31	120.8
2009	38	48	25	54	17	13	34.6	145.2

Table 4.2: Selected economic indicators, Belarus and China, 1996–2009

Source: World Bank, World Development Indicators Database

## Conclusions

The dissertation seeks to contribute to the ongoing debates on post-socialist economic transformation in several ways. First, it considers more closely the performance of reform laggards by interpreting their experience through the optics of economic dualism. Nevertheless, the process of economic transition is not reduced to dualism. Rather, the latter is one of the important features of varying endurance across the former socialist countries. In dual economies, an obsolete sector of poorly performing, often loss-making, enterprises coexists along with a viable sector of relatively efficient, competitive firms providing tax revenues, a fraction of which is channeled as subsidies to the less efficient enterprises. This pattern has a political backing: politicians are reluctant to restructure enterprises due to their propensity to protect the employees of the state-controlled enterprises and to their ideological preferences over the depth of market reforms. In their turn, these preferences reflect popular attitudes towards market reforms. Thus, policy-makers may capitalize on the public concerns for job security, and convert these concerns into policies of partial reforms.

In Chapter 3, these arguments are used to build a model of a dual transition economy. This model distinguishes between the two sectors not on the basis of ownership, but on the basis of efficiency. However, it is often the case that state-owned enterprises make losses and thus require support. At the same time, some state-owned enterprises can be profitable and efficient. In that case, their revenues are taxed and channeled as subsidies to their poorlyperforming counterparts.

However, some countries have moved away from dualistic economic trajectory rather quickly (the advanced reformers, e.g. Poland, the Czech Republic, and Slovakia), while others (a number of former Soviet Union republics, and particularly Belarus) have not (yet) diverted from this path. Although initial policy reactions had run along broadly similar lines, subsequent policies and outcomes have diverged sharply. One of the core differences is related to the modes of integration into the world economy and especially the ways of economic 'transnationalization'.

The economies of Visegrád states and the Baltics are transnationalized on a much larger scale than their CIS counterparts. Transnationalization can be seen as a product of both domestic and external pressures. Exposure to external influence, particularly in the realm of finance, contributes to the resolution of internal distributional conflicts in the conditions of absence of well-functioning relevant institutions. For instance, in Central and Eastern Europe, privatization of banking has been utilized to limit the government discretion and to signal enterprises that they are no longer could be bailed out. Furthermore, external pressures are related such factors, as high levels of foreign indebtedness and failures to upgrade domestic industries by indigenous efforts. These efforts were implemented by many post-socialist countries at the early stages of transformation in the form of temporary – and often implicit – subsidization. But this policy has never reached comprehensiveness of industrial policies of the East Asian developmental states. Similarly, bureaucratic interventions in the CIS economies have failed to refrain from clientalism and rent-seeking. Furthermore, streamlining of statist experiments, supported by political centralization, has resulted in cementing economic dualism.

In general, dualism appears to be inescapable in the course of transition process, due to the following reasons. First, the high level of industrialization inherited from the socialist era made the social costs of restructuring quite severe. Second, the need to prevent the economy from experiencing mass unemployment in the period necessary to construct a wellfunctioning market-based coordination mechanism justified the subsidization of selected enterprises or sectors. Third, the existence of political preferences and public attitudes hostile - or at least not particularly favorable – towards market-oriented reforms obstructed the emergence of market economy.

Subsidization and state support can take many different forms. In the models of Chapters three and four, only two instruments are considered: direct subsidies and financial repression in the form of directed loans provided at lower interest rates than market ones. The model of subsidization, built in Chapter 3, shows that, in dual economies where the policy makers are particularly concerned with the protection of the obsolete, less efficient enterprises, capital investment and economic growth are dampened along the transitional path. Determinants of the policy makers' attitudes towards the subsidized industries are the fraction of the entire workforce that is employed in these industries at the beginning of the transition process and their ideological orientation with respect to market reforms. Therefore, the model of this chapter predicts that – *ceteris paribus* – the larger is the initial share of the workforce that is employed in the stronger is the degree of ideological hostility towards a pure market economy widespread in the population, the lower is the speed at which a transition economy will converge to the income level of the most advanced countries. Being aware of these adverse effects, politicians may search for the policy instruments other than taxation.

Chapter four shows that financial repression is instrumental to economic dualism to survive. Thus, governments may choose financial repression instead of direct subsidization, because the former can stimulate economic growth in contrast to the latter. Moreover, it has been shown that financial repression is likely to benefit the workers and to damage the savers.

The model of financial repression of Chapter four may contribute to better understanding of specific cases of post-socialist economies, such as Belarus and China. In fact, there are at least two dualisms in the Chinese economy: the first one is between FDI and non-FDI China, while the second one is between rural and urban China. In the 1990s, urban China has been given an upper hand, while the rural China has been subject to taxation and financial repression to finance the state-led urban boom.

Both Belarus and China are characterized by financial repression, but used to display satisfactory rates of economic growth. However, it is legitimate to doubt that a policy aimed at artificially compressing the costs of capital in favor of the less efficient enterprises can be desirable in the long run. Indeed, such a policy tends to distort the allocation of resources and is instrumental to the survival of an inefficient sector consisting of poorly performing enterprises, The increasing awareness of the limits of this policy motivates the steps that China is making in order to reduce the political controls over the banking system and loans provision, and the attempts on the part of the Belarusian authorities to start reforming their investment strategies.

To summarize, the first Chapter sets the necessary context for the discussion and analysis made in the two final chapters of the thesis. Also, it provides important insights into the early reform experience, which explains the origins of the varying propensity for reform laggardness. It appears that ideas are important to formulate certain economic policies, but their implementation can be constrained by domestic, context-specific factors. One of the important observations is that in a number of the former socialist countries reforms were introduced with a certain lag, but governments, under the pressure of deterioration of economic performance, had been forced to speed them up. Economic transnationalization is one of the ways to intensify necessary economic changes. The second chapter of the thesis discusses varying experience with transnationalization. In so doing, it distinguishes between the CIS countries and the new member states of the EU. Among the latter, the causes of Bulgaria and Latvia are discussed in order to shed additional light onto the causes of transnationalization. While in Bulgaria reform delays resulted in the accumulation of deficiencies that required a radical break with the inefficient institutions by installing a currency board arrangement, Latvian policy-makers were capable of imposing a neo-liberal discipline from the outset of economic transformation. Chapters three and four focus on the cases of reform delays and investigate the growth and welfare implications of these policies.

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