1. Introduction

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This book brings together ten studies on the transition and growth experience and the foundations for long-term growth of the new independent states created with the dissolution of the Soviet Union in December 1991. The 15 republics of the Soviet Union and their successor nation states exhibit a huge range in size and in income levels (Table 1.1), as well as in historical and cultural backgrounds and in resource endowments. Despite the variety of initial conditions, the number of countries and their shared Soviet experience provide us with a unique natural experiment of the effects of different approaches to establishing and organizing a market-based economy.

The country studies of ten members of the Commonwealth of Independent States (CIS) are mostly based on collaborative work by in-country and external researchers. In this introduction, we provide an overview of the common pre-1992 background and comparative information about the post-1992 performance of the CIS countries. In the concluding chapter we will revisit the comparative aspects, bringing out the common and country-specific features of their growth experience since independence.

The first section reviews the Soviet background and the second section the post-independence experience, emphasizing the uniformity and diversity of the 12 CIS countries' recent history. The third section focuses on the problems of explaining economic growth in transition economies and outlines the individual country studies.

1. THE SOVIET BACKGROUND[1]

Most of the literature, even more so the economic literature on the Union of the Soviet Socialist Republics (the USSR, hereafter the Soviet Union or SU), at least the Western literature, was related to the country as one political unit with a uniform economic system, planned and ruled from Moscow and tied together in a tight web of production, supply and trade network that ignored republican borders or distance.[2] With few exceptions and only

Table 1.1 Republics of the USSR: initial conditions (1989–90)

Republic	Population (million) mid-1990	Per cap GNP[a] (1990)	Life expectancy at birth	High educated specialists (per 10000)	Gini coefficient (1989)	Poverty (% of pop)[b] (1989)	GDP in Manufacturing	Terms of trade[c]	Inter-republic Trade Balance; % of NMP
USSR	289.3	2870			0.289	11.1			
Kazakh	16.8	2600	69	464	0.289	15.5	37	+19	−24.4
Kyrgyz	4.4	1570	66	417	0.287	32.9	44	+1	−20.9
Tajik	5.3	1130	69	343	0.308	51.2	41	−7	−22.2
Turkmen	3.7	1690	66	363	0.307	35.0	34	+50	0.3
Uzbek	20.5	1340	69	386	0.304	43.6	39	−3	−12.1
Armenia	3.3	2380	72	623	0.259	14.3	71	−24	−24.0
Azerbaijan	7.2	1640	71	455	0.328	33.6	47	−7	−4.5
Georgia	5.5	2120	73	643	0.292	14.3	46	−21	−18.6
Belarus	10.3	3110	71	627	0.238	3.3	54	−20	−8.0
Moldova	4.4	2390	69	476	0.258	11.8	43	−38	−33.4
Russia	148.3	3430	69	589	0.278	5.0	55	+79	8.0
Ukraine	51.9	2500	70	569	0.235	6.0	51	−18	−2.8
Estonia	1.6	4170	70	643	0.299	1.9	61	−32	−33.2
Latvia	2.7	3590	69	607	0.274	2.4	59	−24	−18.4
Lithuania	3.7	3110	71	623	0.278	2.3	47	−31	−41.5

Notes:
[a] GNP per capita in US dollars, computed by the World Bank's synthetic *Atlas* method.
[b] Poverty is defined as individuals in households with gross per capita income less than 75 roubles.
[c] Impact on the terms of trade of moving to world prices, calculated at a 105-sector level of aggregation using 1990 weights.
[d] The annual increase in the consumer price index, end of year.

Sources: Columns 1 and 2: World Bank (1992); columns 3, 4, 7, 9: Bosworth and Ofer (1995); columns 5 and 6: Atkinson and Micklewright (1992, Table U13), which is based on Goskomstat household budget survey data; column 8: Tarr (1994).

occasionally, were particular problems of individual republics or regions seriously discussed. The main exceptions were the republics of Central Asia with a mostly Muslim population and a significantly lower income level, different demography and different industrial structure. Indeed, the level of uniformity in the working of the political, social and economic systems was much more similar than in any group of market economies.

The 15 republics that made up the Soviet Union were, however, different in a number of important respects (Table 1.1). They differ in size, from Russia with more than half the population and nearly two-thirds of the National Income, through large Ukraine, with more than 50 million population, down to Estonia with 1.6 million. They are located in different parts of the Soviet Union, some to the west of Russia, with relatively open transportation and other lines to the West, but others in the Caucasus and in Central Asia are landlocked with poor access to their neighbours. Around 1990, they varied in per capita income by a factor of just less than four, from Estonia at the top and Tajikistan at the bottom. While a significant range, it is much narrower than that between developed and developing countries over such a cross-continental expanse. The industrial structure of the different republics varied to some extent but less than what may have been expected by the gaps in income levels. The share of manufacturing in gross domestic product (GDP) ranged between 34 and 61 per cent in 14 of the republics, and up to a high of 71 per cent in Armenia. This is a wide range but it is entirely within or above the range of normal industrial shares in developed countries. It reflects the emphasis of the Soviet Union on industrialization as a major growth vehicle. Some republics, Russia, Kazakhstan, Uzbekistan and Turkmenistan, are generously endowed with natural resources, especially energy, a potential advantage if used properly and the symptoms of the Dutch disease are avoided. However, in the Central Asian republics and Moldova agriculture still employed more than a third of the labour force, and produced more than a third of GDP. The entire Soviet Union had smaller shares than developed countries of labour employed in services and of GDP produced in services.

Other differences between the republics were narrower. Life expectancy at birth ranged between 66 and 73 years, the number of specialists with higher education ranged just between 343 and 643 per 10000 employees (Table 1.1). The high levels of health and education and of industrialization were partly the outcome of the Soviet growth strategy and partly the result of significant transfers, through the budget and via favourable terms of trade, granted by the central government (actually Russia) to the other republics.[3] Russia's subsidy to the other republics through the terms of trade amounted to about 8 per cent of its National Income, and the direct subsidies were additional. On the receiving end, the trade subsidies ranged from 3 per cent of the respective National Income in Ukraine to as much as 42 per cent in Lithuania (Table 1.1). Much of the trade collapsed together with the Soviet Union, and with it most of the direct and indirect subsidies were also eliminated, a very serious demand and income shock, of varied degrees, to most of the newly independent states. All had to pay much higher energy prices and many witnessed their supply lines and the demand for most of their production collapse.

The above is a partial list of some diverging initial conditions faced by the newly independent states. Initial conditions and their diversity were considered by students of transition as one group of factors that, side by side with the policies selected, affected the process itself and its outcome. Indeed the literature is divided over the relative importance of each of these two sets of factors, and some observers also emphasize the possible interaction between the two, that is that favourable (or adverse) initial conditions allow (or preclude) the choice of better (or poorer) policies leading to multiple better (or worse) outcomes. Also, the same policies may produce, with different initial conditions, opposite outcomes. While the great divide in this respect is between the former socialist countries in East and Central Europe (and also the Baltic States) and the CIS countries (Berglof and Bolton, 2002), there have also been significant differences in performance among the latter group. However, before going into the discussion of more differences in the initial conditions it is important to emphasize the common heritage and its major impact on the transition process.

The legacy of the old regime can be divided into two main clusters. The first covers the physical economy and its infrastructure, the level of GDP, the industrial structure, the factors of production and their quality, the technological level and capacity, the transport and supply networks, the urban environment, and so on, some of which were mentioned above. They provide the physical base for further development and for long-term growth. Some of them are supportive and others may provide a hindrance to future economic growth. We come back to some of them below. The second aspect of the old regime is the institutional framework, in the most general sense, which coordinated the economic (as well as political and social) activity under communism. These institutions include the system of central planning, the growth and development strategy, and the authoritarian regime. In all these aspects the old regime was an almost complete contrast to the market system, the democratic regime and the institutional framework that the 'transition to' is all about. This contrast in institutional regimes, and the task of complete overhaul, is a much higher barrier to successful transition, and much more difficult to overcome, than any of the physical economic characteristics listed above.

The transition is first of all, and most of all, one of the most radical institutional changes in modern history. In discussing this great transition, we follow the conceptual framework developed by Douglass North (1990, 1994, 1999). According to him the quality of any (market) system depends on the quality of its institutions. They consist of three elements: the formal rules of transactions and the legal infrastructure, the informal behavioural norms of the population and the bureaucracy, and the quality of enforcement.

On the level of formal institutions, the centrally planned system is a command economy. All decisions on production and transactions are made at the top and are implemented through a hierarchy of mostly quantitative commands, whose fulfilment is enforced by coercive means and strict discipline. This is a diametrically opposite set-up to that of a market-based system in which most decisions are voluntary, originating from below with individual initiatives responding to, mostly, price signals and other indirect incentives, obeying the laws of conduct rather than specific instructions. The authoritarian nature of the regime was also characterized by the general rule that all is forbidden unless declared permitted, the opposite principle of a democratic regime. While under central planning the rules of the game were universal in principle, and in this respect impersonal, unlike in a market environment every agent was personally identified and accountable to the authorities. In this way the authoritarian regime was open to ample discretion with highly arbitrary decisions and thereby it eliminated a substantial degree of its seemingly impersonal nature, raising significantly the costs of transactions and opening the door to ample corruption, which is also the result of the need to negotiate so many decisions with the bureaucracy.

Central planning is a rigid system, working best in routine mode and paying a very high price for any changes. It can enforce relatively more easily quantitative directives rather than qualitative ones. Hence, most of the control and rewards in the system are for doing more of the same, very little is effectively directed to improved quality to enhance efficiency and to the introduction of new technologies. Very taut plans with demanding quantitative targets crowd out qualitative improvements. Therefore creativity and initiatives from below are mostly discouraged, even rejected. Despite the seeming advantage of a central government to internalize the positive external effects of R&D and the dissemination of new technologies, the communist system failed in this area. As the economy developed, central planning became more cumbersome, rigid and inefficient, contributing to declining growth (Ofer, 1987).

The reign of quantities under central planning delegated a marginal role to prices, the traffic police of the market. Prices had a very limited allocative role and were used mostly for accounting and control purposes. Prices were determined by the government and were in many cases distorted. The semi-autarchy of the Soviet Union, and the full isolation of domestic prices from world market prices, helped preserve the extreme price distortions, another barrier on the way to the market and to openness.

The growth strategy under communism, consistent with the above, followed a model of 'extensive growth' aspiring to maximize growth through utmost mobilization of all available inputs, labour and capital. All able-bodied were required to work, low wages served as an added incentive for high participation rates, and investment rates were kept high, concentrated mostly on heavy industry and capital goods. This emphasis on heavy industry, connected also with the military effort, gravitated the SU and most of the republics into a state of over-industrialization, imposing additional burdens of restructuring on the transition. While technological innovation and emulation of Western technology were sought, the nature of central planning and the concentration on input mobilization failed the system in this respect. The extensive growth model leads by definition to declining growth rates and eventual stagnation as the untapped reserves of labour (for a given population) and the ability to keep a high rate of capital accumulation are exhausted. Indeed, apart from most of the Central Asian republics, labour reserves were exhausted earlier, which pushed Soviet growth to depend more and more on investments, resulting in a sharp decline in capital productivity. Also contributing to the system's failure and to declining growth was the decision of the Soviet leaders to engage in an intensive military build-up and arms race, which was especially damaging to civilian technological advance, and the policy of haste, of cutting corners in order to achieve fast growth early, even at the cost of heavier losses of growth later on. Inappropriate technology, run-down infrastructure, over-utilized natural resources and a distorted industrial structure (over-industrialization and undeveloped services), and a very low rate of population growth in most republics were part of the heritage of this strategy for the new regimes.

All the above notwithstanding, the combination of central planning and the growth strategy did achieve some of the goals of the Soviet regime; faster growth at the beginning, industrialization and urbanization, and modernization, and a significant increase in the standard of living of the population; all with more success during the earlier stages and less during the last two decades of the Soviet Union. The communist regime also invested relatively large amounts of resources in education and in health, bringing the United Nations Development Programme (UNDP)'s 'Human Development Index' (United Nations, 1997) of the Soviet Union well above the country's ranking according to its level of per capita income and creating a respectable stock of human capital, which also served the goal of growth. The Soviet Union also maintained a certain level of income equality (even allowing for the special privileges to the elites), partly through wage policy and partly through generous welfare services, which among other things also contributed to weak incentives.

In order to finance large investments, defence expenditures and generous social services, the communist regime maintained large public budgets. The budget was financed mostly from the profits of public enterprises and from various turnover (sales) taxes, imposed at the gates of enterprises, with little or no real tax-collecting effort. The big government budget and the lack of any culture of voluntarily paying taxes in a market environment came back to haunt the new states during the transition period. These, together with a corresponding lack of any meaningful macro-monetary system, contributed to the eruption of inflation and to the difficulties in combating it, as well as to the difficulties during the early transition period in preserving the high levels of social services and human capital, needed badly for long-term growth.

Formal institutions, *à la* North, are supported by efficient enforcement and by informal institutions. Enforcement under the communist regime was through intimidation and harsh sanctions. Everybody was scared of the various police forces and of the officials of the Communist Party. The courts of law served as additional government arms to impose its will and the chance of winning a case against the government was near zero. Following the death of Stalin, discipline started very slowly and gradually to erode and with it also the fear. More and more law enforcers directed attention to their self-interest, engaging in illegal activities, corruption and bribery. These phenomena expanded significantly towards the end. Over this period there were no attempts to change the legal system and laws, to adjust them to a somewhat less fear-stricken society. The new independent states inherited an enforcement system that was utterly unfit for a free and democratic society, but also one that had already developed a corrupt culture that, unless radically reformed, could only flourish further under the new little-restricted freedoms of a transition economy.

Informal institutions are the collection of behavioural norms, the culture of doing business, negotiating and observing contracts, and following the rule of law with little intervention by the legal or enforcement authorities. They develop over time under the umbrella of formal institutions, and support them. An illustration from the field of contracts in a law-abiding society is that most contracts are not prepared by lawyers, the majority of them are observed, most cases of disagreement are settled by the parties, and only very few reach the courts. During the very early years of the communist regime, ideology played a role of supporting the regime and its goals among parts of the population and among the elites. National patriotism supplemented and then replaced ideology during and in the aftermath of the Second World War.

The supporting mentality was supplemented and then largely replaced over time by an alternative body of informal rules and norms of behaviour, antagonistic to the formal institutions. While these informal institutions provided a degree of flexibility absent but badly needed in order for the rigid system to function, they mostly provided an opportunity for people to take advantage of the system for their self-benefit. The informal institutions in the economic sphere consisted of norms of behaviour that helped officials and managers of enterprises and shops to negotiate deals outside the production plan to help them fulfil the plan outside of its instructions, but also to simulate plan fulfilment without really doing so, to negotiate with lower-level authorities reduction of the targets against the permission of those higher up, and to conspire to steal outputs and inputs from the state by shifting deals to the underground economy. In this way the informal institutions undermined the formal ones, unlike in North's framework where they support each other. The arbitrary and discretionary nature of the regime and its dependency on personal connections and relationships provided perfect support for such activities. The contrast between formal and informal institutions was further widened by the hypocritical behaviour of the leadership, manifested in a growing contrast over time between the declared goals and values of the regime and its hidden agenda of power and self-serving. Increasing segments of the population came to realize the gap and responded through shirking, a growing sense of cynicism and strong distrust, which further encouraged unlawful, 'informal' behaviour. While most assets were formally the property of the state, their property rights trickled informally down the bureaucratic ladder, opening opportunities for rent-seeking and taking. In this way the old regime left to the transition states scorched land as far as proper free-society modes of conduct are concerned. It destroyed all the institutions of civil society, decimated any remnants of social capital and positive social networking, and destroyed the basis for solidarity and of observing the law. Transaction costs under this environment skyrocketed.[4]

The transition economies (TEs) inherited the perception of a deep conflict rather than complementarity between formal and informal institutions, which also made enforcement more difficult. This conflict, or gap, was made still deeper due to the non-familiarity of everybody with the nature of the new laws for a market economy and a free society, many of which were imported from the West and transplanted.[5] In this respect the East European countries and the Baltic States enjoyed the advantage over the CIS states, of being able to refresh their own, more familiar pre-Second

World War codes. In the CIS states, the enhanced freedom under the new regime (and the weak bureaucracies) opened up vast opportunities for the old behavioural norms to flourish.

In the framework of Douglass North the two most important roles of the government in supporting the market economy are the protection of property rights and of contracts, and the facilitation of impersonal, universal transactions, in place of the personally based transactions typical of less-developed markets. Given the tasks of privatization and of the creation of markets, not to mention all the other government roles, an effective government is even more important during the transition than under normal conditions. The discontinuous nature of the transition, involving huge redistribution of assets, extreme changes in relative prices, and opening the economy, provided ample opportunities for rent-seeking and other grabbing activities. The meeting of these opportunities with the economic and transactions environment of the pre-transition period imposed an additional heavy responsibility on the government. The sad story is that while TEs suffer from a greater incidence of market failures, warranting more government intervention, their institutions suffer from serious government failures that put in great doubt the merit of such interventions. In many cases, the government becomes a partner of 'state capture' rather than one of its combatants. All TEs, but the CIS states in particular, suffer from weakness and inefficiency of the government; the most obvious reason for this is the lack of knowledge and experience of how to run a market democracy.

The CIS countries suffered from an even deeper governance problem, since none of them had real government under Soviet rule, and all were subject to the Soviet highly centralist rule. The case of Russia is less clear: while the republic of Russia *per se* shared the same experience as all the others, in 1992 it inherited the ministerial structure of the Soviet Federation, its Central Bank and so on. The new CIS states, except for Russia very long ago (and the Baltic states) had no national legacy as independent states, nor any experience with capitalism and democracy that could have been revived and relied on. Even a common national identity was and is still absent in many of them. In the Caucasus and Central Asia there is a pseudo-national history in some states, which is more tribal than national, but in Belarus and Moldova national feelings are only remotely defined. National identity is also in dispute in Ukraine, Moldova and Kazakhstan (and the Baltic states) where history and the deliberate Russification efforts of the Soviet government increased the proportion of Russians among their populations. While some of the population in a number of CIS states were elated by gaining independence and freedom from Soviet domination, these feelings were not as strong as in East Europe and the Baltics, and a degree of attachment to and continuing dependence on Russia did remain. None of the CIS countries could rely on expectations of joining the European Union or the North Atlantic Treaty Organization (NATO), giving them hope and motivation for sacrifices, and guidance (Roland and Verdier, 1999; Roland, 2000). None of the CIS countries under the Soviet rule developed any significant opposition to the regime, not to speak of one with some democratic and market experience. True, in many cases pseudo opposition leaders or groups took over the government from the ruling Communist Party secretariats, but all of them came from the ranks of the Communist Party and could hardly contribute the needed experience and knowledge. Furthermore, they faced an uphill conflict with the government structures that more or less remained in place. In cases where the old communist regime stayed in power (Kazakhstan, Turkmenistan, Uzbekistan) there may have been a chance for a more effective government, but then the pace of the reforms was put in doubt.[6]

2. ECONOMIC REFORM IN THE COMMONWEALTH OF INDEPENDENT STATES

After the dissolution of the Soviet Union in December 1991, the 15 republics became internationally recognized independent nations. Twelve of them formed a loose successor organization, the Commonwealth of Independent States – the three Baltic countries did not join the CIS.[7] Despite many agreements to maintain the common economic space within the CIS and the continued economic importance of Russia to most CIS countries, the organization has had little economic content. The CIS members do, however, have sufficient common background that they form an obvious group for comparative economic analysis. Since 1992, however, they have pursued diverging paths in economic strategy and policies

All of the CIS countries have been involved in the transition from a centrally planned economy to a market-based economy.[8] The transition had begun under Gorbachev's leadership in the late 1980s, but the dissolution of the Soviet Union added negative economic shocks to the already apparent transformational recession and inflation, and allowed national variation and experimentation in transition strategies.

Although the general principle following the dissolution of the Soviet Union was for the republics to become independent countries with the preexisting borders and political leadership, an immediate effect was to intensify inter-republic conflicts, stimulate secession movements, or provoke civil war for national control. The Armenia–Azerbaijan conflict over Nagorno-Karabakh was the bloodiest inter-state conflict until a 1994 ceasefire, and remains unresolved. Georgia and Moldova have secessionist regions that operate largely outside the central government's control. Tajikistan's civil war ended with a 1997 peace agreement, but the government's authority over some areas remains incomplete. Russia has ongoing difficulties in Chechnya. Elsewhere nation building was less bloody but still difficult. Apart from Russia the CIS countries had no previous experience of nationhood and to varying degrees the leadership was preoccupied in the early years with building a national identity as well as with the practical problems of building national institutions. Large minorities, especially the Russian minorities in Kazakhstan and Ukraine, required political balancing acts.

The political disruption added to the economic disruption of the breakup of intra-Soviet ties. Production chains had already begun to dissolve in 1990 and 1991, but formal independence was an added blow. The extent of inter-republic transfers within the Soviet Union is controversial; it was very significant to some republics, but apart from some continuing subsidization of energy trade, the transfers ended more or less definitively in 1992. The shift from controlled to world prices for international transactions benefited some countries more than others (see the final column of Table 1.1), but everywhere the process of adjusting to major price changes and breaks in demand and supply chains added to the transformational recession which had begun in the final years of the Soviet Union. The cumulative decline in output was far more severe than in Eastern Europe (apart from war-torn Yugoslavia) and for most of the Soviet successor states was concentrated in the period 1992–94 (Tables 1.2 and 1.3, and Figure 1.1).[9]

The years 1992 and 1993 were a period of monetary chaos. In an attempt to alleviate the economic impact of the collapse of the Soviet Union, the CIS countries retained the common currency. The institutional design of the rouble zone was, however, unstable as each national government could create rouble credits, retaining the seigneurial benefits for itself but distributing the inflation costs across the whole rouble zone. The currency arrangement added to the hyperinflation of 1992–93. The countries issuing national currencies and then adopting price stability as a priority (that is, the Baltic countries and the Kyrgyz Republic) were the first to bring inflation down below 50 per cent. By the mid-1990s, however, almost all CIS governments recognized the high costs of hyperinflation and the monetary causes of inflation, so that controlling inflation through monetary policy became a priority (Table 1.4).

Against this backdrop, CIS governments were either actively or by default creating market economies. Administered resource allocation by central planners has been replaced by allocation of resources in response to market signals, although governments continue to play a role in influenc-

Table 1.2 *Growth in real GDP 1989–2000 (%)*

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2001; 1989 = 100
Armenia	14	−8	−12	−42	−9	5	7	6	3	7	3	6	10	8	74
Azerbaijan	−4	−12	−1	−23	−23	−20	−12	1	6	10	7	11	11	9	62
Belarus	8	−3	−1	−10	−8	−13	−10	3	11	8	3	6	4	3	91
Georgia	−5	−12	−21	−45	−25	−11	2	11	11	3	3	2	5	4	37
Kazakhstan	0	0	−13	−3	−9	−13	−8	1	2	−2	2	10	13	8	84
Kyrgyz Rep	8	3	−5	−19	−16	−20	−5	7	10	2	4	5	5	2	71
Moldova	9	−2	−18	−29	−1	−31	−1	−8	1	−7	−4	2	6	4	37
Russia	0	−4	−5	−15	−9	−13	−4	−4	1	−5	4	8	5	4	64
Tajikistan	−3	−2	−7	−29	−11	−19	−13	−4	2	5	4	8	10	7	56
Turkmenistan	−7	2	−5	−5	−10	−17	−7	−7	−11	5	16	18	12	14	96
Ukraine	4	−3	−12	−14	−14	−23	−12	−10	−3	−2	0	6	9	5	46
Uzbekistan	4	2	−1	−11	−2	−4	−1	2	3	4	4	4	5	3	105
CEE & Baltics	1	−7	−10	−2	0	4	5	5	5	4	3	4	3	2	113

Notes: 2001 = preliminary actual figures from official government sources; 2002 = EBRD estimates.

Sources: 1989: European Bank for Reconstruction and Development (EBRD), *Transition Update* (April 2001), p. 15; all other years: *Transition Report* (2002), p. 58.

Table 1.3 Maddison's estimates of per capita GDP at PPP

	1973			1990			1998		
Republic	Pop.	GDP	GDP p.c.	Pop.	GDP	GDP p.c.	Pop.	GDP	GDP p.c.
USSR	249.7	1513	6058	289.4	1988	6871	290.9	1132	3893
Armenia	2.7	17	6189	3.3	20	6142	3.8	13	3341
Azerbaijan	5.5	24	4458	7.1	33	4681	7.7	16	2135
Belarus	9.2	48	5234	10.3	73	7153	10.2	59	5743
Georgia	4.9	29	5894	5.5	41	7569	5.4	15	2737
Kazakh	13.8	105	7593	16.7	122	7305	15.6	75	4809
Kyrgyz	3.2	12	3702	4.4	16	3592	4.7	10	2042
Lithuania	3.2	25	7589	3.7	32	8591	3.7	22	5918
Moldova	3.7	20	5379	4.4	27	6211	3.6	9	2497
Russia	132.7	872	6577	148.3	1151	7762	146.9	664	4523
Tajik	3.2	13	4105	5.3	16	2995	6.1	5	830
Turkmen	2.4	11	4795	3.7	13	3626	4.8	8	1723
Ukraine	48.3	238	4933	51.9	311	5995	50.3	127	2528
Uzbek	13.1	67	5118	20.5	87	4264	24.1	79	3296
Estonia	1.4	12	8656	1.6	17	10733	1.5	15	10118
Latvia	2.4	19	7780	2.7	26	9841	2.4	15	6216
Lithuania	3.2	25	7589	3.7	32	8591	3.7	22	5918

Notes: Pop = mid-year population in millions; GDP = gross domestic product in billion 1990 international dollars; GDP p.c. = gross domestic product per capita in 1990 international dollars.

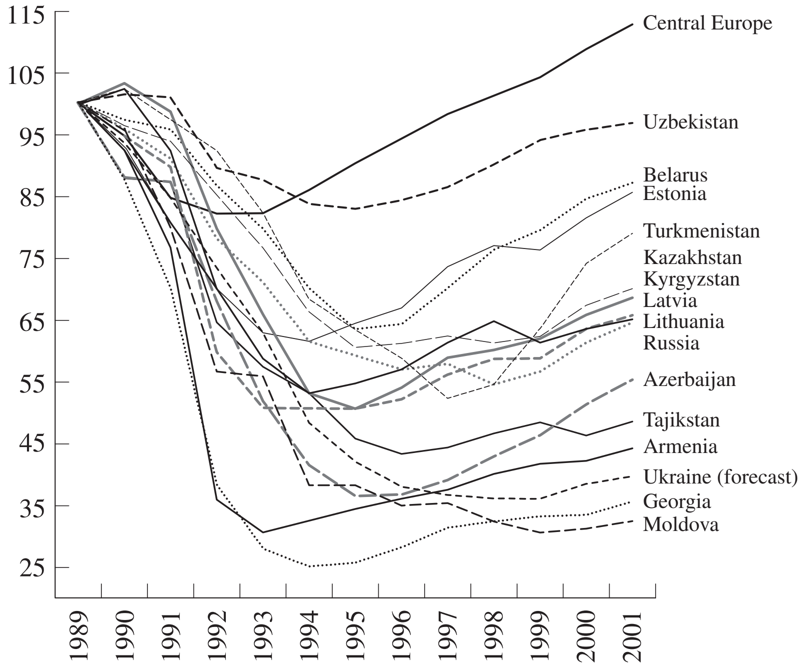
Source: Maddison (2001), pp. 183–5.

Table 1.4 Inflation (change in consumer price index)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Armenia	274	1346	3732	5273	177	19	14	9	1	−1	3	1
Azerbaijan	107	912	1129	1664	412	20	4	−1	−9	2	2	3
Belarus	94	971	1190	2221	709	53	64	73	294	169	61	41
Georgia	79	887	3125	15607	163	39	7	4	19	4	5	5
Kazakhstan	79	1381	1662	1892	176	39	17	8	7	13	8	6
Kyrgyz Rep	85	855	772	229	41	31	26	36	12	19	7	3
Moldova	98	1276	789	330	30	24	12	39	8	31	10	9
Russia	93	1526	875	311	198	48	15	86	28	21	22	16
Tajikistan	112	1157	2195	350	609	418	88	28	43	34	39	13
Turkmenistan	103	493	3102	1748	1005	992	84	24	17	8	12	10
Ukraine	91	1210	4735	891	377	80	16	23	11	28	12	2
Uzbekistan	82	645	534	1568	305	54	59	29	18	50	26	23
CEE & Baltics	119	445	251	39	20	15	10	8	5	7	6	3

Notes: 2002 = estimate.

Source: European Bank for Reconstruction and Development (EBRD) (2002), *Transition Report*, p. 60.



Source: Popov (2001), p. 6.

Figure 1.1 GDP change in FSU economies, 1989 = 100

ing both prices and the framework within which people respond to price signals. A fuller menu of necessary reforms would include, besides price liberalization and privatization, emphasis on the interconnection between inflation and budget deficits, the benefits of bringing domestic prices (including interest rates) in line with world prices, financial and banking reform to remove constraints on enterprise formation and expansion and to ensure efficient allocation of capital, property rights essential for a market (and enterprises) to function effectively, enterprise reform (not just privatization, but removing soft budget constraints and facilitating formation of new enterprises), and welfare reform to provide a safety net for those unable to provide for themselves in the market economy. Some of these reforms are, of course, easier to implement quickly than others and almost everywhere the first stage of transition concerned the trinity of liberalization, stabilization and privatization.

Early transition debates within the CIS, as in Eastern Europe, concerned the relative merits of rapid and gradual reform. Big Bang (or Washington

Consensus or 'shock therapy') strategies emphasized the interactions and necessity of proceeding quickly and in synchronization; without meaningful relative prices and a stable absolute price level, enterprise reform would not produce good resource allocation, but without enterprise reform there would be no necessary response to relative prices. Gradualists feared the adjustment costs, welfare losses and social disruption of Big Bang policies. In practice, the Big Bang versus gradualism debate subsided because all agreed on the general nature of the list of needed reforms and nobody advocated major delay.

The first transition stage was easier, while the second stage of institutional reforms was slower. Prices were substantially liberalized in January 1992, when Russia undertook a general price reform and the other countries followed, albeit with exceptions for a varying list of key goods and services. Despite initial scepticism in some countries about free trade and the need for price stability, these two goals were accepted very quickly as prime targets. Policy-makers came to appreciate that openness has important benefits – not just in gains from trade, but also the introduction of appropriate relative prices, access to best-quality inputs, and dynamic benefits from the transfer of ideas and techniques.[10] A liberal trade regime is reflected in the almost universal acceptance of the principles incorporated in the World Trade Organization (WTO); by 2002 Turkmenistan was the only transition country not to have applied for WTO membership (Table 1.5). Fiscal balance was difficult to achieve, because government revenues fell, while demands for expenditures continued or even increased; in general, they declined for support of the economy, investment and defence (apart from in war situations), but increased for social services and for providing an economic safety net. Moreover, policy-makers unacquainted with macroeconomics at first failed to appreciate the tight connection between budget deficits and accelerating inflation. Nevertheless, after initial hyperinflationary episodes, price stability was generally recognized as a priority.[11] In the long run, stabilization requires fiscal balance especially if the domestic capital market is thin; although foreign aid can help in the short run, in practice it seemed to delay necessary fiscal reforms (as in Moldova, Ukraine, the Kyrgyz Republic or Mongolia).

Privatization was embarked upon rapidly, and in all countries small-scale privatization and housing privatization proceeded quickly. Large-scale privatization was slower and the procedure varied across countries. In some cases voucher privatization led to fairly rapid distribution of many state assets, but raised concerns about equity and insider control. In other countries, a case-by-case approach to selling large enterprises led to much slower privatization as assets were overvalued or unacceptable conditions were imposed. A theme of several of the country studies in this volume is that

Table 1.5 WTO status of Soviet successor states

	WTO status
Kyrgyz Republic	Joined WTO 1998
Latvia	Joined WTO 1999
Estonia	Joined WTO 1999
Georgia	Joined WTO 2000
Lithuania	Joined WTO 2001
Moldova	Joined WTO 2001
Russian Federation	Negotiating (1993)
Belarus	Negotiating (1993)
Armenia	Negotiating (1993)
Ukraine	Negotiating (1993)
Uzbekistan	Negotiating (1994)
Kazakhstan	Negotiating (1996)
Azerbaijan	Negotiating (1997)
Tajikistan	Negotiating (2001)
Turkmenistan	Not applied

Note and Source: date in brackets is when the Working Party was established. Up-to-date membership information is provided on the WTO website www.wto.org.

the variations in privatization methods affected the nature of the market economy being established and the growth performance of individual countries.

By the end of the 1990s all of the CIS countries, with the possible exception of Belarus, had more or less completed the first stage of transition; prices had been liberalized, the macroeconomy stabilized and most small enterprises privatized. The painful progress of large-scale privatization, however, highlighted the need for structural reform. Enterprise reform needed to go beyond a simple change of ownership. For market incentives to elicit desirable responses, enterprises must face hard budget constraints, have access to finance at competitive interest rates, be prevented from engaging in anti-competitive behaviour, enjoy protection of physical property and of other property rights, be able to rely on efficient infrastructure provision, and so forth. Already during the first stage of transition substantial variations in the form of market economies had emerged in the CIS, but these differences are widening during the more complex second stage.

There are diverse paths to establishing a market-based economy, just as there are many variants of market-based economies. Growth has come primarily from new enterprises, although they can take diverse forms (new private enterprises in Poland, township and village enterprises in China). For such enterprises to succeed, the government must not be too heavy handed; the grabbing hand of the state can prevent the working of the invisible hand of the market. The extent to which governments can provide a helping hand is disputed; governments must provide law and order and other public goods, and address market imperfections, but whether they should go further in promoting new enterprises by providing training, subsidizing credit, creating special zones and giving other tax benefits (after choosing losers and winners), is doubtful. A corollary to the role of new enterprises in generating growth is that not much economic growth has come from the pre-existing state enterprises, whether privatized or restructured in some other way. The only effective solution appears to be to establish a hard budget constraint and take the consequences. The World Bank's study *Transition: The First Ten Years* (2002) concludes that the success formula has been '*encouragement + discipline*' – the former applied to potential new enterprises and the latter to pre-existing old enterprises.

Inequality and poverty increased dramatically in Eastern Europe and the former Soviet Union (Table 1.6).[12] The trend was perhaps not unexpected,

Table 1.6 Poverty measures for Eastern Europe and CIS 1987–99 and 1993–95

Country	1987–99		1993–95	
	Number, millions	Share of population, %	Number, millions	Share of population, %
Belarus	0.1	1	2.3	22
Estonia	0.02	1	0.6	37
Kazakhstan	0.8	5	11.0	65
Kyrgyz Rep	0.5	12	4.0	88
Latvia	0.03	1	0.6	22
Lithuania	0.04	1	1.1	30
Moldova	0.2	4	2.9	66
Russia	2.2	2	74.2	50
Turkmenistan	0.4	12	2.4	61
Ukraine	1.0	2	32.7	63
Uzbekistan	4.8	24	13.3	63

Notes: The numbers indicate how many people in each country were living below a poverty line of 120 international dollars per month; 'international dollars' means that values are estimated at purchasing power parity using 1985 US dollars as the base. The 1990s data are for 1993, except that Lithuania is for 1994, and Belarus, Estonia, Latvia and Ukraine are for 1995. Lithuanian data for 1993/94 do not include consumption in kind.

Source: Milanovic (1998), Table 5.1.

as a market economy rewards people through income differentials, but the extent of the increase in inequality did come as a surprise. The high incidence of poverty was particularly shocking to people who had lived in a superpower where poverty was never officially recognized – even if large numbers of people, especially in Central Asia and the Caucasus, were living in under-provisioned households with per capita income of less than 75 roubles in 1989 (Table 1.1). By the early 2000s provision of a safety net for those who were having difficulty coping in the market economy had become a priority, with governments that failed to provide such a safety net facing difficulties in maintaining public support for further structural reforms.

Tables 1.7 and 1.8, as well as the recent year columns in Tables 1.2–1.4, give selected information on the distance travelled by the CIS states so far, and on how ready they are to embark on long-term economic growth. By 2000–2002 most of the countries have stabilized, both fiscally and monetarily, and already experienced a few years of economic growth, though most are still struggling to regain the 1990 level of per capita GDP. Most of the countries transformed their economies from predominantly public, through a variety of privatization processes, to predominantly private, with Belarus, Turkmenistan, Uzbekistan and Moldova lagging behind. All countries went through a significant structural change with a decline in the share of industry and a rise in services. By 2002 most of the countries managed to avoid extremely large external deficits, Azerbaijan, Armenia, Moldova excepted, but most CIS countries, even those with rich natural resources, accumulated significant external and internal debt in the process. Only a few succeeded in using borrowing for successful stabilization, restructuring and growth. All of them except for Russia started the transition with no debt and this provided an opportunity to borrow additional resources for growth and restructuring. The high debts accumulated by the turn of the century will constrain further use of borrowing and impose a fiscal and trade burden on future growth prospects. Foreign direct investment (FDI) is a most desired substitute to foreign borrowing, but so far most CIS states have failed to attract significant FDI flows, the exception being the few energy-rich countries. Outsiders investing in a country expect a level playing field, full protection of their property, and no advantage to the domestic competitor. Therefore the extent of FDI flows to a country is one of the best indicators of the solidity and maturity of the institutional environment. This is why the extent of FDI flows, the abundance of natural resources and military conflicts kept aside, are consistent with the achieved transition levels (Table 1.7). This is also why both European Bank for Reconstruction and Development (EBRD) transition indexes and FDI flows are so much higher in the Central and Eastern Europe (CEE) and Baltics group. While the CIS countries most advanced in the transition had

Table 1.7 FSU states: various transition scores (2001 or 2002)

State	% GDP private	Share of services in GDP, %	Average transition score	General gov't expenditures, % of GDP	Fiscal deficit, % of GDP	Current account balance, % of GDP	General gov't debt, % of GDP	External debt, % of GDP	Debt Service, % of exports of G&S	FDI inflows, % of GDP 2001
Armenia	70	54.3	3−	23.8	−3.8	−9.5	–	42.8	9.7	3.3
Azerbaijan	60	49.9	2+	19.9	1.4	−0.9	29.4	24.5	5.7	4.0
Belarus	20	54.6	2−	31.3	−0.4	0.8	–	7.6	2.5	0.7
Estonia	80	74.5	4−	37.8	0.4	−6.2	4.8	59.6	7.1	6.2
Georgia	65	59.0	3	18.2	−2.0	−6.8	–	53.8	7.4	0.7
Kazakhstan	65	65.4	3−	22.4	−1.1	−7.8	19.9	63.1	11.9	12.4
Kyrgyz R.	60	31.8	3−	28.0	−6.0	−3.4	113.0	127.7	24.4	1.5
Latvia	70	66.6	3+	37.6	−1.9	−9.7	15.0	73.5	19.6	2.2
Lithuania	75	68.2	3+	31.6	−1.9	−4.8	29.2	43.9	27.3	3.7
Moldova	50	61.5	3−	27.4	−0.5	−9.1	103.3	91.6	30.4	1.5
Russia	70	67.3	3−	35.8	2.9	11.3	114.7	53.6*	14.1	0.0
Tajikistan	50	59.2	2+	16.3	−0.1	−6.9	–	97.6	19.2	0.9
Turkmenistan	25	40.0	1+	24.4	0.8	−2.5	–	81.1	30.9	4.5
Ukraine	65	49.3	2+	36.6	−1.6	3.7	38.5	31.5	8.1	2.0
Uzbekistan	45	52.0	2	32.5	−0.5	−0.5	71.1	75.2	30.4	1.2

Note: *Public debt only.

Source: European Bank for Reconstruction and Development (EBRD) (2002), *Transition Report*, various tables.

Table 1.8 Six components of governance, 2000/2001, individual CIS (grades between 0 and 100, developed countries = 100)

Country	Voice and accountability	Political stability; no violence	Government effectiveness	Regulatory quality	Rule of law	Control of corruption
Belarus	17.2	50	16.9	2.4	20	54.7
Kazakhstan	24.1	59.3	31.9	23.7	31.8	23
Russia	38.5	33.3	33.1	6.5	17.1	12.4
Turkmenistan	6.3	52.5	9.4	3	12.9	6.2
Uzbekistan	13.2	13	21.3	11.2	27.6	29.2
Georgia	50	14.8	28.1	17.8	39.4	28.6
Armenia	44.8	17.9	15	23.1	45.3	24.2
Moldova	59.8	40.1	12.5	12.4	40	23
Kyrgyz republic	31.6	39.5	31.9	20.7	26.5	20.5
Ukraine	41.4	26.5	26.9	13.6	31.2	19.3
Azerbaijan	27	22.2	18.1	39.1	21.8	10.6
Tajikistan	27.6	3.1	7.5	5.9	4.7	9.3
Average CIS	36.9	22.1	20.2	18.0	29.6	20.6
SD	14.9	12.9	8.4	10.2	12.8	7.4
Average CEE & Baltics*	79.1	71.1	67.0	71.9	71.2	69.1
SD	7.6	8.2	9.2	14.6	5.9	7.6

Note: *Not including the Balkan states.

Source: World Bank Institute, New Governance Indicators database.

by the end of one decade reached a level of 3 for overall transition achievements, even the weakest among their East European neighbours had attained 3 + and most reached 4 (EBRD, 2002, p. 20).

While the EBRD transition indexes include a heavy dose of institutional variables, the data in Table 1.8 focus on specific measures of quality of government, based on the work of Kaufmann *et al.* (2001, 2002) and the World Bank Institute database. Hundreds of variables for more than 150 countries were aggregated into six main clusters: 1) *Voice and accountability*: focuses on the quality of the (democratic) political process and civil and private liberties; 2) *Political instability and violence*: measures the threat and realization of destabilizing the government or regime by any form of unlawful means; 3) *Government effectiveness*: measures the quality of inputs, mostly of the bureaucracy, and of the processes by which policy is being formed, including its independence of political interference; 4) *Regulatory burden*: looks at the quality of the policies and especially the degree to which they interfere negatively with the proper operation of the market economy; 5) *The rule of law*: estimates respect for the law and the quality of the judiciary and enforcement arms; and finally, 6) *Control of corruption*: measures the inclination of people and officials to offer and accept bribes and the various forms of grand corruption including 'state capture' (Kaufmann *et al.*, 2002, pp. 4–6 and Appendixes). The figures in Table 1.8 represent grades between 1 and 100, where 100 represents the top level in the best-governed developed countries. As can be seen from the table most quality measures are very low, and much lower than the corresponding ones for the East European group. In a few cases – Armenia, Georgia, Moldova – a high level of democratization is correlated with bad measures across the board, indicating too much freedom leading to anarchy. With the exception of 'voice', most governance criteria, especially the fighting of corruption, are also below the corresponding level in groups of developing countries of a similar level of economic development. Similar comparatively dismal observations are found with respect to banking and financial institutions (Ofer, 2003). Ten to 12 years after independence, CIS countries still have a very long institutional way to go and one wonders how much of this can be traced to their communist sources.

What have been the general lessons from transition? The economic performance in the former Soviet Union has been disappointing. Initial conditions were unfavourable as many enterprises were uncompetitive, but mass closure was unthinkable, so subsidies led to budget deficits whose monetization caused high inflation. Sustained growth requires controlling the budget deficit and hence inflation, so that relative price changes can be observed and financial markets can develop. Trade taxes, although relatively easy to collect, are an undesirable revenue source because an open trade policy is the best way to introduce appropriate relative prices (that is, world prices). Financial reform, and more general institutional reform – the second stage of transition – is necessary for private sector development, as well as improving macroeconomic policy options. So much is well known, but often forgotten, in established market economies. One of the most novel lessons is the significance of hard budget constraints; distinctions of ownership structure are subsidiary. Finally, economic reform has a political dimension: if the population is kept onside by compensating losers as well as fairly rewarding gainers then the process is more likely to be sustainable, and the economy likely to meet people's needs and expectations.

3. EXPLAINING ECONOMIC GROWTH: TEN TRANSITION STORIES

The growth record is hard to interpret because initial conditions, as well as policy choices, matter. Despite many attempts to identify patterns, no robust econometric relationship between pace and depth of reform and economic performance has been established. The best Eastern European performer was rapidly liberalizing Poland, while the best performer among former Soviet republics was gradual-reforming tightly controlled Uzbekistan (and not the more liberal Baltic countries). Eastern European countries generally did better than the Soviet successor states (in cross-country regressions, distance from Düsseldorf is the strongest explanatory variable), although China and the South-East Asian countries did much better than any others.[13]

Much attention has been paid to explaining the East Asian edge. The Chinese reforms, which began in the late 1970s, focused first on reforming agriculture, and then gradually adopting an open door policy, while small-scale local businesses (the township and village enterprises) were treated in a hands-off fashion by authorities in the more dynamic coastal regions. Initial conditions meant that China, and Vietnam, could follow comparative advantage (in labour-intensive manufactures) rather than having to transform an economy dominated by an inefficient manufacturing sector. Putting agriculture first worked because agriculture was important (80 per cent of China's labour force in the late 1970s) and because small-scale rice farming could be stimulated by changing ownership structure and price incentives (unlike wheat or cotton farming where key inputs like machinery or irrigation were indivisible and their availability was disrupted by the break-up of collective farms). Although China never adopted a Big Bang liberalization and stabilization strategy, monetary policy was sufficiently controlled to never permit inflation to stay above 20 per cent for long.

In explaining the disappointing economic record of the CIS countries as a group, the institutional disadvantages discussed in section 1 of this Introduction are critical, but they have worked out in different ways in individual CIS countries. The richness of the case studies in this book lies in their focus on country-specific explanations of the growth record. Although a common framework was initially imposed on the authors (and is still reflected in the longer versions of the studies),[14] the various chapters highlight specific features which were important to their country's economic history since 1991.

Chapter 2 on Russia, by Ksenia Yudaeva, Maria Gorban, Vladimir Popov and Natalya Volchkova is more than just a chapter on Russia. It uses Russia as a case study to investigate the factors that contribute to the shaping of the degree of success of the transition process. Russia, according to the authors, experienced an early collapse of government that caused most of Russia's difficulties and rendered it unable to overcome inhibiting negative initial conditions. Russia failed because it developed a weak illiberal democracy without the rule of law, before the economic reforms, because it did not produce well-trained politicians and economists for the new regime, and because it failed to bring the government and the Parliament to work in tandem. It also failed because it had to import from the West and adapt and transplant an alien legal and institutional structure, a framework that neither the government nor the people could internalize and identify with in a short while. It also failed since there was nobody to blame for the failure of communism except itself, and there were no promising expectations to join a guiding and supporting alliance, like the European Union (EU) or NATO. The disorganization caused by the (well-intentioned) mistakes of Gorbachev and of the mass liberalization under Yeltsin in 1992, as well as the inherited distorted industrial structure, could not be controlled by the weak government – hence the long-term decline in output. Other policy mistakes over the years were the overvaluation of the rouble, partly due to its use as a macroeconomic stabilizer and partly caused by large energy exports, that inhibited restructuring, and the tight money policy that created money substitutes, barter, arrears and non-paments. It was the crisis of 1998 that changed it all. The sharp devaluation opened opportunities for restructuring, import substitution and becoming competitive, and the rise of Putin brought a more effective government, stability and trust, a clear action plan and better prospects. Both, with the help of high energy prices, produced positive growth at last. The authors are of a strong view that it is the right policies, at least during later years, and not initial conditions that determine the economic prospects. They prove it through a cross-sectional analysis of Russia's regions that shows high liberalization scores bring about (especially during the second half of the 1990s) higher investments, including FDI, in every sector, GDP and industrial growth.

In 1990 Belarus had the second-highest level of GDP per capita after Russia among the members of the CIS group, and by 2001 moved to first place among them. The high initial income level is explained by the industrial structure of Belarus as a big factory for processing and assembling high value-added and complex manufacturing goods. This same structure was also one of the main initial problems: the very extensive forward and backward internal network threatened chaotic disorganization, and the extensive external supply network, predominantly with the SU, and the lack of energy resources brought decline in trade and extreme deterioration in terms of trade. Despite the above, and the additional negative effects of the Chernobyl catastrophe, Belarus experienced one of the lowest output declines during the early 1990s (more came later) and has so far had one of the best recovery records (Tables 1.1, 1.2). Belarus, as shown in Chapter 3, is also a special case as a late starter of reform and a slow reformer throughout, and of a reform reversal since 1995. The authors of the chapter, Marina Bakanova, Lúcio Vinhas de Souza, Irina Kolesnikova and Ivan Abramov, try to explain this apparent paradox. The three main explanations are the maintenance of a strong, authoritarian government that moderated disorganization and corruption, the use of direct interaction methods of the old regime mostly via non-privatized SOEs, in order to encourage production some of which may be of little value, only part directed to consumption, and also a reflection of possible overestimation of the relevant statistics. The chapter finds that only 40 per cent of the old Belarusian manufacturing was competitive and that the diversion of trade from Russia to the West has a positive effect on growth, even though Belarus continues to maintain close trade relations with Russia (including implicit subsidies). Belarus's hope of a possible reunion with Russia and the continued talks about it blur the country's resolve to become an economically viable unit. The chapter also demonstrates that private and privatized enterprises are more efficient, but that the government continues to support SOEs, and trade with the West is more rewarding but the government continues to seek more trade with Russia. The question arises whether the very gradual reform is a better way to proceed, or what is observed is just a postponement of the time of reckoning when the price of transition will have to be paid.

Ukraine is the second-largest former republic, with more than 50 million people. It is made up of two main parts: the east, with a large Russian as well as Russified population, the location of the main large heavy energy consuming industries and the west that was annexed to the SU from Poland before the Second World War, with its much more Ukrainian nationalistic, anti-Russian and agrarian population. The tension between these two parts is one of the explanations for the continued failure of the government to unify the country and to introduce effective democracy and a market economy. Given its industrial, natural and agricultural resources and human capital, one could have expected that Ukraine would do better. Yet, like Russia, output continued to decline until after the 1998 crisis and the appointment of a new, more reform-oriented government. The story that is told by the authors of Chapter 4, Olexander Babanin, Vladimir Dubrovskiy and Oleksiy Ivaschenko, is one of a colossal government failure. They mention the divisions within society as one reason for this. A second explanation is the fact that during the Soviet period Moscow and Russia were the centre of government, the economy and academia, and many talented and capable Ukrainians tended to move there, leaving Kiev with second-rate leaders and professional people and no experience in government.[15] Others who suffered from the communist regime and were able, left for the West. However, the main reason for the failure of transition in Ukraine is the conspiracy between magnates of the old, energy-intensive industry, and all branches of government, in a 'state capture' scheme to plunder the rest of the country by collecting and distributing rents among themselves and to protect and preserve their loss-making old-fashioned sectors. Most of the government leaders belonged to the old *nomenklatura.* At first, rent was obtained from the subsidies to the price of energy imported from Russia and Turkmenistan and from fees for the transmission of oil and gas through its borders. When these resources dried up, they were substituted by government funds and borrowing abroad, at the expense of the rest of the population and of reforms. An elaborate system of barter deals sanctioned by the partners in the Parliament facilitated it. Only the near exhaustion of these funds (the authors criticize lax foreign lending in this connection) that brought Ukraine to the brink of a financial crisis in 1999, produced the shock needed to appoint a more reform-minded prime minister (Yushchenko, December 1999 to Spring 2000) and turn the corner into a more active reform path.

Moldova is the worst performer during the first decade of transition. From being one of the more affluent republics of the SU, by 2002 it had recovered to just above a third of its initial per capita GDP, the worst growth performance among all CIS states (Table 1.2). The dismal record is even more surprising given the title of 'a small wonder' given to it by *The Economist*, as late as 1995. Artur Radziwill and Oleg Petrushin paint the picture of this failure in a number of dark colours in Chapter 5. The main economic problems started from an especially severe double blow to the terms of trade and the collapse of trade: in addition to the sharp increase in energy prices, Moldova, a large producer of top of the line agricultural products, saw prices (previously heavily subsidized) plummeting and the markets disappear. When, later, prices and trade potential improved, it was the absence of agricultural reform that prevented recovery. The conflict between the Russian and the Romanian parts of the country inflicted on Moldova a second initial blow. Even when the eastern part was separated out, the rest of the country could not find a cohesive national focus and a common destiny and could not agree on a strong effective government. Without clear prospects, the government and the agricultural–industrial production elite engaged in corruption, rent-seeking and 'state capture' instead of in reforms. There is some irony in the fact that external borrowing, intended to help with reforms, was used in order to extend the ability of Moldova to avoid reform. In more recent years, when reform started to move ahead and some growth resumed, servicing the external debt has provided an additional burden. No wonder *The Economist* asked in 2000 'Can Moldova get worse?'

Armenia, the smallest CIS state, is landlocked and even further isolated due to the hostilities over Nagorno-Karabakh with Azerbaijan, and Turkish support to the latter. The devastating earthquake of 1988, the armed conflict and the isolation caused output in Armenia to fall sharply, by almost two-thirds up to 1993. Being a major producer of intermediate goods, many for the military sector, the break-up of the Soviet production chain and the isolation from energy supplies also contributed to the sharp decline. An early privatization of agriculture increased its share in the economy and helped with the supply of food. In Chapter 6, Heghine Manasyan and Tigran Jrbashyan go back to the Soviet period and observe a long-term rise in the productivity of the Armenian economy since the early 1970s, which they attribute to the sharp increase in the educational level of the labour force. They argue that the steady economic growth since 1994 is partially a recovery process, including the effects of the ceasefire and the resumption of the operation of the nuclear power station, and partially a result of market and institutional reforms, including macroeconomic stabilization introduced in the early stages of transition. However, during the last few years, the contribution of total factor productivity (TFP) to the country's growth became positive again, more or less corresponding to previously established ('normal') patterns. They therefore believe that further sustainable economic growth for Armenia is possible only through human capital accumulation and concentration on high value-added exportable manufacturing.

In discussing economic autocracy and recent growth performance in Turkmenistan, Alexandre Repkine in Chapter 7 emphasizes the role of abundant natural gas and oil in explaining the growth record of the least-reformed CIS economy. Between 1991 and 1997 Turkmenistan experienced a collapse of non-energy output, but the president maintained tight control over the economy and used populist policies and repression to maintain political stability. During the second half of the 1990s economic recovery was led by import-substituting activities in the manufacturing sector (oil refining and textiles) and in agriculture (sowing wheat in place of cotton), but failure to undertake economic reforms stifled any non-state-led activities. The resource rents have underpinned both phases in Turkmenistan's economic growth, but the strategy does not offer good long-term prospects. Repkine explains the almost total absence of economic reform in terms of the interests of the autocrat, who lacks incentive to consider long-term economic growth above short-term control over the resource rents.

In Chapter 8 on the Uzbek paradox, Martin Spechler, Kuatbay Bektemirov, Sergei Chepel' and Farrukh Suvankulov examine Uzbekistan's economic progress without neo-liberal reform. Their explanation of the paradox lies in omitted variables from the simple correlations of economic reform and economic growth – specifically, institutional capital. Uzbekistan has pursued gradual reforms, in contrast to Turkmenistan's non-reform strategy, but the goals of stability, equity and political sustainability were at least as important as economic growth, and therefore a Big Bang transition strategy was ruled out. Initial growth, up to 1996, was helped by earnings from cotton, gold and uranium and the achievement of energy self-sufficiency, but in the longer term growth has been led by public investment and provision of infrastructure, education and a social safety net and other public services.

Tajikistan's growth performance in the first decade of transition is analysed by Khojamahmad Umarov and Alexandre Repkine in Chapter 9. The disastrous decline in incomes has left Tajikistan as the poorest CIS country with income levels comparable to those of the world's poorest countries. This is largely explained by the civil war, whose negative effects were not simply those of immediate destruction but also included debilitation of institutional development leading to the virtual absence even today of a competitive economic environment or of restructuring of the economy. The share of the non-state sector has increased substantially, but this reflects the collapse, rather than privatization, of the state enterprises (apart from a single complex producing aluminium) and the shift to small-scale subsistence activities and shuttle trade. With declining domestic demand and lack of credit facilities, even the shuttle traders have few growth prospects. The economic decline is exacerbated by geographical isolation and by mass emigration which has eroded the country's stock of human capital.

In explaining economic growth in Kyrgyzstan, Roman Mogilevsky and Rafkat Hasanov in Chapter 10 also emphasize the role of landlockedness and lack of easily tradable natural resources. Like Tajikistan, Kyrgyzstan was severely harmed by the collapse of intra-SU trade in the early 1990s. The government adopted radical economic reforms along the lines of the Washington Consensus (the Big Bang model), but the growth outcome was disappointing. Mogilevsky and Hasanov explain this in part by the lack of supporting institutional development, captured by measures of instability in the legal environment. Kyrgyzstan was successful in attracting foreign assistance, mainly from the international financial institutions, but the disappointing growth record meant that repayment even of concessional loans was difficult and by 2001 the country was on the brink of default, which was only averted in 2002 by a Paris Club rescheduling (see Table 1.7).

In contrast to the other Central Asian countries, Kazakhstan is rich in natural capital, both energy and minerals resources and farmland, in Chapter 11 Yelena Kalyuzhnova, James Pemberton and Bulat Mukhamediyev focus on the management of natural resources in their study of economic growth in Kazakhstan. The economy experienced a sharp decline in output between 1991 and 1996, accompanied by rising unemployment and structural change as both industrial and agricultural output fell. Since 1996 the economic recovery has been driven by increasing oil and natural gas production. The strength of the energy sector has allowed the country to import essentials while maintaining more or less balanced trade, but it has also prevented new activities from emerging so that the economy has become increasingly dependent on the energy sector. The economy has thus become more exposed to risk, and future growth will depend critically on sound management of the resource rents.

Fischer *et al.* (1998) state that there are 'two forces: those arising from the transition and transformation process, and the basic neoclassical determinants of growth'. This book is about the first of the two and this bias is evident in most if not all the chapters, each one with a slightly different story emphasis. It is the weakness and failure of the governments and the lagging institutions that held back the resumption of growth. Human capital was there, technology and capital, even the knowledge of how to run a market economy could be obtained from the global economy (or even internally), to be put to work if and when the conditions become supportive. This is why in most of the normal growth regressions based on transition indicators and initial conditions, CIS transition economies position themselves at a distance from the estimated line and have such large residuals (negative or positive). These residuals are explained by the missing, or badly defined and measured, institutional determinants. For example, capital flight from Russia alone during the first decade amounted to US$20–30 billion a year, and this is only part of the potential resources, inside and outside the country, that could have been put to work if they could have been secured and protected by a supportive business environment, not to mention the potential of additional domestic resources that could have been mobilized through a properly working market-oriented banking system and the billions that could have come from abroad. Is this colossal institutional failure a result of bad policies or is it a reflection of the enormity of the needed structural changes and cultural and mental transformations that must accompany them? Or is it that the choice of policies was constrained by the institutional heritage, as was also their effectiveness? While this seems to be the proper generalization, the individual stories of the CIS states provide a canopy of variations and colours around it.

NOTES

1. This section draws on and sometimes quotes from Ofer (2001) and Ofer (2003).
2. The inter-republic trade between the 15 members of the union ranged, for individual republics, from 85 to 97 per cent of their entire trade. The only exception is Russia itself where 'only' two-thirds of its trade was directed to other republics. Part of this difference is due to the fact that a substantial proportion of the external trade of the other republics took place via Russia (Bosworth and Ofer, 1995, p. 74).
3. Russia sold the republics' energy at below world market prices and bought industrial and agricultural products at above world prices.
4. On the contrast between formal and informal activities and institutions, see Gaddy and Ickes (2002, Chapter 4).
5. See the discussion on the 'transplant effect literature' in Chapter 2 on Russia in this volume, based on Berkowitz *et al.* (2000) and Polterovich (2001).
6. A discussion, more literature and a strong view on this issue can be found in Chapter 2 on Russia.
7. The CIS was formed in December 1991, although Azerbaijan did not ratify its membership until after the fall of the Popular Front government and Georgia did not join the organization until the following year.
8. This section draws on material in *Constructing a Market Economy: Diverse Paths from Central Planning in Asia and Europe* and on a summary article (Pomfret, 2002; 2003). Besides the four GDN background papers, other reviews of the transition experience in Eastern Europe and the former Soviet Union include Wyplosz (2000), Fischer and Sahay (2000), Roland (2000), Havrylyshyn and Nsouli (2001), Åslund (2002) World Bank (2002), and Blejer and Skreb (2002).
9. The GDP estimates must be treated with caution, because of collection biases (in centrally planned economies managers tended to over-report output, but in the new environment producers hide output from the tax collectors' eyes), index number problems (the bundle of goods in 2002 was far different from that in 1989), and differences between output measures and well-being. All of these considerations cause GDP estimates to understate the benefits of transition, which include greater consumer choice and less queuing. Maddison's purchasing power parity estimates in Table 1.3 may better capture living standards, and they also highlight some potential implausibilities in the official data, for example for Turkmenistan.
10. Trade taxes were an attractive revenue source for new governments because they are relatively easy to collect, but in the long run they are harmful. If openness is desirable, then so is convertibility of the national currency into foreign exchange for current account transactions; otherwise there are too many distortions hindering international trade. Capital account convertibility is more contentious; many transition countries quickly accepted it as a means of encouraging foreign investors, but it also increases potential

volatility and several countries, such as the Czech Republic in 1997 and Russia in 1998, experienced serious crises.

11. Higher inflation obscures relative price changes and hence undermines the signalling mechanism of a market economy, and inflation discourages financial market development. Low levels of inflation do not matter in this context, but a threshold seems to exist. The idea of a threshold value beyond which inflation is harmful to growth was popularized by Bruno and Easterly (1998), although their threshold of 40 per cent now appears too high. Focusing only on transition economies, Christoffersen and Doyle (1998) estimated a threshold of 13 per cent.
12. By contrast, the picture in China and Vietnam is mixed. In China, inequality initially declined after 1978, but then increased in the 1990s.
13. The econometric literature is reviewed in Pomfret (2002, pp. 90–93) and in World Bank (2002). Among the studies finding a primary role for reform policies are a series of papers by IMF economists (for example Fischer *et al*., 1998; Fischer and Sahay, 2000). Initial conditions are the strongest determinants in the econometric work of EBRD economists Falcetti *et al.* (2000), although they find that some countries defied the odds by performing better, or worse, than initial conditions suggested and that the effect of initial conditions diminishes over time.
14. The full-length papers are available on the EERC website at http://www.eerc.ru.
15. ‘it was easier for an Ukrainian to become a factory manager in Siberia than in Ukraine’.