Russian economic transition to market economy and its implications for the 1998 financial crisis

Giuseppina Feliciani
University of Perugia
Prepared for the 17th AISSEC Conference
Perugia, June 25-27, 2009

Introduction

The fall of the Berlin Wall on 9 November 1989, leading to *de facto* German reunification, is usually taken as the date for and the icon of the collapse of the Soviet-type economic system. It was a political event, whether we consider it the breach of the Berlin Wall or the Polish elections bringing to power the first non-communist majority on 4 June 1989, that marked the beginning of the end of the system. There was a broad consensus that after a short transitional period, the socialist countries would join the capitalist system[1]. However, the way to a market economy typically came with its own national flavours in each transition economy. The present paper considers the case of Russia[2]. The economic transition has brought about a large and abrupt recession in Russia over the 1990s, leading to the financial crisis in 1998. After the crisis, growth has resumed and transition has speeded up the integration of Russia in the world market including financial markets.

After a brief analysis of the old system and its collapse (section 1), the reforms and economic policies towards transition in Russia over the 1990s are discussed, with an explanation of the transformational recession occurred (section 2). This phenomenon is linked to Russian financial crisis, pointing out the elements of financial instability and global financial integration as key determinants (section 3). Considering post-crisis growth from 1999 to 2007, the overall results of transition are taken into account, underlying some peculiar structural features of the Russian economy (section 4). Lessons and prospects are analysed and a few concluding remarks are given at the end (section 5).

1. The collapse of the Soviet-type system

The model of a centrally planned economy, consolidated in the Soviet Union in 1928-32, after World War II, spread to the countries of Central Eastern Europe (Lavigne, 1995). The political monopoly of the Communist Party, strengthened by the prohibition of factions within the party (since 1921) and its "leading role" and pervasiveness at all levels of the state, economy and society, are characteristics of the system. The whole economy is organized as if it were a single enterprise, according to a detailed central plan drawn both in physical and monetary term by a Central Planning Commission (*Gosplan*) (Nuti, 2001). Each enterprise is managed by a director, in collaboration with Trade Unions and the Party (the *troika*); bonuses are awarded for plan fulfilment and over-fulfilment, there are penalties for under-fulfilment. The State has the exclusive ownership of production means in the most important sectors.

The monetary system consists of a monolithic state bank (*Gosbank*) whose primary functions are to grant credit to enterprises in whatever amounts were necessary to fulfil the plan for output and investment, to take deposits from households and to issue currency. Money circulates in two separate circuits: cash - or means of payment convertible into cash - for the payment of wages, the purchase of consumption goods and other transactions involving the public; and bank money exclusively for inter-enterprise transactions[3] sanctioned by the plan. Thus, money performs an important function of control. However, as long as financial means are necessary to fulfil and over-fulfil the plan, they are always available as subsidies or credits, thus subjecting firms to "soft budget constraints" (Kornai, 1980)[4].

---

[1] Nuti (2007).
[2] Eastern and Southern European countries are explicitly excluded from the analysis in this paper. The dynamics of transition in these countries are discussed in my thesis and fully described in an earlier paper "*Eastern European Economics: from market economy transition to market economy integration into the EU*" .
[3] See Nuti (2001), Bini (1994), Lavinge (1995).
[4] The non-fulfilment of the plan by an enterprise would directly be sustained through budgetary means such as bank credit.

Money prices are fixed administratively by the centre, on the basis of distributive considerations. Interest rates are generally low, in some cases negative in real terms (Bini, 1994). Planned prices are kept at an artificially low level, by the intention to avoid inflation, indeed simply repressing inflationary pressure. The intent to avoid inflation causes a generalised, permanent excess of demand, for both consumption and production and investment goods (Kornai, 1980). Full employment, indeed an excess of demand for labour, is maintained as a by-product of an excess demand for goods, due to an excess of demand both by the centre (for public consumption, investment for growth, military expenses, space conquest) and by consumers and enterprises. Similarly, fiscal policy is entirely subordinate to the plan's specific objectives for output, defence, and social spending.

Foreign trade is also a state monopoly, exercised by Foreign Trade Organisations, which operate on their own account, specialised in the export of energy products and raw materials and imports of processed goods and food products. The exchange rate is overvalued in terms of gold or convertible currencies (Nuti, 1993) but has a purely accounting role, for the ruble is not convertible, not even within the bloc of the CMEA (Council of Mutual Economic Assistance) countries (Lavigne, 1995)[5]. Subsidies or taxes equalise domestic and external prices and FTOs' profits or losses are transferred to the state budget, while enterprises are largely insulated from the world market. The autarky which characterises the system facilitates central planning but is a source of great inefficiency (Nuti, 1993).

In the earlier period, the industrialisation era and the reconstruction after the war, the system[6] worked and realised important initial achievements: industrialisation, accelerated growth, urbanisation, military power. Already by the second half of the 1950s[7], however, the economic system registered a growth slowdown, in spite of rising share of investment in national income. Towards the end of the 1980s the slowdown turned into a diffused decline, accompanied by large scale imbalances: growing inflation, public budget deficit, and current account deficit.

According to official statistics (Table A), the average annual rate of growth of net material product (NMP)[8] fell from 7.8 percent in the second half of the 1960s to 4.3 percent in the 1976-80 and 3.2 percent by the first half of the 1980s (IMF, The World Bank, OECD, EBRD, 1991). The slowdown in Soviet economic growth has been attributed to two sets of factors. The first relates to the choice of growth strategy. A second set of factors, by contrast, points to inherent deficiencies in the planning system itself.

Growth strategy. The heavy industrial base created in the Soviet Union was a method of generating economic growth by *extensive* means (Nuti, 1992)[9]. The vast scale of the USSR made it possible for a long time not to come up against the limits of the sources of growth (reserves of labour and natural resources). However, by the 1970s the Russian labour force had stopped growing and easily accessible sources of raw materials had been mostly used up (Nove, 1987). The growth rate of employment continued to decline by the early 1980s and in 1981-1985, employment was growing at only one-half the rate of the late 1970s. As far as natural resources were concerned, costs of extraction and transportation rose as production of oil and gas in particular was forced to shift from Europe and Central Asia to harsher and more remote regions in Siberia and the Far East (IMF, The World Bank, OECD, EBRD, 1991). Having approached these resource constraints, the Soviet economy could have maintained its rapid expansion only through accelerating productivity growth. Some studies have estimated that total factor productivity growth has slowed in this period (IMF, The World Bank, OECD, EBRD, 1991). It seems likely that the efficiency with which the central planners were able to balance physical inputs and outputs branch-by-branch and enterprise-by-enterprise would have declined as the economy grew and became increasingly complex. It is also possible that, as economic growth slowed, the traditional diversion of higher quality inputs to the defence sector would have put an increasing burden on the other, "productive", sectors of the economy (Daviddi, 1992).

Inherent deficiencies of the system itself. The lopsided development of the military-industrial complex over several decades brought about a deformed, *dual sectoral* structure of the economy (Duchêne, 1987): on the one hand, the military-industrial complex; on the other hand, the inflated metallurgical, fuel and energy complexes needed for arm production and the like at the expense of the service sector. Distortions at the macro level were accompanied by distortions at the micro level. Most enterprises were abnormally large

[5] CMEA or COMECON was the bloc of socialist countries engaged in the process of planned integration since the end of the 1950s.

[6] A detailed account of the Soviet economic system is found in IMF, The World Bank, OECD, EBRD (1991), Nove (1992), Lavigne, (1995).

[7] When this decline began is a subject of continued debate; official statistics indicate it started only in the 1970s. It is now generally accepted that official statistics have tended to exaggerate growth by the failure to adjust adequately for so-called *hidden inflation*, that refers to the practice of state enterprises of introducing supposedly new products or claiming to have increased their output of higher quality goods so as to justify prise increases that would not otherwise be permitted by the authorities.

[8] NMP differs from GDP largely due to the exclusion from the former of depreciation and of the value added of services provided by the so called "nonmaterial" sector that do not directly contribute to material production.

[9] The strategy of *extensive* growth indicates the dependence on increases in the quantity rather than the productivity of inputs; *intensive* growth relies primarily on the application of technology.

and poorly specialised, they produced a wide variety of goods and services, which were often only distantly related to their mainstream production activities (Popov, 1999).

The pre-eminence of investment in the growth strategy resulted in a correspondingly limited supply of consumer goods and reflected some of the features of the planning system: the limitations on private enterprise, the sporadic shortages and associated queuing and the poor quality of those consumer goods that were available (Kornai, 1980). Although the share of investment going to industry remained constant in the 1970-85 period at around 35 percent, the proportion allocated to the oil and gas industries combined rose from about 4.5 percent in 1971-75 to almost 8 percent in 1981-1985, in order both to develop new gas fields and to maintain oil output which, by the mid-1980s, had fallen below the level of 1980. In the mid-1980s, the food and light industries combined accounted for only 21.5 percent of industrial value added, testifying to the continued low priority placed on consumer goods (Nuti, 1993). One counterpart to this was a high share of defence expenditure in total national income.

At the same time, innovation-aversion and inefficient use of resources remained major areas of weakness of the planned economy (Nuti, 2001). The incentives for enterprise managers to innovate, increase efficiency or improve the quality of their output were inadequate or even perverse and this stemmed from the overriding emphasis in the plan on gross production targets (Daviddi, 1992). With the main allocations determined administratively, and with production and distribution effectively monopolized, the structure of relative prices was arbitrary and fixed. The central regulation of wages, which was intended to keep the growth of real wages in line with gains in labour productivity, performed well in the period 1970-1985. The rate of growth of the average monthly real wage declined in line with the falling rate of growth of labour productivity and the share of primary incomes of the population in NMP fell, as a result, by 3 percent between 1970 and 1985 (IMF, The World Bank, OECD, EBRD, 1991).

Repeated attempts at reforming the Soviet-type system were made from the mid-1950s, directed towards improving the system, through forms of regional decentralisation in 1956, and increasing enterprise autonomy in 1965. However, reforms were inconsistent and not sufficiently radical, the basic system design remained unchanged (Nove, 1992). Whatever the role of productivity trends in this period, it would appear that the slowdown in output growth was at least somewhat cushioned by the significant terms of trade gain accruing to the USSR as the result of successive increases in world oil prices after 1973 (Desai, 1997). As the world's largest producer and exporter of petroleum, the USSR could improve its overall gross barter terms of trade in the period 1971-1985, i.e. the ratio of import to export volumes, by an annual average of more than 3 percent (Table A).

Soon after coming to power in 1985, Gorbachev began to promote a policy of economic "acceleration" (*uskorenie*)[10] designed to revive economic growth (IMF, The World Bank, OECD, EBRD, 1991). The strategy had several elements: a major retooling of the Soviet industry, which would have raised the average level of technology employed and increased both the efficiency and the quality of production; the strengthening of quality controls, throughout the creation of a new agency, *Gospriemka*; the stimulating of the "human factor", throughout the policy of *glasnost*, aimed at increasing the accountability of bureaucrats and enterprise managers by exposing them to open criticism; the anti-alcohol campaign. It finally envisaged measures to "clarify" the role of private activity in the economy, like the Law on State enterprises in 1987 which abolished the traditional mandatory output targets and allowed enterprises not only to flexibly adjust their production to increase profits, but to retain a higher share of internally generated funds (principle of "full self-financing") and the Draft Law on Cooperatives[11], placing cooperative ownership on a legal par with state ownership. These changes, coupled with the increased prevalence of worker-elected managers now permitted under Law, led wages soar in 1988 (Nove, 1992).

Together with the industrial modernization and discipline campaigns, a third scheme of reforms was introduced, a hybrid "market socialism", combining public ownership and enterprise with the market benefits of efficiency and automatic adjustment (Nuti, 2001). In practice, however, state orders accounted for over 90 percent of all industrial production in 1988 and the degree of enterprise autonomy in respect to inputs and outputs was less than had been envisaged.

The authorities began in 1988 to restructure the banking system, seeking to create a two-tier system, in which commercial banking functions would be performed by five state–owned banks, specialized by sector, with Gosbank retaining the role of a conventional bank, nonetheless without strengthening competition. Towards the end of 1988, some liberalization began in the banking system, as the cooperatives and those enterprises with surplus liquidity were permitted to establish their own "commercial" banks, substantially beyond the influence of the central bank. They were free to attract deposits from households and extend credit to enterprises in any sector of the economy. Although they increased rapidly in number to more than

[10] The strategy was incorporated into the 12th Five-Year Plan, which was formulated in 1985 for the period 1986-90.
[11] Cooperatives were defined sufficiently broadly to include both large collective farms and three-person family cooperatives.

400 by September 1990, the commercial banks still accounted for only about 5 percent of all outstanding credit (Frydman, Rapaczynski, Earle, 1993).

In 1989 all state enterprises, joint ventures, production cooperatives and other entities judged by the Ministry of Foreign Economic Relations to be competent to trade internationally were given the right to do so and by the end of 1990 their combined share of total transactions had risen at the expense of the FTOs. With the beginning of decentralization of foreign trade in 1986, the authorities decided to give exchange rate policy a more active role, gearing it toward the convertible currency area[12]. In 1990 a commercial exchange rate was introduced, which would fluctuate in line with the exchange rates of the currencies in the basket to which it was pegged and would apply to most trade and capital transactions and a free exchange market would be established.

The incompleteness and sequencing of the reforms were in large part responsible for the monetary disequilibrium that developed in the second half of the 1980s ("*monetary overhang*"). The greater autonomy that was granted to the enterprise sector shifted resources from the state budget towards the enterprises, which already in 1985 was showing a deficit of more than 3 percent of NMP. This asymmetric decentralization process was accompanied by the increasing fungibility of enterprises' own funds and as a result, the effective *moneyness* of the resources of the enterprises rose appreciably. To offset this impact, and to face the increased budgetary financial needs, the authorities adopted the strategy of tightening of credit policy towards enterprises in 1986-87. Despite an appreciable decline in credit to the enterprise sector, overall net domestic credit grew rapidly due to the rising budget deficit, which continued to be largely monetized[13]. At the same time, rapid growth of internally generated resources of enterprises more than offset the effects of the *credit crunch* and led to an excess liquidity among enterprises[14]. This enabled the management of increasingly autonomous enterprises repeatedly to raise wages at rates which outstripped the growth of real consumption possibilities and led to rising excess liquidity of the household sector as well. Moreover, some of the reduction in enterprise transfer to the budget seems to have been replaced, however, by a significant increase in financial flows among enterprises through extrabudgetary centralized funds under the control of branch ministries. The government could not match these artificial incomes with an appropriate quantity of goods and services, whose shortage rapidly intensified, while inflation accelerated (Nuti, 2007). Inflation became a new, albeit covert tax on the population, allowing the government to use its cash deposits with state-owned banks to fill budget gaps. However, inflationary financing was suppressing investment in fixed capital[15]. The growth of external debt, due to continued borrowing in international capital markets in order to finance the current account deficit, the fall in the world market oil and gas prices, the dismantling of the state foreign trade monopoly and the licensing of imports under the principle of self-financing were to aggravate balance of payments difficulties in 1989-90.

Institutional capacity started to weaken back in the late 1980s under the Gorbachev reforms: the credibility of the state was undermined by numerous cases of government failure, and the provision of public goods and the enforcement of law and order became notoriously inefficient. As the socialist economic system rested upon the monopoly of the party, a breach in that monopoly triggered the collapse (Lavigne, 1995). That happened soon after Gorbachev came to power, when the legitimacy of the Soviet communist party was allowed to be questioned in the USSR and it renounced support of that legitimacy in the "brother" countries. The nationalistic and ethnic pressures first erupted in October 1987 into an open uprising in the High Karabakh, a little-known enclave inhabited by Armenians within the Republic of Azerbaidzhan. Centrifugal tendencies prevailed in efforts to rebuild a united community of nations[16]. Political pluralism[17] was introduced in 1990 and Comecon was officially dissolved in 1991.

Following the dismantling of the USSR, between 1989 and 1991 all the former Soviet Republics and within them the ethnic minorities declared themselves sovereign and/or independent[18]. In 1991, the Republics were no longer paying their taxes to the federal budget and some of them started to introduce

[12] The main measures were the introduction of the so called foreign exchange coefficients (DVKs), the foreign exchange retention scheme in 1987 and the foreign exchange auctions in 1989. The DVKs were abolished in 1990.

[13] The economy was injected with uncovered money supply in the hope of thus maintaining economic growth. In 1988 money supply M2 (money in circulation and fixed-term deposits) rose by 14 percent, in 1989 by 15 percent, in 1990 by 18 percent and in 1991 by 77 percent.

[14] See IMF, The World Bank, OECD, EBRD (1991), p. 34. Credit to the nongovernment sector (mainly enterprises) as a share of total bank credit fell to around 50 percent by the end of 1989 from 82 percent in 1985. While the credit crunch was insufficient to offset the acceleration in government borrowing, the growth rate of total credit more than doubled relative to the 1986-87 period.

[15] See IMF, The World Bank, OECD, EBRD (1991). In 1988, the increase in such investment was 7.6 percent, in 1989 4.1 percent, in 1990 0.1 percent and in 1991 there was a steep fall of 26.2 percent.

[16] See in more detail Lavigne (1995), Nove (1992).

[17] The party's monopoly on power was ended explicitly in February 1990, whereas its implicit ideological monopoly was ended only in 1991, following the failed coup against Gorbachev.

[18] The Commonwealth of Independent States (CIS) was officially formed between all the former Republics except the Baltic States and Georgia (which was to join later, in 1993) on 21 December 1991, and the USSR was dissolved nine days later.

their own currencies. Government revenues and expenditure as a percent of GDP decreased in most republics 1.5-2.5 times; regionalization and tensions between central and regional authorities were growing in most CIS states, while the central government's share in total revenues was decreasing; payment discipline weakened, and trade, tax, wage and bank arrears persisted despite all efforts to deal with them (EBRD, 1989). Moreover, in November 1991 Russia took over most of the other budget responsibilities of the Soviet Finance Ministry and this substantially increased the Russian republic's budget deficit. Because of high inflation, the demonetization of the economy progressed at astonishing rates: monetary aggregates and bank credits as a percent of GDP fell massively; the shadow economy, which accounted for 10 percent of GDP in the late 1980s in the USSR, expanded to at least 25 percent, causing a major loss of state revenue and crime rates grew two times (Popov, 1999). The economic system also virtually collapsed[19] and in 1991 Russia embarked on a program of reforms designed to create a market economy (IMF, The World Bank, OECD, EBRD, 1991).

2. Post-socialist transition

The early literature on transition economies focused on how to move to a market economy on the basis of three main issues: liberalization, stabilization and privatization[20]. Liberalization was seen as the first element of transition, consisting of price liberalization, as well as the liberalization of foreign trade and entrepreneurship in the formerly state-controlled economies. Stabilization was an essential part of the macroeconomic reform package: bringing down high inflation and balancing government budgets were rightly seen as crucial preconditions for future growth (Gros and Steinherr, 1995). The importance of privatization was partly based on the need to harden the budget constraints of large enterprises.

These three issues later formed the backbone of the so called Washington consensus, a broad agreement - especially among the Washington institutions, the IMF, World Bank and US Treasury- on guidelines for successful transition. Somewhat later much emphasis, both in economic theory and in policy analysis, had shifted towards reform implementation and the institutional arrangements. A wide range of institutions has been named as essential in successful transition, including property rights, law enforcement, and social norms and trust[21]. A major challenge of economic transition concerned the role of the government and public institutions. The so called Washington consensus can be summarized in the belief that both macroeconomic stabilisation and transition to the market economy can and should be implemented as a "shock therapy" and that it is sufficient to liberalise prices and international trade and liberalise the economy for the automatic realisation of the new system (Nuti, 2007). The assumptions are based on the main idea of the superior efficiency of the new economic system. These positions have strongly been contested at the time by a minority of gradualists and have proved to be wrong and misguided (Lavigne, 1995). There are only a handful of intermediate measures which can be instantaneous or more or less gradual, and in those cases there is no absolute superiority of speed over gradualism, only costs and benefits whose net effects depend both on the trade-off actually offered by the economy and on the weightings employed by the government in their valuation (Nuti, 2001).

Transition in Russia began in 1992. The pace of transition to a market economy envisaged by the Soviet authorities was a gradual one[22]; nonetheless, the actual policy followed has been a peculiar mixture of shock and gradual approaches (Popov, 1999). In December 1991, Gaidar was committed by President Yeltsin to radical transformation of the Russian economy. As regards *macroeconomic policies*, budgetary policies envisaged fundamental reforms, sought to restrict credit and monetary growth, and introduced fiscal and price reforms. A radical reform program, liberalizing 80 percent of wholesale and 90 percent of retail prices, was launched on January 1992. However, some prices, especially those charged by state wholesalers, were subject to centrally imposed ceilings, and prices of basic foodstuffs, energy and some other consumer and producer goods continued to be fixed by the authorities, but were raised by at least 300 percent (Goskomstat, 1992). The budget prepared by the new government called for a sharp drop in the budget deficit, from 20 percent of GDP in 1991 to 1 percent in the first quarter of 1992. The budget envisaged reductions in subsidies, military and investment expenditures, and a shift from turnover and sales taxes to value-added and export taxes. The Central Bank of Russia introduced a number of standard monetary instruments to control the growth of credit and monetary aggregates, like high interest rates and direct control of money supply.

[19] See Daviddi (1992), p.74.
[20] For a debate on the transition path see Sachs (1992), Gaidar (1997), Nuti (2001), Stiglitz (2006).
[21] Roland (2000) offers an excellent textbook presentation of economic theories of transition and OECD (2002) provides a good example of the policy concerns.
[22] For a detailed description of the programs proposed for transition see IMF, The World Bank, OECD, EBRD (1991).

The establishment of market clearing prices created the environment in which other changes could be introduced effectively. The January 1992 program also included the partial liberalization of exchange rates and foreign trade. Earlier, in November 1991, all restrictions on imports were lifted and barriers to the export of finished goods were removed, though the exports of fuel and raw materials were subject to strict restriction. The commercial exchange rate of the ruble was drastically devalued and import tariff were abolished. The ruble became internally convertible in June 1992 and it was set at 125.26 to the US dollar, the market average during June. Moreover, uncertainty concerning the foreign trade settlement mechanism impeded trade among former republics, which collapsed in 1991 due to the general disorganisation of the economy and to autarkic tendencies (Lavigne, 1995). After the deregulation of prices in January 1992, fuel and energy prices were controlled directly and, later, indirectly, through export quotas and export taxes, but nevertheless were allowed to increase from 3-5 percent of the world price level in January 1992 to 30-40 percent of the world level in 1994 and about 70 percent in late 1995. Export taxes on resource goods were gradually lowered and finally abolished on April 1996, whereas the prices for fuel exports to the near abroad increased to 75 percent of the world price for gas in 1994 and to about 70-80 percent in 1995.

These shock measures helped solve a number of urgent problems (Nuti, 1993). First, they rapidly saturated the market with domestic and imported foods and other consumer goods, averted famines and drastically cut the surging demand. Secondly, they withdrew from citizens and enterprises an excess money supply that was creating the monetary overhang and threatening to cause the collapse of the country's financial system. Thirdly, they drastically reduced subsidies to unprofitable enterprises, which had to sell their product at fixed prices that did not cover production costs; and this decreased the need to issue money. Fourthly, the mechanism of free prices, combined with an inflow of imported goods and services, introduced elements of competition, including competition among state-owned enterprises.

The shock liberalisation of prices and foreign trade inevitably had a number of negative consequences. An upswing in wholesale and retail prices significantly reduced effective demand both for investment and for consumer goods and services. The contraction of domestic demand entailed a precipitous cutback in production in industry, agriculture, and especially the service sector. As a result, employment began to diminish, while unemployment started to rise since January 1992. In addition, the annual inflation rate, reflecting earlier financial repression, in 1992 was 1526 percent (Goskomstat, 1993). High rates of inflation were depressing investment and total investment in the second half of 1992 was 48 percent less in real terms than in the corresponding periods of 1991, whereas Russia had to renew its technical basis in a number of industries almost completely and introduce new and more effective technologies.

The government adopted a restrictive monetary policy in order to cut back inflation, as a condition to acquire IMF loans, fuelling the lack of liquidity that caused inter-enterprise indebtness and the resurgence of the practice of bartering[23]. In fact, high interest rates induced the main borrowers, the state-owned enterprises, to seek non-bank money, i.e. to increase inter-enterprise debts. Because the latter reached a very high level the government was induced to inject money in the enterprise sector, and inflation soared again. The relaxation of the monetary policy is one explanation of hyperinflation in Russia, where the Central Bank in 1992 and 1993 expanded loans to the enterprises so as to fight the accumulation of inter-enterprise credits, themselves very inflationary. To combat inflation, following the elections of December 1993 and despite the electoral defeat of the reformers, the Chernomyrdin government embarked on an extremely restrictive monetary policy and by the end of 1994 Russia had moved out of hyperinflation (Nuti, 2001).

The contraction of the domestic market compelled commodity producers to look for markets abroad. The manufacturing industry inherited from the USSR was practically uncompetitive, apart from production of weapons and military equipment, whereas Russia's fuel and metals were on the other hand by nature competitive, their prices remaining at an early stage of reforms, one-half and one-third of world prices. In spite of export duties and other barriers imposed by the government, fuel, metals and other basic goods surged into foreign markets. This aggravated yet more the deformation of the export structure toward basic goods. On the social and political level, the shock liberalisation of prices and the inflation that followed it engendered profound disappointment among the population and their negative attitude to reforms and reformers (Desai, 2005)[24].

Additional components of the reform program, envisaging institutional transformation and including large-scale *privatization* and the provision of a social safety net, were elaborated and approved in June and July 1992. When privatization began in Russia in 1992, the legal situation was complicated by a plethora of often overlapping and conflicting laws (Frydman, Rapaczynski, Earle, 1993). The 1990 "Enterprise Law", had brought both private businesses and state and municipal enterprises under the same legal regime, and,

[23] On monetary surrogates during transition see Nuti (1992), Butorina (2000), Dyker (2000).

[24] In 1995 elections, right wing parties, the reformers, did not obtain enough votes to be elected to the State Duma, thus deteriorating the political situation within the country and virtually halted the further progress of reforms

together with the 1987 Soviet Law on State Enterprises, specified a three-tier governance structure, giving considerable powers to the general meeting of the labour collective and a partly elected Enterprise Council[25]. Workers could elect enterprise managers, but in the end, however, managerial interests remained predominant. The leasing program began in April 1989 and gained force in 1991, establishing a special entity, called the "lease enterprise", and giving priority to work collectives of existing enterprises, which could, by a vote of two-thirds of their members, organize themselves as separate units and enter into a lease agreement with the appropriate authorities, but had to preserve the name of the old enterprise. As regard to regulation over foreign ownership in 1991, it allowed foreign investors to invest in Russia by means of founding a Russian commercial entity with a Russian partner, setting up a branch or a subsidiary in Russia, or purchasing shares in an existing enterprise or the right to use land and other natural resources, but with some exceptions regarding key sectors, like industry, fuel and energy sectors.

However, in 1992 traditional state enterprises in Russia still employed a large fraction of the labour force and produce most of the country's output, while the number of employed persons in the private sector increased three times, as compared with the same period in 1991. The number of foreign investors, which traditionally have participated in the Russian economy through joint ventures, has grown, their output and employment remaining relatively small, especially in comparison with the traditional state sector. At the time Russia began to carry on this process by early 1992, out of nearly 250,000 enterprises in the country only 70 were privately owned by individuals and 992 enterprises were corporately owned (Pinder, Shishkov, 2002).

Preparations were made for privatisation first of small productive establishments (shops, restaurants, hotels), small plots of land and housing – "small" privatisation – then the "large" privatisation of state enterprises, converted into share companies under the control of Ministries and to be subsequently sold by various methods, such as sales of entire enterprises directly or following *corporatisation* (transformation into joint stock companies)[26], sales of shares to managers and employees. Privatisation of small enterprises and other small economic units carved out of existing enterprises became the first priority of Russian privatisation, both because of its potential impact on consumers and because the task of small privatisation was seen as less daunting than the job of transforming the ownership structure of heavy industry (Frydman, Rapaczynski, Earle, 1993). However, the category of large enterprises constitutes the greatest part of Russian industry, over which the greatest battles have been fought.

Two stages can be clearly distinguished in the history of privatisation in Russia: the first, from early 1992 to mid-1994 and the second, starting in mid-1994. Initially, it took place via the distribution to all Russian citizens of vouchers that could be redeemed for shares in newly-privatized companies. Subsequently it occurred via auctions and the highly controversial "loans for shares" policy, where certain banks and industrial combines acquired shares in companies at prices far below their true market value in return for loans to the government (OECD, 1997).

The rationale behind the Russian voucher scheme is to generate the demand for shares[27] and political support for the privatisation process, both among the enterprise insiders and ordinary citizens. The voucher privatization scheme was intended as an innovative way to solve the problem of selling-off state-owned assets. By giving vouchers to all citizens, the question of the fair distribution of property amongst the population was addressed. In addition it was hoped that voucher privatisation would create at a stroke a nation of shareholders with a vested interest in the success of the economy (Bacon, 2006). In addition to privatisation by voucher, this stage of the process also involved giving shares in enterprises to their workers and managers. The results were not quite as anticipated in terms of a wide base of share ownership (Stiglitz, 2002). Many small shareholders were persuaded to offload their shares to enterprise managers, either voluntarily or pressured by economic circumstances or managerial arm-twisting. In their turn, some such enterprises were sold on to Russia's larger business empires, or, less often, to foreign investors. In thousand of cases, the ability of shareholders to control companies was curtailed by the government retaining a controlling interest. The quantitative effect was indeed impressive and changed the structure of ownership in Russia. By 1994, 104,000 state-owned enterprises were turned into joint-stock companies or other non-state firms, though the state retained a share in the assets of some of them and there were nearly 40 million shareholders in Russia. Nine-tenths of all industrial workers became employed at private enterprises. Besides, a system of institutional investors such as special funds, banks, began to be formed and there appeared in Russia a corporate security market. From an economic point of view, however, this stage of privatisation turned out to be disappointing, as there was no increase in funds for modernisation of

[25] For legislation until 1991 see IMF, The World Bank, OECD, EBRD (1991).

[26] *Corporatisation* is often referred to in Russia as "commercialisation", since the transformed enterprises become governed by a new legal regime of commercial law, common to both public and private business organisations.

[27] In the initial period of reform there were no private owners of big capital, who could invest it in state-owned enterprises nor foreign investors. So an artificial demand had to be created within the country for the shares of the enterprises subject to large scale privatisation.

enterprises and in most cases efforts to improve their specialisation also failed (Nuti, 2001). At the same time, the voucher scheme allowed workers' collectives to concentrate in their own hands 51 percent of the shares of the enterprises where they worked and in many cases the directors of such enterprises managed to bring these stakes under their personal control, turning into oligarchs[28].

The second stage of privatisation began in mid-1994 and was regarded by the government as a source for supplementing the national budget which was by then overstrained[29]. But there was almost no interest for the shares of thousands of medium-sized and large enterprises that were unprofitable or bringing low profits and the situation was worsened by the systematic non-payments by enterprises. Likewise of little use were the methods of loans-for-shares auctions, the transfer of federal shares to regional authorities to pay off federal debt to them. All this led to a slowdown in the rate of privatisation and hopes of attracting additional resources to the budget were not fulfilled, nor did efficient owners emerge to reorganise production and adapt it to the requirements of a market. In purely quantitative terms, it is possible that the greatest part of privatisation has been unofficial, informal, spontaneous, and of dubious legality (Frydman, Rapaczynski, Earle, 1993). The practice in which some enterprises or their parts were transformed into joint stock companies and their shares were acquired by other state enterprises was very common, creating a network of cross-holding that gave managerial insiders firmer control over a portion of the state sector. Other mechanism through which state assets have been converted into private ownership involved joint-ventures arrangements with foreign participants, receiving state assets at a very low price in exchange for kickbacks to insiders in the form of ownership participation, bribes, and jobs with special privileges (Popov, 1999). A random survey of 439 enterprises conducted by the World Bank in 1994 revealed that workers and managers were dominant owners in 70 percent of all non-state enterprise or in 84 percent of all non-privatized enterprises (World Bank, 1994). As with privatisation of larger state enterprises, the employees of smaller state enterprises or parts of enterprises sold at auctions and through competitive tenders have also been granted a number of preferential terms (Popov, 1998).The initial accumulation of capital in the late 1980s and 1990s proceeded under conditions of unbelievable opportunities for enrichment, due to the arbitrage between state-regulated prices and free market (domestic or foreign) prices. The result was the increase in income inequality in Russia, the most common measure of which, the Gini coefficient (0=for absolute equality; 1 for absolute inequality) has increased from 0.30 to 0.40 and of poverty over transition in the 1990s (World Bank, 2006). Moreover, the transition has been accompanied by the rapid emergence of labour unemployment.

The overall results of these reform approaches were painful for the Russian economy and the people. As Table B shows, Russia experienced dramatic and sustained economic problems in the 1992-1998 period. According to official statistics, output fell every year except 1997, and by mid-1999 GDP was little over half its 1990 level. The unfortunate combination of large distortions in industrial structure, the external trade patterns and the distortions at the micro level inherited from the era of central planning and the collapse of state and non-state institutions that occurred in the late 1980s and early 1990s were the key determinant of suboptimal choices in industrial strategy, macroeconomic and social policy, and in the privatization area during transition, leading to a dramatic recession (Popov, 1999). Transformational recession[30] indeed can be seen as a supply-side phenomenon, as a structural adjustment process resulting from the need to overcome disproportions inherited from the centrally planned economy[31]. The reallocation of resources due to these distortions was associated with the temporary loss of output. The collapse of state and non-state institutions, although not easily measurable, is observable in the dramatic increase of the share of the shadow economy, in the decline of government revenues as a proportion of GDP, in the inability of the state to provide appropriate regulatory framework, in the accumulation of tax, trade, wage and bank arrears, in the demonetization of the economy, in poor enforcement of property rights, bankruptcies, in increased crime rates (Popov, 1999).

In parallel with the economic and institutional decline, one of the outstanding characteristics of the Russian economy over the decade of transition has been the lack of structural change, whether in terms of the structure of production, of investment, of exports, or of key institutions like banks (Dyker, 2000). This *structural inertia* is one of the main underlying reasons for continued stagnation in the performance levels of

[28] For a detailed analysis of Russian privatisation and its consequence, see Stiglitz (2002).

[29] Obzor Ekonomicheskoi Politiki v Rossii za 1999 god (Moscow: Economic Analysis Bureau 2000).

[30] See 1996 World Development Report *From Plan to Market.* The conventional explanation of the dynamics of output during transition was probably summarized in the 1996 World Development Report *From Plan to Market*, which basically stated that differences in economic performance were associated with "good" and "bad" economic policies, in particular with the progress in liberalization and macroeconomic stabilization countries had achieved.

[31] A deeper analysis is in Section 1. The reallocation of resources from industry to services was one of the major reasons for the transformational recession. As regard disproportions at the micro level, it may be assumed that large enterprises face greater adjustment problems and have to undergo greater restructuring, which in turns leads to a greater reduction of output.

the Russian economy during transition in the 1990s. The structure of the Russian economy by main sector has changed little since 1992. There is a huge increase in the weight of services within GDP in 1992, probably due to the impact of *perestrojka*, because it has not been followed by further systematic increase since then. Agriculture and construction present sharp falls in 1992 and relative stability thereafter. Industry is the only sector where there does appear to be a clear downward trend since then. The distribution of investment by main sector has also been relatively stable since 1992, notably for industry and construction. The share of fixed capital formation in the services sector was fairly stable up to the mid-1990s, when it started to rise on account of increases of investment in transport and communications (Economist Intelligence Unit, Country Forecast Russia, various numbers).

Agriculture. The scheme of agricultural activity inherited by Russia from the Soviet Union was not seriously distorted. The problem with Soviet agriculture was a level of labour and capital productivity that was both low and stagnant and an aggregate level of production which showed no growth trend after 1973 (Dyker, 2000). The major reason for such poor performance was the peculiarly distorted organisational structure in the sector, geared on a feudal-autoritarian basis which effectively excluded high productivity. With privatization, the majority of collective and state farms have been converted, in formal legal terms, into joint stock companies or cooperatives, but they continued to be run on essentially Soviet lines. The private subsidiary sector had increased its aggregate land holdings by 30 percent since 1991, but still held less than 3 percent of total agricultural land; the new private farmer sector increased its land holdings rapidly up to 1993, but only marginally thereafter, and held only some 6 percent of the total land stock in 1997; the major holdings still belonged to the former collective and state farms, which held more then 80 percent of the total agricultural land (Popov, 1998). The patterns of preservation of Soviet-era organisational patterns is exactly matched by trends on the production side. The private subsidiary sector over transition contributed a rather larger share of total agricultural output than it did in Soviet times.

Industry. While the aggregate levels of fixed investment in industry have fallen, industry's share of total investment has shown a striking degree of stability and the pattern of investment by branch has remained similar to that of the last two decades of the Soviet Union. The share of the energy and fuels sectors taken together have continued to rise inexorably, whereas the share of chemicals and the food industry have stagnated and that of engineering has fallen. Investment in light and the building materials industry has virtually ceased. Within the hydrocarbon sector, the share of oil-processing and that of gas increased up to mid-1990s (Rossiiskii Statisticheskii Ezhegodnik, 1998, p. 698).

In addition to the rapid growth of service sector, especially of trade, banking and financial services and the conversion of defence production, the Russian restructuring was associated with a massive and unique reallocation of resources from secondary manufacturing to raw material industries. There has been a directional restructuring of Russian trade, away from the rest of the former Soviet Union and the CMEA towards Western markets, but remarkably little sign of structural evolution. Hydrocarbons continued to dominate exports, though falling in terms of share of total exports. Exports of metals and precious stones grew rapidly to the mid-1990s, with a similar picture in chemicals and wood and paper. Textile exports grew in importance up to the mid-1990s, but remain at a nugatory level. Overall, the consideration of export trends in 1997 shows that Russia continued to export the things it exported in Soviet times and reinforces Russia's status as a raw material producer (Dyker, 2000). This structural rigidity in exporting, in the contest of highly volatile international prices for hydrocarbons and metals, has meant a constant danger of the balance of trade. The resource sector employed in 1995 only 3 million workers, but produced nearly as much output as machine building, light industry and agriculture combined, which together employed 17 million workers. Labour productivity was over five times higher in the resource sector than in machinery and equipment and in agriculture during the 1990s. Due to changes in relative prices favouring the resource sector, the share of resource industries in total industrial output increased from 24 percent in 1991 to 51 percent in 1996 at the expense of the reduction of the share of secondary manufacturing, mostly machinery and equipment and light industries (Popov, 1999). Taxes on oil and gas production and oil refining amounted to over 50 percent of gross output in 1996, whereas the output in machine building and light industry fell steadily (Rossiiskii Statisticheskii Ezhegodnik, 1998, pp. 747-8). In the 1990s Russia opted for an import substitution policy[32] that hindered restructuring in inefficient industries and suppressed the growth potential in relatively efficient sectors (Popov, 1999, p. 41). The relative decline in industry and agriculture was in part a consequence of Russia's increasing openness to the world economy, a trend visible in the sharply rising absolute volume of exports and imports, even in the context of economic decline.

[32] See Pospiezna (2005). Generally foreign trade is divided on export substitution and import substitution policies. The export substitution policy is based on the expansion production of exported good of the country, which leads to the aggravation of trade conditions in favour of trade partners. The import substitution policy may expand the country's import of good, which leads to the improvement of trade conditions in the country toward trade partners. The investment stimulation into import substitution policy promotes the domestic production, decreases relative import prices, and rises the relative export prices.

Foreign investment. Foreign Direct Investment would have come in to compensate the structural rigidities of the Russian economy, to refashion the structure of production and the science and technology system. Indeed, FDI has never amounted to more than 5-6 percent of total investment during the 1990s in Russia (Dyker, 2000, p. 16). In qualitative terms, it has made a big impact on general levels of management and "soft" organisational technology. It has also served as a vehicle for the transfer of hard technology to key sectors like oil. Most of the FDI has gone into hydrocarbons, food processing and commerce. The banking sector is one of the few areas, outside hydrocarbons and the defence industry proper, where Russian law places severe constraints on FDI. Foreign banks are not allowed to own, in aggregate, more than 12 percent of the total capital of the banking sector. The big increase in foreign investment in Russia in 1997 appear largely to have reflected increases in financial investment (EBRD, ECE, Foreign Investment Promotion Centre, Ministry of Economics of the Russian Federation, 1998), mostly used to cover budget deficits, as we will see in the following section.

3. Russian financial crisis in 1998

After experiencing high inflation rates during the period immediately following the deregulation of prices on January 1992, Russia finally opted for the program of exchange rate stabilisation. In mid-1995 managing to maintain the stable rate of the ruble for the first half of 1995, it introduced a system of the crawling peg, an exchange rate corridor with initially pretty narrow boundaries. The program was based on the government and the CBR decisiveness to bring down the rates of growth of money supply and thus to curb inflation (Popov, 1999). The key to the program was to contain within reasonable limits of the government budget deficit and to find non-inflationary ways of its financing. From 1994, the Central Bank of Russia stopped financing the budget deficit through direct loans at a discounted rate. The monetary authorities reduced their net credits to the federal and local governments from 8 percent of GDP in 1994 to 3 percent of GDP in 1995. The liberalisation of Russian foreign exchange regime had allowed citizens and companies to buy dollars without any limits, even though without instruments to ensure the legitimacy of these movements. These measures had grave consequences. First, the monetisation of the economy was very low (*bezdenezh'e*) and revealed a considerable *dollarization* of the economy and widespread use of money surrogates in the form of growing barter transactions, payment of wages in kind and promissory notes or bills of exchange[33].

In fact, given the high rates of inflation, most economic agents preferred to use dollars. Moreover, there began a chain reaction of non-payment: in 1994 barter accounted for 20 percent of total sales in the country. Second, the lack of cash led to huge delays in paying salaries, and that, in turn, decreased the standard of living, provoked social tensions and shattered people's trust in the government and reforms. Non-payment had a very negative impact on the transmission mechanism of the government's economic policy, because the low levels of monetary base deprived the government of the capacity to exercise effective control over economic agents through monetary policy and pushed it into adopting non-market instruments (Butorina, 2000). In order to collect more taxes, the government had to increase the level of taxation: the more the tax burden grew, the smaller the tax base became. The demonetisation has aggravated fiscal imbalances as many companies started to look for ways of tax evasion. The problem of payment arrears has substantially increased since 1995. The impressive reduction of inflation in 1993-1997 could have been regarded as an outstanding result of the macroeconomic stabilisation if it had not been for a sharp decline in production (Popov, 1999). The Russian authorities succeeded in reducing inflation and established credibility in maintaining a stable currency, but several problems, both monetary and structural, undermined the fruits of stabilisation (International Financial Statistics and Central Bank of Russia). Difficulties caused by the need for dramatic structural reforms were only aggravated by an unreasonably tough monetary policy.

The economic situation in 1997 shows that financial stabilisation in Russia has remained extremely fragile, owing to the fiscal situation that had strongly deteriorated since 1992 and to the domestic banking system, completely vulnerable and disconnected from the real side of the economy (Buchs, 1999).

Fiscal situation[34]. Since the break up of the Soviet Union in December 1991, deficit financing has been one of the most serious problems for financial stabilisation. A substantial decrease in the income of the budgetary system has been observed in Russia since 1992 (Institute of the economic problems of the transitional period, 1999). The high level of redistribution of financial resources through the state budget in the USSR provided for a corresponding degree of centralisation in the management of the national economy. The democratisation of the political regime and the transition to a market economy brought about the

[33] See Butorina (2000).
[34] Fiscal sustainability is discussed in Buchs (1999), p.705.

appearance of general laws for the functioning of state finances. The underlying problem behind the persistence of large budget deficits in Russia between 1992 and 1997 is the spectacular decline in tax revenue (EBRD, 1998). One possible measure of the phenomenon is the *revenue-to-GDP ratio*. In Russia this ratio steadily declined: from 14.5 percent in 1993 to 9 percent in 1998 (BOFIT). As Russian GDP declined by almost 50 percent in real terms over the same period, the drop in real revenue is even more alarming. To keep a balanced budget the *expenditure-to-GDP ratio* (including interest payments) must match the *revenue-to-GDP ratio* (Gobbin, Merlevede, 2000, p. 143). Indeed, the cost of reducing the expenditure-to-GDP ratio could be high, given the huge wage and pension arrears, which had led to social instability. By July 1998 the uninterrupted increase in the amount of arrears starting in 1992 amounted to about 35 percent of GDP (Goskomstat, 1999).

The explanations of the phenomenon of the decline in tax revenue are manifold (Buchs, 1999). First, it can be found in the way privatisation was carried out. The result of privatisation was the creation of large financial and industrial groups, concentrated primarily in oil and raw materials, known as the oligarchs or insiders. The creation of ties between bankers and industry led to pervasive cronyism and lack of outsider control, strengthening the dependence of the industrial groups on bank and state credit. At the same time, the oligarchs have paid little in taxes, thus creating the tax burden on the rest of the economy. So firms did not pay taxes and the government did not pay its suppliers nor its employees[35]. The growth of arrears in both privatised and state-owned enterprises reinforced a culture of nonaccountability and created strong incentives for rent seeking and corruption even in the private sector. The second factor was the central bank's monetary-credit policy of restricting the growth of the money supply which reduced the enterprises' cash flow and forced them to look for substitutes for real money. Moreover, is some cases, as subsidies from the Government and cheap credits from the Central Bank towards state enterprises had been reduced, the incentive to pay taxes vanished. Third, the various exemptions and changes made in the calculation of taxes have impaired tax revenues. Fourth, the revenue-sharing mechanism between the Federal and regional governments have affected tax collection.

In addition, the decline of production over transition led to the lowering of the budget's revenue base. The sharp lowering of the volume of production and the level of its effectiveness was accompanied by higher costs per unit of output and lower financial returns (Lushin, 1997). Structural changes in GDP, as the sharp increase in the share of services in the volume of GDP which coupled with the reduction of the share of goods meant a reduction in the share of the revenues, particularly in the share of profits, that comprise the current budget's revenue base. Changes in the population's incomes were also unfavourable to the collection of income for the budget, as wages sharply declined in the structure of GDP. With the development of reforms, the collection of taxes to the budget were increasingly worse, as the payment discipline of state enterprises with respect to the budget was significantly higher than that of private enterprises, and other new enterprises. Moreover, there was a growing resistance of new entrepreneurs to the fulfilment of legislative norms governing the payment of taxes. The state of the budget strongly depended on the financial situation of subjects of the market, such as commercial enterprises or population. Throughout the period of reforms, there has been a consistent rise in the share of unprofitable enterprises, especially in the non state sector, and a decline of profitability in branches of the national economy. In 1996, the share of unprofitable enterprises was 41 percent of all enterprises (Lushin, 1997). The substantial decentralisation of financial resources led to a reorientation of the resources that left the sphere of state influence towards a narrow stratus of the population, the new rich, which arose as a result of uncontrollable social transformation.

The only way Russia could cope with its public deficit after 1992 without fuelling inflation was through the development of a dynamic Government Security market. Beginning in the second half of 1993, the government short-term bonds (GKOs, also known as government treasury bills) and, in addition, from mid-1996, medium-term securities-federal loan bonds (OFZs), were issued. After an initial period, the Government was able to increase its sales of short-run bonds in the form of three-month Treasury Bills in 1994 and 1995 and they proved very successful. The failure of long-term bonds resulted from the continuing uncertainty of Russian financial markets, which had made investors prefer shorter term securities, that is higher liquidity and negligible default risk. The combination of reduced inflation and high yields made GKO a very attractive investment. Because of the crawling peg regime of the ruble vis-à-vis the dollar, the exchange risk was also modest. By the end of 1997, the total amount of GKOs and OFZs outstanding was equivalent to 14.4 percent of GDP from 1.7 percent in 1994 (EBRD, 1997). The government also managed to finance the deficit through borrowings from international financial organisations, primarily the IMF, the Western governments and banks and at the Eurobond market.

[35] For a description of the arrears problems see Lushin (1997), Gobbin, Merlevede (2000).

Financial sector. The development of commercial banking has been spectacular in Russia, at least from a quantitative perspectives: following the 1988 banking reform, commercial banks increased in number all over the country[36]. There were 2500 registered commercial banks in 1995. While this represented a major new structural element in the Russian economy, it generated little of the restructuring impetus vis-à-vis the rest of the economy normally expected of banks. However, this was the result of the lack of supervision and of appropriate legislation. Some of these banks were simply former State banks with a new name, with the old bureaucrats still holding the reins. The new Russian commercial banks were poor mobilisers of savings, with a large proportion of total savings going either abroad, with the result of huge capital flights in the 1990s. Weak regulation and control as well as strong incentives for capital flight led to the development of offshore financial institutions (Dyker, 2000). Moreover, in 1994 some one-third of Russian banks were "zero-banks", in which the owners, the main depositors and the main customers are all the same people, with an essentially fraudulent scope. In fact, new commercial banks were strongly connected to state enterprises since their assets came from state firms or former state banks and not from household deposits and their portfolio contained an outstanding number of loans made to unprofitable enterprises on the basis of unbacked credits from the bank. Russian banks have been equally ineffectual at channelling funds into new business developments. As long as there was hyperinflation, the banks exploited high nominal interest rates and the numerous opportunities for arbitrage on foreign exchange markets. With the introduction of an exchange rate band in July 1995, the commercial banks lost their source of arbitrary profits and this precipitated the "August 1995 liquidity crisis", when more than 150 banks failed to meet their obligations on overnight credits on the interbank money market. The Central Bank intervened and offered liquidity only to some banks. By July 1998, the number of operating banks had fallen to around 1600, as the Central Bank had withdrawn about 1000 licences since the beginning of 1995 (Buchs, 1999).

The remaining banks managed to survive as stabilisation was under way by holding large amounts of Government securities, mostly GKOs, which was a source of fast growing profits and by conducting operations in close relation with local governments. In 1997 the Russian banking system was highly concentrated around two main actors. The first was *Sberbank* (the CBR-owned Savings Bank), holding the majority of household deposits and more than 40 percent of outstanding GKOs at the end of 1997, while another 30 percent was held by foreign investors. So Russian citizens were indirectly financing the government deficits. The second was the group of 22 Moscow banks belonging to the financial-industrial oligarchy, the vulnerability of which was more linked to their reliance on Government business and stakes in Soviet-style industrial conglomerates than on the State securities market. Such banks controlled a sizable portion of the economy through their political connections. One-third of the assets of the Russian banking system had been put into GKO by mid-1998. To finance their activities the banks used a lot of foreign resources. The danger became more imminent at the end of 1997 when the net foreign assets had become negative. Moreover, 12.4 percent of the domestic liabilities was denominated in foreign currency (OECD, 2000).

At the time of the financial crisis in 1998, an institutional and regulatory framework that would enable banks to fulfil their role on a market economy was still missing in Russia. Banks' profitability was largely based on speculative activities, with no impact on the real side of the economy and on growth. The pressure of the Russian budget deficit started to push up interest rates on government stock from late 1997, once again offering the banks an easy alternative. Banks became increasingly vulnerable on the liability side because of the very low share of deposits, as 78 percent of them were held by *Sberbank*, mainly because the latter was the only institution to have a Government guarantee on its deposits. Other important factors of vulnerability included declining profitability of banks and substantial arrears mirroring the rapid build up of inter-enterprise payment problems.

Attempts to reform the system after 1995 and 1996 by integrating Russia into global financial markets and allowing for greater competition in the financial sector were made. Integration of the Russian economy into the global financial system had begun in 1992, with Russia creating a unified, convertible currency and joining the IMF. Though this integration opened the Russian economy to international market discipline, it did not improve the performance of the financial system. The exposure of the banking system was further increased when Russia entered the Eurobond market in 1995 and later, when it opened the domestic bond market to foreign nonresidents in 1996. A situation in which state borrowing required significantly more resources than the amount of liquid domestic savings predetermined the decision to permit non residents to enter into the domestic state debt market.

[36] For a detailed description of the law, see IMF, The World Bank, OECD, EBRD (1991).

Several factors may explain the foreign investors' rush on Russian securities market[37]. Stabilisation efforts, with the successful pegging of the ruble to the dollar, provided a key financial signal to investors. Second, Russia continued to receive substantial financial support from the IMF and the World Bank and concluded important debt rescheduling agreements with its creditors in 1996 and 1997. Finally, foreign investors were allowed to buy short-term Treasury Bills in primary markets and repatriate the related income (Institute of the economic problems of the transitional period, 1999). With the liberalisation of the movement of capital, Russia had become one of the most significant of the newly formed financial markets around the world for international investors. The widespread participation of foreign investors in financing the state budget deficit drastically increased the dependence of the Russian economy on competitive conditions in world financial markets. But the substantial lessening of control over foreign capital and the corresponding decline in the cost of servicing state debt created the illusion that there were no problems in financing the state budget deficit, at least in the medium term.

The development of the government securities market had some negative consequences[38]. First, it diverted the assets of enterprises and banks from the real economy, as capital began to flow into the GKOs and OFZs market where there was an opportunity to enrich oneself rapidly. Second, and most importantly, the intention was that the government bonds would be a temporary instrument until the flow of tax revenues should increase. Yet, the government engendered a self generating process of uninterrupted issuance of government bonds. The government' s domestic debt for them grew rapidly: from $0.2 billion at the end of 1993 to $46 billion in 1996, reaching $80 billion by mid-1998. To pay off the debt for the previous issues, new bonds had constantly to be issued. The GKOs market was short-term, thus enabling the government to periodically roll over the debt. By 1997, the GKO market resembled a *ponzi scheme*, where the government was issuing new short-term debt to finance old short-term debt (Buchs, 1999). GKOs were consequently not effectively backed by the ability of the Russian government to tax (Poirot, 2001).

The total debt of the Russian federal government reached about 79 percent of GDP by the end of 1998 (Gobbin, Merlevede, 2000). By looking at the structure of the total debt of the federal government from 1994 to 1998, two-thirds of it is external debt. This external debt is to a large extent an inheritance from the Soviet era and according to the IMF World Economic Outlook (IMF, 1998c), of the $134.6 billion foreign currency debt at the end of 1997, $99 billion already existed at the beginning of 1992. The recent debt mainly consisted of loans granted by the IMF and the World Bank ($18.5 billion) and foreign governments ($7.6 billion) and Eurobond emissions ($4.5 billion) by 1997 (IMF, 1998). The internal debt is dominated by the GKOs and the remaining part consisted of OFZs. The GKOs proved very successful as inflation dropped from over 1000 percent in 1993 and 200 percent in 1994 to about 10 percent in 1997 (BOFIT, 1998). According to the IMF (IMF, 1998c) the GKO market represented $60 billion in 1998, of which one-third was owned by foreign and offshore Russian investors in May 1998. At the same time, there was about $20 billion foreign speculative capital invested in GKO. The Central Bank had at that moment only $9.6 billion at its disposal. The GKO owned by residents were not very problematic as these were almost entirely managed by Sberbank and the Central Bank, closely connected to the government and so almost certain to roll over the debt at any time.

By making excessive use of GKO financing the maturity structure of the ruble-denominated debt became very unbalanced. This made the Russian government very vulnerable to changes in market sentiments. Interest payments have become an increasingly important item in the federal government budget. From 1996 on the magnitude of interest payments became unacceptably large. In the 1998 pre-crisis period the importance of GKO financing began to drop in April and became significantly negative in July. This meant that the cost of servicing the domestic bonded debt exceeded the gross returns from the sale of government securities in December 1997 (Annual report of the Central Bank of Russia, 1998). This indicates the government could no longer use GKO emissions to raise funds in an effective way. The Central Bank policy of maintaining a stable exchange rate vis-à-vis the dollar greatly affected the government debt. The Central Bank had to raise the key interest rates on several occasions to reduce the pressures on the ruble[39]. Because of the huge amount of debt that had to be refinanced every month the government was very vulnerable to these interest rate changes. By June 1998, the yields on new GKO emissions was so high that further GKO financing became practically impossible.

Moreover, ruble deposits were only 9 percent of GDP at the beginning of 1998. So efforts to reduce the share of speculative foreign capital on the GKO market were not realistic. In addition the money supply grew at a slower pace than the GKO debt during 1993-1998, due to the tighter monetary policy to reduce

[37] Details are in Buchs (1999). About US $6 billion of Government bonds were purchased by nonresidents in 1996 alone, and in US $10 billion in 1997, of which 8 billion in the second part of the year.
[38] See Institute of The Economic Problems of The Transitional Period (1999).
[39] Because the Russian debt market was dependent on foreign participation, the Central Bank had to adjust the interest rates to the demands of foreign investors. By keeping them in the market, the stability of the ruble could be assured in the short run.

inflation. By 1998 the ratio of GKO to M2 was already 100 percent. A danger existed that a devaluation would have wiped out almost every bank in Russia apart from Sberbank. The failure of some large banks would have been enough to create a systemic crisis: if bank A can no longer fulfil its obligations to bank B, bank B also gets into trouble, causing the interbank market collapse.

The domestic problems were complicated by external factors, starting in autumn 1997. The world financial crisis actually began in July 1997 with the devaluation of the Thai bath. The devaluation of the Thai monetary unit affected Malaysia, the Philippines and Indonesia, while a second wave of the crisis hit Hong Kong in October and quickly spilled over Latin America, Brazil in particular, and to Russia[40]. An atmosphere of global threat arose and declines in exchange rates, drops in stock market indices, and rises in interest rates on dollar-denominated debt obligations occurred in most countries with developing market economy (Russian- European Centre for Economic Policy and research). The financial crisis in South-East Asia caused a slowdown in economic growth rates in many countries and, consequently, a falling-off in demand for energy resources and a stead decline in world prices for liquid fuel. By August 1998, oil prices had fallen by 40 percent from their level at the beginning of 1997. This was a heavy blow for Russia because one-fourth of its budget revenues came from oil producers and exporters (Kirkow, 1999).

The dramatic decline in world energy prices in 1998 had a profound impact not only on the profitability of Russian oil companies but also on federal tax revenues. These losses could be compensated at least in part by the devaluation of the ruble and by increasing in this way the competitiveness of Russia's oil and other basic resources on the world market. It was apparent that a growing part of the industrial oligarchy was in favour of a devaluation, to boost their competitiveness and to reduce their own domestic debt. Indeed, oil and gas companies had not only accumulated colossal tax arrears vis-à-vis the government, but were also severely indebted (Buchs, 1999). However, such a step would have led to a collapse of the national banking system. As a result, Russia's current account and budget deficit worsened in 1997, even though indicators such as GDP and inflation were improving, due to the unfavourable competitive conditions in the world markets for the principal Russian export commodity groups as well as the increase in the total amount of interest payments to nonresidents.

A sharp turnaround in the dynamic of foreign portfolio investments was thus characteristic of the fall of 1997. The ruble came under attack in November 1997. This probably reflected investors' nervousness about tax collection problems and building up of domestic debt. Foreign exchange reserves fell substantially until December, but this was not due to foreign investors' withdrawals from the GKO market: there was actually a net inflow of foreign capital to the Treasury bill market. The reserve losses can be explained by the spectacular increase in purchases of foreign currency by Russian residents in November and December, which most likely reflected the population's confiscation fears associated with the January 1998 redenomination of the ruble. This factor led to a catastrophic rise in the balance of payments deficit financed from the foreign reserves of the Central Bank of Russia. The gold currency reserves decreased by $5.9 billion in the fourth quarter of 1997. The data on the balance of payments of Russia showed a deficit in the balance of trade in the second half of 1998 and a rise in the current account deficit (Buchs, 1999). The balance of payment deficit in the spring and summer 1998 was financed both through obtaining portfolio investments and credit from the IMF and reducing the gold currency reserves of the Central Bank. One of the factors demonstrating the ill-suited government reaction to the deepening crisis was the absence of a well-developed program of measures to reduce state spending and the state budget deficit. An additional cause of the deterioration of the situation in the financial markets was changes in the composition of the government that were made at the end of November, which instilled in the investors a lack of confidence in the ability of the executive authorities to pursue an intelligent and consistent financial policy.

The worsening of the world financial crisis and the unfavourable changes in world market conditions caused the outflow of capital from Russian financial markets. The end of May 1998 marked the beginning of the collapse of Russia's financial markets, as investors really started to question the government's ability to honour its debt and continue to maintain a stable currency. Indeed, Russia announced in mid-July that international lenders would provide US $ 22.6 billion in new credits spread over 1998 and 1999, including a US $ 11.2 billion new IMF loan for Russia, a first trance of US $ 4.8 billion being made available immediately. The loan package provided immediate reserves to the Central Bank, but failed to engender market confidence. In this situation, as early as in July, a panic flight from the rouble to the dollar began and the price of Russian securities started to fall. The increased pressure on the ruble as a result of the exodus of portfolio investments from Russia at the beginning of the year caused a rapid increase in the official exchange rate of the US dollar. The attempts of the Central Bank to accelerate the rate of devaluation of the ruble led to a sharp increase in interest rates on the GKO market (Institute of the economic problems of the

[40] For South-East Asian crises in 1997 see in more detail Russian-European Centre for Economic Policy and research, (1998), Mishkin (1999), Stiglitz (2001).

transitional period, 1999). Banks were no longer able to pay off debts and make tax payments. Money kept flowing out of the country and foreign exchange reserves fell by US $ 1.4 billion in one week, making the ruble increasingly vulnerable (Buchs, 1999).

The three East Asian countries most severely hit by the crisis as well as Russia found themselves in a typical *liquidity crisis*[41]. The typical feature of a liquidity crisis is that creditors suddenly react on the basis of the other creditors' actions, and no longer on the basis of the debtor's fundamentals. Thus, no one would lend money to the illiquid borrower unless the other creditors lend first. A useful measure of vulnerability to liquidity crises is the ratio of short-term liabilities (debts) to short-term assets (reserves) of the country. A ratio greater than one is not by itself sufficient to cause a crisis, since the situation is perfectly sustainable as long as foreign creditors are willing to roll over their debts , but does indicate vulnerability to a crisis as foreign creditors know there is simply not enough foreign exchange available to repay them all. This would engender a major confidence crisis, or speculative attack, resulting in massive capital withdrawals and investors' panic. This was exactly what happened in Russia (Table C), as a result of a contagion effect originating from East Asian countries, where the sudden financial difficulties of some industries and banks, especially in Korea and Thailand, were enough to explode a confidence crisis among some investors, and the crisis resulted on a panicked reversal of capital flows. With the very same logic, when Russia became subject to confidence problems, the reversal of capital flows caused the collapse of the ruble and the contagion effect subsequently hit other emerging economies. Another obvious channel of contagion is financial linkages between emerging financial markets[42].

By summer 1998, the Ministry of Finance of Russia had begun systematically to delay repayment to the Central Bank of the indebtedness that had arisen for the repayment of the next series of GKOs by the bank. The process became uncontrollable and a banking crisis began along with the panic in the currency market. It was provoked by the deterioration of the situation in the financial markets, against the background of the tight monetary policy in the first half of 1998. The currency reserves had been exhausted as a source of financing for the deficit in August 1998 and the further attraction of new portfolio investments proved to be impossible due to the crisis. The Russian government had no alternative to devalue the ruble. The government plan on August 17, included three groups of measures: the introduction of a "floating" ruble exchange rate, with its devaluation; the imposition of a three-month moratorium on the repayment of the foreign debts of Russian banks; the compulsory restructuring of GKO-OFZ debt and the imposition of strict capital controls on Russian banks and companies to limit the capital flight (Institute of the economic problems of the transitional period, 1999).

The ruble exchange rate fell by three-quarters and the population's real money incomes during 1998-1999 declined by 28 percent, that is to the level of the most difficult year, 1992. The Moscow Stock Exchange virtually collapsed and so did the ruble, forcing the Central bank to interrupt trading for several days. The devaluation triggered an additional reaction of panic in the first days of September: as several Russian banks were on the brick of bankruptcy, deposit holders started to run on banks whereas it was no longer possible to exchange rubles for dollars. The reaction of the Central Bank to the run on banks showed that the ultimate losers of the crisis were deposit holders, as it decided to allow household deposits from six commercial banks to be transferred to Sberbank by mid-November, while freezing the accounts until that date. Households were left no alternative and with the rapid fall of the ruble and signs of serious inflationary pressures, the move was tantamount to a massive write-off of deposits (Stiglitz, 2001). The Ministry of Finance announced that Russia had defaulted on the debt interest payments due on August 1998 to several Paris-Club creditors. In October 1998, prices rose quickly, as did the money supply, imports steadily fell and output collapse resumed and GDP declined, as compared with 1997, by 4.9 percent. Russia lost for a long time the confidence of the international economic community and the inflow of foreign investment slowed down drastically.

4. Post-crisis growth

From the end of 1998 the overall economic performance in Russia began to improve step by step. Industrial production, encouraged by devaluation and growing efficiency, rapidly recovered and pulled the GDP ahead. Inflation rates were moderated in comparison with previous years, while the exchange rate was

---

[41] See in more detail Buchs (1999). The spill over effect of East Asian crises suggests a useful distinction between *insolvency* and *illiquidity*. Insolvency applies to a borrower lacking the net worth to repay outstanding debts out of future earnings, whereas illiquidity applies to a borrower lacking immediate cash to repay its current debts although he might be perfectly able to honour its debt service in the long run.

[42] For instance, Korean banks had accumulated substantial amounts of Russian and Brazilian Government debt, and at the same time, Brazilian banks had invested in Russian GKO; when Korean banks experienced severe liquidity problems, they sold off both assets which affected sales of Russian debt by Brazilian investors, and ultimately led to the general fall in asset price in emerging markets.

stable enough and predictable. The amount of taxes collected by the budget notably increased, wage arrears were reduced and pension arrears were completely paid off (Goskomstat, 1999). Real GDP in Russia grew at an average of 6.7 percent per year in real terms during 1999-2007, with the strongest growth in the export-driven industries, particularly in the oil sector where high global oil prices have proved beneficial (EBRD, 2007).

According to a report on the Russian economy from the OECD, there were positive trends in many areas by the summer of 2004 (OECD, 2005).

- Real wages and disposal incomes were well-above levels found before the 1998 financial crisis, with the number of people living below the official poverty line having fallen by around 33 percent between 1999 and 2004.
- Unemployment declined from 13 percent in 1998 to 8 percent in 2004.
- The federal budget was in surplus every year from 2000 onwards, facilitating the establishment of a stabilization fund to meet budget needs.
- Wage and pension arrears, which had hit many of Russia's poorest citizens for several years in the late 1990s and early 2000, were no longer occurring.
- Legislation[43] has been introduced to regulate and clarify activity in areas such as land ownership, labour, bureaucratic oversight, and customs codes.

Industrial production in 1999 was fostered by various factors[44]. An increase in exports stimulated output in the chemicals, timber, paper and wood processing industries, and, to some degree, in production of metals. Import substitution[45] rapidly developed in motor vehicles, consumer goods, foodstuffs, and certain sectors of consumer appliances production. Output in defence industry and agricultural machinery resumed. Manufacturers of instruments and other intermediate goods benefited from a recovery in metal-fabricating.

One of the most intriguing aspects of post-crisis growth is how unexpected it was. In the immediate aftermath of the August financial crisis, most observers did not expect Russia to grow at all. While in the immediate aftermath of the crisis the main contribution to growth came from net exports, domestic demand took over as the dominant driver by mid-1999 (Ahrend, 2006). Overall, exports grew from US $76 billion in 1999 to US $304 billion in 2006 and imports grew from US $40 billion in 1999 to US $164 billion in 2006 (Ministry of economic development and trade of Russia). In the immediate post-crisis period, Russian industry profited from a sharply devaluated exchange rate, and thus from sharply lower real energy prices and wages. These factors were the major drivers of the industrial recovery in 1999-2000. However, as wages increased, and both the real exchange rate and energy prices recovered from the exceptionally and unsustainably low levels of 1999, the boost to growth from the devaluation gradually disappeared. Increasing oil production has undoubtedly played the major role in sustaining growth in recent years, and changes in oil prices have also been an important factor. The increase in exports is linked to a *price effect* rather than a *volume effect* , owing to the favourable conjuncture of raw materials and oil in world markets (Walter, 2007).The improvement of Russian external position contributed to its current account and budget revenues.

Given the large share of hydrocarbon products in Russian exports, which in 2006 amounted to 68 percent in the composition of Russian exports, the oil price undoubtedly is an important determinant of Russia's terms of trade and has had a substantial impact on economic growth. Russian exports continued to be concentrated on extractive industries, whereas exports of metals accounted only for 14 percent (Walter, 2007). As exports, above all of raw materials and oil, have increased due to the price effect, imports have also increased, especially of high technology goods. Favourable trends in external markets, growth of industrial production and an active state policy with regard to the prices of natural monopolies allowed enterprises to significantly consolidate their balance sheets. As a result, from 2001 to 2007 the significance of the private oil companies' performance on the economy as a whole was enormous. The oil sector contributed close to one quarter of GDP growth during 2001-07. Since state controlled oil companies barely grew, Russia's private oil companies directly accounted for one fifth of GDP growth. The private oil companies played a crucial role in keeping Russia's external balance in surplus, and thus allowing the current consumption boom to unfold. The performance of state-controlled oil companies suggest that Russia's leading private oil companies would not have achieved the growth performance of the last few years if they had remained under state control (Ahrend, 2006). The small business sector also developed relatively rapidly in 2001-05, although its contribution to overall growth has been limited as it remains comparatively small.

[43] In 1999 the Bank of Russia adopted a package of measures against the flight of capital from the country. Some rigid rules for payment in advance and purchases of foreign currency through non-resident banks were introduced.
[44] For a detailed analysis of Russian post-crisis growth, see Sutela, 2005, Bacon, 2006, Gilles, 2007, Clément- Pitiot, 2007.
[45] See Pospiezna (2005).

While the small business sector is thus larger than usually claimed, it is still relatively small by the standards of OECD economies (see Table D).

The main factor driving growth from a demand perspective was rapidly increasing private consumption, which grew by an average of almost 9 percent per annum starting in 2000 (OECD, 2005). The consumption boom was driven by increases in real purchasing power of households, as a result of rising real disposable incomes and exchange rate appreciation. Real wages increased by around 130 percent during 1999-2004 and were more than 40 percent above pre-crisis level by mid-2005. Rapid growth in real incomes has also led to even faster import growth.

Prudent fiscal policy and the resulting budget surpluses played a key role in reviving private investment. New issuance of government bonds after the crisis was very limited and took place at negative real interest rates, which served to redirect private capital to more productive uses. This was reflected in increasing investment. Fiscal responsibility was facilitated by growing revenues due to favourable terms of trade and strong growth and to the deep structural cuts on the expenditure side. The government also took advantage of the favourable fiscal situation to implement a comprehensive reform of the tax system[46] and to adopt a number of institutional reforms designed to improve both the process of fiscal policy making and the management of public expenditure. Declining sovereign foreign debt levels, together with the improved perceptions of the Russian economy helped large Russian companies to borrow increasingly from foreign banks and international markets (Clément- Pitiot, 2007). While increased corporate borrowing in foreign currencies carries some systemic risks and has complicated monetary policy, the positive effect of this has been that Russian banks have been forced to begin lending to a wider range of corporate clients than before, as well as to consumers.

Macroeconomic stabilisation and the restoration of a common legal space in Russia after 1999 contributed to reduce economic uncertainty. The perception that property rights had become sufficiently secure, a perception that turned out to be misguided in some cases, was one of the factors contributing to the recovery of investment in 2000 and especially in 2001. This effect was particularly strong in the oil sector, where investment jumped from 25 percent of industrial investment before the crisis to around 35 percent from 2000 onwards. Strikingly, the growth of oil sector investment was led by companies controlled by the state or by oil industry insiders. However, the output and export growth of Russian oil companies was very uneven during 2001-2003 and Russia's private oil companies, those controlled by major financial groups, accounted for almost all of the growth recorded over the period (Russian Federal Service for State Statistics, OECD, 2006). Statistics of the balance of payment in Russia show the increase in foreign investments in Russia over the 2001-2006 period, especially FDI flows. However, FDI flows are not directed to energy sectors in Russia, but to construction and bank and finance (Goskomstat, 2007).

The Russian economy can nowadays be considered as being composed of three sectors. Firstly, there is the energy and commodity sector in which export prices are likely to remain high in the future. Transition from commodity exports towards refined products is unavoidably slow and requires large-scale investments. Secondly, there is industry as a legacy from the Soviet Union, with the automobile and aircraft production playing a key role. Its future competitiveness and possible linkage with international production chains is also a big issue for the future of several Russian industrial cities. The third sector is composed of new production. Russia has already undergone a major structural change, as services in particular but also industry have created new lines of business, partially or completely unknown in the Soviet Union. Examples range from the financial sector to travel agencies. The new production is mostly domestic market activity. With the ongoing expansion and deepening of the financial system, the demand for rubles continues to strengthen and the transition from bartering to monetary economy seems to be accomplished (Sutela, 2005).

Despite the clear progress achieved by the Russian economy since the financial collapse of 1998, there is still plenty of room for further improvement (Gaidar, 2003). Russia will be facing a change over from growth based on increased capacity utilisation to growth based on investment[47]. The production capacity inherited by Russia was already dangerously obsolete in the last Soviet decades, and the same trend has continued in most sectors. About half of industrial investment is concentrated on the energy sector. Housing and retail trade have experienced a strong boost in investment. A number of areas of human capital, such as public health and education, are of concern. On what then do concerns about the future of the Russian economy focus? Russia's riches in terms of natural resources, particularly oil, gas and metals, have been at the root of its economic recovery since the late 1990s. The chief concern is that reliance on such natural

[46] See Ahrend (2006). Tax reform saw the introduction of a low level of income tax, set at 13 percent with the intention of drawing many Russian out of the shadow economy and making them taxpayers. The tax system was also oriented towards capturing a lager share of natural resource rents, especially windfall profits from high oil prices.

[47] The full analysis is in Sutela (2005).

resources makes Russia particularly vulnerable to fluctuations in the global market, particularly with regard to oil prices (Walter, 2007). There are also fears that remaining a resource-based economy will condemn Russia to somehow being a second-rate economy, supplying the resources to richer nations as they press ahead with the technological advances at the forefront of economic development (Bacon, 2006). Finally, there is the question of the distortions which resource dependence may bring into an economy, supporting a strong currency, rising imports and decreasing exports. The Russian government is well aware of such potential difficulties, hence the implementation of the stabilisation found[48] in 2004 and the proclaimed intention to create a more diverse economy.

The legal environment within which the Russian economy exists still remains in need of further reform. In particular, two related issues stand out: corruption and the arbitrary use of power (OECD, report on the Russian economy, 2004). A recent World Bank survey shows Russia ranking in the lowest 25 percent of countries in terms of the rule of law and the control of corruption. Part of the reason is that a legal framework for a market economy had to be created from scratch in the 1990s, and therefore, many areas of activity were unregulated. The piecemeal introduction of laws then leads to legislative confusion, and the promotion of a culture where the law is considered neither effective nor relevant. Such corruption has been particularly prevalent at the regional level, where the relationship between big business and regional authorities can be especially close and so regional legislation and practice has been used to give advantages to favoured companies and to restrict the activities of others. This arbitrary use of power is related to the ability of the state to interfere in the operation of a company, or to undermine the property rights of a private company for reasons of political control or national security (Bacon, 2006). Despite movement towards market reform, there still remains a statist approach within the Russian government when it comes to control of key industries. For example, the energy sector was seen by the Putin government to be a legitimate object of state control for security reasons, as well as a means of income generation and economic management. The more difficult challenges lie nowadays in the political domain and in the establishment of a strong democratic regime.

5. Lessons and prospects

In evaluating costs and benefits of transition, some lessons should be taken. To some extent, transition had to be a messy affair, as any complex, unprecedented process, with international ramifications and ridden, with conflicts within and between groups. Just as the earlier successes of communist economies were built on the sacrifices of the population, and in particular workers, so were the successes of the transition (Nuti, 2007). The market economy model implemented in the transition in Russia was more fundamentalist than any other modern capitalist model in existence over the 1990s.

- The speed of privatisation cost government revenue and opportunities for injections of new investment and management; it also created opportunities for self-appropriation of state assets by managers and party officials, and straight corruption. The process led to a “state capture” by private investors, rather than simply state assets privatisation. The demotion of the state led to delays or gaps in market regulation, especially in financial markets, for the protection of shareholders and more generally for corporate governance.
- The weakness of the banking system has exacerbated these underlying problems because banks have failed to mobilise alternative sources of finance or to channel finance into investment in the real economy, preferring to feed off the budget deficit, and in the worst case, operating as instruments of looting.
- In the absence of significant levels of investment in areas with growth potential, the Russian economy failed to develop any real dynamic on the structural dimension, and in many cases continued to suffer from structural defects inherited from the Soviet period.
- Lack of structural change at the production level has left the Russian balance of payments heavily dependent on oil and gas and therefore vulnerable to changes in world prices of energy materials. Capital flight has created serious problems of hard currency liquidity for the Central Bank.
- In combination, these structural factors have helped to ensure that production levels in Russia would continue to stagnate, and that that stagnation would be punctuated by recurrent crises of budgetary and debt balances.
- Foreign direct investment has eased structural rigidities to only a minor extent. The structural impact of purely financial investment from abroad has probably been negative.

[48] The stabilisation fund was created in order to meet budget needs in years when external factors, particularly low oil prices, might otherwise cause a shortfall.

As has been shown, the unsuccessful reform of Russia's economy during the 1990s and then the 1998 crisis were caused above all by the elements of socialism inherited from the Soviet era in the economy, the social sphere and the psychology of society. There was an extraordinary degree of continuity between the structural problems of the Soviet economy and those of the Russian economy in transition, in terms of general factors of transition. Structural change was painful, the communist structural heritage being heavily strong and the installation of a more democratic regime made it in some ways more difficult for the government to resist the pressures of sectoral lobbies. Moreover, the deep roots of the Russian crisis lie in the inappropriate application of ultra-liberal monetarist instruments of developed market economies to an economy in transition.

Russian financial market turmoil in 1998 was due in part to the inherent potential of irrationality of liquid financial markets, apart from the economic and political issues analysed above. According to Summers, an international financial crisis is a situation where the international dimension substantially worsens a crisis in ways that could not occur in a closed economy (Summers, 2000). The structural inertia, which characterised Russian economic system over the 1990s created an environment in which financial fragility was more likely. This situation was worsened by the integration of Russia into global financial markets, thus increasing the level of systemic risk. Market economists use models of perfectly competitive markets, that is to say, markets where there is a perfect information available immediately to all participants and where individuals react in response to it. Unfortunately, these markets do not often exist in large numbers; markets are quite different and imperfect, particularly two of the most important ones, labour and financial markets, where actors act on the basis of waves of sentiment and perceptions[49].

The lessons drawn from this analysis challenge the conventional wisdom that openness of financial markets will promote more efficient allocation of capital and lead to better functioning domestic and global financial institutions. Instead, the integration into the global financial system is likely to result in further destabilisation of the system unless such integration is preceded by the creation of effective regulatory frameworks for both the domestic financial institutions and global financial institutions. This was evident in the course of transition in Russia over the 1990s. Opening up an already unstable and fragile economy to global financial flows only worsened the situation by creating more incentives for destabilising speculation. The most debatable issue is about globalisation as a dual process, which entails both benefits and challenges, because neither the openness to the global economy, nor the liberalisation process are enough, as the government still has a dramatically important role to play in make capitalism work socially (Poirot, 2001).

Russia's project for global capitalism and for joining the institutions of the world financial order were pursued in the 1990s. IMF and World Bank supported the program, by large loans and particularly IMF ruled decisions in order to prevent this nuclear power to fall under nationalism and economic and social disorder (Gilpin, 2000). From the very outset, the attitude of the West to the new Russia was ambiguous. Usually the IMF and the World Bank are either praised or blamed for their part in imposing economic policies and institutional transformations in extreme forms, throughout the conditionality of their financial assistance, whose effects were multiplied by other public and private institutions in turn making their assistance conditional on an IMF program. Sometimes western advisers have been blamed for recommending policies to Russia that they would not have dared propose to their own governments (Stiglitz, 2002). But the ultimate responsibility for the policies actually adopted must be attributed to the sovereign government that have accepted those policies (Nuti, 2007).

Nowadays, the baseline scenario for the Russian economy cannot be other than positive. The economy does not function well in that it cannot guarantee high living standards for citizens. Even so, it appears to function better year-on-year so that growth will be secured. Additional challenges are the completion of reforms, the fight against unemployment, that seems to have accompanied this recovery, the maintenance of its competitiveness, the reduction of inequality and poverty that have risen during the transition and the consolidation of democracy. So can Russia sustain strong growth? At a minimum level this would require good macroeconomic management, the avoidance of major policy errors, and a framework that sets the right incentives for private initiative in the economy and particularly in the hydrocarbon sectors. Further progress with respect to structural reforms would also be helpful, as they should raise Russia's long-term potential growth rate. The beginning of 2005 witnessed a deterioration of the business climate, largely stalled structural reform efforts and an increase in the state's role in key sectors (OECD, 2006).

Although Russia is now performing well on many indicators (Table D), as with political reforms, what we have in the Russian economy today is not exactly what the purist reformers of the immediate post-Soviet era anticipated. It remains, nonetheless, far removed from the Soviet legacy of 1992, despite not having yet

[49] See Minsky and Kindleberger (1982). Financial panics or crises are ultimately a result of "changes in animal spirits", that is sudden and exogenous changes in the perceptions and expectations of agents.

thrown off every last structural and behavioural vestige of that era. Today's Russia is a signatory of to the major international human rights conventions, is a member of the Council of Europe, with all the human rights requirements which that entails, and has constitutional guarantees for a whole raft of normative rights and freedom. At the same time, though, reports of the denial of certain rights and freedoms, and at times of more serious human-rights abuses, are still heard. The behavioural legacy of the Soviet period presents a challenge which twenty-first century Russia has to overcome if a truly law-based state is to be created.

Table A. USSR: Sources of Economic Growth, 1961-1990

(Average annual growth rate, in percent)

		Employment		Gross Fixed Capital Stock		
	Net Material Product	Total	Material Sphere	Total	Productive Capital Stock	Gross Barter Terms of Trade
1961-65	6.5	-	0.4	8.5	9.6	-3.0
1966-70	7.8	-	1.0	7.5	8.1	-3.0
1971-75	5.6	-	1.1	7.9	8.7	5.2
1976-80	4.3	1.4	1.0	6.8	7.4	0.6
1981-85	3.2	0.7	0.5	6.0	6.4	4.0
1986-89	2.7	0.4	-0.1	4.8	4.7	-2.4
1986	2.3	0.6	0.1	5.3	5.2	-14.5
1987	1.6	0.4	-	4.9	4.8	-4.9
1988	4.4	0.1	-0.4	4.7	4.4	-1.0
1989	2.5	0.5	-0.1	4.4	4.2	6.9
1990*	-2.5	-0.8	-	-	-	-

Sources: Narodnoe Khoziaistvo SSSR za 70 let, 1987, Goskomstat, 1991
*First nine months.

Table B. Russia's economic indicators, 1992-2003

(Change year on year, in percent)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GDP	-14.5	-8.7	-12.6	-4.2	-3.6	1.4	-5.3	6.4	10.0	5.1	4.7	7.3
Industrial production	-18.2	-14.2	-20.9	-3.0	-4.5	2.0	-5.2	11.0	11.9	4.9	3.7	7.0
Fixed investments	-40.0	-12.0	-27.0	-13.0	-18.0	-5.0	-12.0	5.3	17.4	10.0	2.6	12.5
Unemployement	4.9	5.5	7.5	8.2	9.3	9.0	11.8	11.7	10.2	9.0	7.1	8.9
Inflation		842	224	131	22	11	84	37	20	19	45	12

Source: Goskomstat

Table C. Short-term debt/gross international reserve ratio, June 1997

Russia	**1.87**
Argentina	1.21
Brazil	0.79
Indonesia	1.70
Korea	2.07
Malaysia	0.61
Philippines	0.85
South Africa	3.12
Thailand	1.45
Venezuela	0.28

Source: Bank for International Settlements, 1997

Table D. Progress in transition

Country	Private sector	Enterprises			Markets and trade			Financial institutions		Infrastr. reform
	Private sector share in % of GDP, mid-2006 (EBRD estimate Per cent)	Large-scale privatisation	Small-scale privatisation	Governance & enterprise restructuring	Price liberalisation	Trade & foreign exchange system	Competition policy	Banking reform & interest rate liberalisation	Securities markets & nonbank financial institutions	
Armenia	75	4-	4	2+	4+	4+	2+	3-	2	2+
Azerbaijan	60	2	4-	2	4	4	2	2+	2-	2
Belarus	25	1	2+	1	3-	2+	2	2-	2	1+
Georgia	70	4-	4	2+	4+	4+	2	3-	2-	2+
Kazakhstan	65	3	4	2	4	4-	2	3	3-	3-
Kyrgyz Rep.	75	4-	4	2	4+	4+	2	2+	2	2-
Moldova	65	3	4-	2	4	4+	2	3-	2	2+
Russia	**65**	**3**	**4**	**2+**	**4**	**3+**	**2+**	**3-**	**3**	**3-**
Tajikistan	55	2+	4	2-	4-	3+	2-	2+	1	1+
Turkmenistan	25	1	2	1	3-	1	1	1	1	1
Ukraine	65	3	4	2	4	4-	2+	3	2+	2+
Uzbekistan	45	3-	2+	2-	3-	2	2-	2-	2	2-

Source: EBRD Transition Report 2006, November, London

Note: The transition indicators range from 1 to 4+, with 1 representing little or no change from a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy. The private sector share of GDP is calculated using available statistics from both official sources and unofficial sources. The share includes income generated from the formal activities of registered private companies as well as informal activities where reliable information is available. The term “private company” refers to all enterprises in which private individuals or entities own the majority of shares. The accuracy of EBRD estimates is constrained by data limitations, particularly in the area of informal activity. EBRD estimates may, in some cases, differ markedly from official data. This is usually due to differences in the definition of “private sector” or “non-state sector”. For example, in the CIS, “non-state sector” includes collective farms as well as companies in which only a minority stake has been privatised.

References

Ahrend, R., *Russia's Post-Crisis Growth: Its Sources and Prospects for Continuation*, in Europe-Asia Studies, vol.58, n. 1, January 2006, pp. 1-24.

Bacon, E., *Contemporary Russia*, Palgrave, New York, 2006.

Bini, M., *La Banca nelle economie in transizione: vincoli di ambiente e aspetti strutturali*, Edizioni giuridiche economiche aziendali dell'Università Bocconi e Giuffré, Milano, 1994.

Blanchard, O., *The Economics of post-communist transition*, Oxford University Press, New York, 1997.

Buchs, T., *Financial Crisis in The Russian Federation, Are The Russians Learning to Tango?*, in Economies of Transition, vol.7, n.3, 1999, pp. 687-715.

Butorina, O., *Implications of the Russian Crisis*, in Post- communist Economies, vol.12, n.4., 2000, pp.409-423.

Central Bank of Russia, *Annual report of the Central Bank of Russia*, various issues.

Russian-European Centre For Economic Policy and Research, *Financial crises and Asia*, London, 1998.

Clément- Pitiot, H., *Les Mutations du Capitalisme Russe, Des persceptions extérieures à la realité*, La Russie dans la mondialisation, in Le courrier des pays de l'Est, n. 1061, Mai-Juin 2007.

Daviddi, R., *Riforme strutturali e politiche di stabilizzazione in Unione Sovietica*, in Chilosi, A., *L'economia del periodo di transizione: dal socialismo di tipo sovietico all'economia di mercato*, Il Mulino, Bologna, 1992.

Desai, P., *The Soviet Bloc and The Soviet Union: Why Did they Fall apart?*, in Harriman Review, Summer 1997, 10:2, pp.1-11.

Desai, P., *Russian Retrospectives on Reforms from Yeltsin to Putin*, in Journal of Economic Perspectives, vol.19, n.1, Winter 2005, pp. 87-106.

Dyker, D., *The Structural origins of The Russian Economic Crisis*, in Post-communist Economies, vol.12, n.1, 2000, pp. 5-24.

European Bank for Reconstruction and Development (EBRD), Transition Report, various issues, EBRD London.

Frydman, R., Rapaczynski, A., Earle, J., *The privatization process in Russia, Ukraine, and Baltic States*, CEU University Press, London, 1993.

Gaidar, E., *Recovery growth and some peculiarities of the contemporary economic situation in Russia*, in Post-communist Economies, vol.15, n. 3, September 2003.

Gilpin, R., *The Challenge of Global Capitalism, The World Economy in the 21st century*, Princeton University Press, Princeton, New Jersey, 2000.

Gobbin, N., Merlevede, B., *The Russian Crisis: A debt perspective*, in Post- communist Economies, vol.12, n.2, 2000, pp.141-163.

Gros, D. Steinherr, A., *Winds of Change. Economic Transition in Central and Eastern Europe*. Longman, UK, 1995.

IMF, The World Bank, OECD, EBRD, *A Study of The Soviet Economy*, Paris, 1991, vol. 1, 2, 3.

Institute of The Economic Problems of The Transitional Period, *The Crisis of The Financial System in Russia, Principal Factors and Economic Policy*, in Problems of Economic Transition, vol.41, n.10, February 1999, pp. 7-44.

Kirkow, P., *Foreign Trade Arrangements in Russia and its regions: relying on Foreign Capital to Generate growth?*, in Post-communist Economies, vol.11, n.1, 1999, pp. 79-97.

Kornai, J., *The Economics of shortage*, North Holland, Amsterdam, 1980.

Lavigne, M., *The Economics of Transition: From Socialist Economy to Market Economy*, Macmillan, London, 1995.

Lushin, S., *The Fiscal and Payments Crisis*, in Problems of Economic Transition, vol. 40, n.5, September 1997, pp. 36-48.

Minsky, H., *The Financial Instability Hypothesis; Capitalistic processes and the behaviour of the economy*, in Kindleberger, C.P., Lafargues, J.P., *Financial crises, theory, history and policy*, Cambridge, Cambridge University Press, 1982.

Mishkin, F., *Global Financial Instability: Framework, Events, Issues*, in The Journal of Economic Perspectives, vol. 13, n. 4, Autumn 1999, pp. 3-20.

Nuti, D., *Crisi, stabilizzazione e riforma nell'Europa Centro Orientale. Prospettive e risposta occidentale*, in Chilosi, A., *L'economia del periodo di transizione: dal socialismo di tipo sovietico all'economia di mercato*, Il Mulino, Bologna, 1992.

Nuti, D., *Lessons from the Stabilization Programmes of Central and Eastern European Countries, 1989-1991*, in Somogyi, L., *The Political Economy of the Transition Process in Eastern Europe*, Edward Elgar, Bodmin, Cornwall,1993, pp. 40-67.

Nuti, D. M., *I sistemi economici post-comunisti, ovvero 2001 odissea nella transizione*, in *Il Futuro del Capitalismo* di Jossa., B., Il Mulino, Bologna, 2001.

Nuti, D.M., *Managing transition economies*, Essay prepared for as Chapter 15 of Stephen White, Judy Batt and Paul Lewis (Eds), Developments in Central and East European Politics, n.4, 2007, Palgrave/Duke UP, 2007.

Nove, A., *An Economic History of the USSR 1917-1991*, Penguin Books, Harmondsworth, 1992.

OECD, *Economic surveys; Russian Federation*. Organisation for Economic Cooperation and Development (OECD), Paris, 2002.

OECD, Organisation for Economic Cooperation and Development (OECD), Paris, various issues.

Pinder, J., Shishkov, Y., *The EU and Russia: the promise of Partnership*, Ed. The Federal Trust for Education and Research, London, 2002.

Poirot, C., *Financial integration under conditions of chaotic hysteresis: the Russian financial crisis of 1998*, in Journal of Post Keynesian Economics, Spring 2001, vol.23, n.3, pp. 485-507.

Pospiezna, P., *Economic Opening up of Russia: Establishment of New EU-RF Trade Relations in View of EU Eastern Enlargement*, Discussion Paper 130, University of Wuppertal Bergische Universität Wuppertal, Europäische wirtschaft und internationationale makroökonomik, Wuppertal, 2005.

Popov, V., *Shock Therapy versus gradualism: the end of the debate; explaining the magnitude of transformational recession*, (In Russo), Institute of European and Russian studies (EURUS), Carleton University, Ontario, Canada, 1998.

Popov, V., *Will Russia Achieve Fast Economic Growth?*, in Communist Economies and Economic Transformation, vol. 10, n.4, 1998, pp. 421-449.

Popov, V., *Currency crises in Russia and other transition economies*, in The Asian Crisis Turns Global, by Montes, M., Popov, V., ISEAS, Singapore, 1999, pp.1-28.

Popov, V., *Investment, Restructuring and Performance in Transition Economies*, in Post-communist Economies, vol.11, n. 4, 1999, pp. 445-462.

Roland, G., *Transition and Economics: Policy, Markets and Firm*. The MIT Press, 2000.

Rossiiskii Statisticheskii Ezhegodnik, 1998.

Sachs, J., *Privatization in Russia: Lessons from Eastern Europe*, in The American Economic Review, vol.82, n. 2, May 1992, pp. 43-8.

Summers, L., *International Financial Crises: Causes, Prevention, and Cures*, in The American Economic Review, vol. 90, n.2, Papers and Proceedings of the One hundred Twelfth Annual Meeting of the American Economic Association, May 2000, pp. 1-16.

Sutela, P., *Will growth in Russia continue?*, in Bank of Finland Buletin, v.79, n.4, 2005, Edita Prima Oy, Helsinki, pp. 12-20.

Stiglitz, J., *La globalizzazione e i suoi oppositori*, Einaudi, Torino, 2002.

Stiglitz, J., *Making globalisation work*, Allen Lane, London, 2006.

Walter, G., *Le commerce extérieure. Comment sortir du piège d'une économie de rente?*, La Russie dans la mondialisation, in Le courrier des pays de l'Est, n. 1061, Mai-Juin 2007.

World Bank, various issues.

World Development Report *From Plan to Market*, 1996.