



Why they, why not we?

AN ANALYSIS OF THE COMPETITIVENESS OF
FINLAND AND RUSSIA

Antti Helanterä

Simon-Erik Ollus

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46

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Sitra Reports series 46

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Graphic design: Marjut Heikkinen
Cover design: Anu Mikkonen

ISBN 951-37-4326-8
ISSN 1457-571X (print)

ISBN 951-563-467-9 (URL: <http://www.sitra.fi>)
ISSN 1457-5728 (URL: <http://www.sitra.fi>)

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Edita Prima Ltd.
Helsinki 2004

PREFACE

The idea to compare the competitiveness profiles of Finland and Russia was first conceived in summer 2003. It was the first time I met Aleksey Mordashov, CEO of Severstal-Group and at a conference for European business leaders organised in Helsinki in July, where our conversation turned into an interesting analysis of the success factors of our respective home countries.

We decided there and then to continue that conversation on a fishing trip to Lapland at the beginning of August. We did not catch any salmon, but an even better result of the trip was the idea to commission a comparative report of Finland and Russia's competitiveness.

Two talented young researchers, Antti Helanterä and Simon-Erik Ollus, were assigned to carry out the commission. They were faced with a challenging, some said even impossible, task. To draw comparisons between two countries, which are so different in size, conditions and history would put any scientists' skills and creativity to the ultimate test. It did not help that the schedule was fairly tight. The writers had only a few months to collect data, analyse it and write the report. They finished the work on time, and, in my opinion, have also excelled in terms of content.

Comparing development in Finland and Russia shows that the economic and technological performance of a single country is only partly explained by material resources. What is more crucial for

modern industrial development is the intellectual capital: the standard of education and research, as well as competencies at large.

Besides material and intellectual capital, historical, cultural and social factors affect the economic and technological performance of a country. These factors rose strongly to the fore in Helanterä and Ollus' analysis.

Every nation has its unique historical, cultural and social DNA. Like biological genes, it determines how it will be able to accommodate to the changes in its environment. These factors are often downplayed or completely overlooked when comparing the competitiveness profiles of different countries, because they are difficult to measure or indeed identify.

Although discerning historical, cultural and social differences may be difficult and a country's strengths in terms of these factors may not be directly applicable to the next country, making such comparisons is nonetheless extremely useful. Each society needs to identify its strengths and weaknesses, because only through a genuine understanding of its own situation can a country dramatically change its course.

My hope is that this book will provide useful, new elements for economic and social debate in Finland and Russia alike. I also hope that it would help the two countries better understand each other and increase general interest towards their neighbour so different in size and with a very different history.

*Esko Aho
President,
Finnish National Fund for Research and Development Sitra*

PREFACE

The issues of doubling the GDP, the future development of the country, the strengthening of our economy are in the centre of public discussion at the present time. But nevertheless there is still no final conception of achieving these goals.

To find answers for these urgent questions it would be useful to look at the examples of other countries, to understand the secret of their success. I believe that such comparisons could help to define our own way of development. At the same time while comparing ourselves with other nations, we often realize that they are far more successful than Russia. Moreover, obviously, Russia is not among the most successful countries in the world. Then a natural question arises: "Why?"

In search of an answer we often refer to external factors to explain our underdevelopment. We confront with numerous myths of supposedly natural limits of our economic growth. The following reasons are often heard: Russia has a harsh climate, we have few sun days pro year, the considerable part of the country is swamped or situated in permafrost. Bad geographical location, great extension of the country, the center's remoteness from periphery, conservative Orthodox spirit, huge defense expenditures, historical predisposition to corruption, and, at last, fools and bad roads – it is an incomplete list of reasons which scholars use to explain our backwardness and underdevelopment. But, unfortunately, we forget that many coun-

tries burdened with the same problems carried out deep economic reforms and achieved leading positions in the world.

Furthermore, the comparison of Russia with one country exposes the groundlessness of our excuses. It is Finland.

Its climate is not better than Russia's one, and the percentage of swamps on the territory is higher. It traditionally allocates much money for defense. Finland went through two world wars in the last century, as is the case with Russia. The industrialization in Finland began later than in other European countries. Finally, before the Revolution in 1917 it was part of the Russian empire. Its USSR-oriented economy experienced serious difficulties in the period of restructuring. Despite these facts nowadays Finland occupies the first place in the World Economic Forum competitiveness ranking, whereas Russia lags considerably behind.

In this connection it seems to me very interesting to make an attempt of scientific comparison of our countries and to analyze the reasons, which led to such a considerable difference in living standards. That is why Severstal group of companies was one of initiators of this research and provided financial support to the program. I would like to tender my thanks to our Finnish colleagues – Esko Aho, Pekka Sutela, the Head of the Bank of Finland Institute for Economies in Transition, for understanding and elaborating the ideas of this research, Antti Helanterä and Simon-Erik Ollus, the authors of the research, Centre for Markets in Transition (Helsinki School of Economics). I am also thankful to Vladimir Mau, President, Academy of National Economy under the Government of the Russian Federation, who showed interest in this program. At present under his supervision Russian scientists conduct the similar research, and Russia is compared not only with Finland, but also with the most developed countries in the world. The research's findings will be published and constitute the next part of this book.

There are two main goals of this project, which has already become international. Firstly, we would like to get a better understanding of the reasons, why our countries are so different. Secondly, by means of initiating public debate about this research we would

like to put the following question to our society: "What is the future way of economic development in Russia?" We believe that a free choice of society should be based on open-minded, objective and unbiased reflection on its past, present and future. Only such choice could make citizens of our country happy and the country itself flourishing.

Alexey A. Mordashov

General Director,

Chairman of the Board of Directors,

Severstal-Group

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The main task of the report is to compare the competitiveness of Finland and Russia. Why should one compare Finland and Russia, who, at least at first sight, have very little in common? Finland is a small country whereas Russia is the largest country on earth by territory. In addition, the political systems of these countries have very few characteristics in common. There are, however, several reasons justifying such comparison.

In the mid-19th century Finland and Russia were lagging behind and had not been industrialised. Finland was part of the Russian Empire and, in that sense, they share a common starting point. Moreover, both have sought to catch up with the (other) Western market economies, Finland even succeeding in that. Second, scholars in the more favourably located countries – and numerous Russian scholars as well – often explain Russia's backwardness and underdevelopment with Russia's geography. Russia has suffered from such a harsh climate and peripheral location that is neither fruitful nor reasonable to compare it with, for example, the countries of the European Union. Compared with its fellow EU countries, Finland can reasonably argue that its geography is also different. Finland offers an opportunity to test the argument of whether unfavourable geographical conditions are an acceptable excuse for underdevelopment. Finland ranks high in the most respective competitiveness rankings, whereas Russia's ranking certainly leaves room for

improvement. Third, the economic growth of the both countries in the post-war area was at least partly based on extensive investments in industry. Capital was used ineffectively.

The conventional view on competitiveness – for example World Economic Forums (WEF), International Institute for Management (IMD) and United Nations Development Programme (UNDP) – stresses the importance of R & D, education, taxation, economic growth, labour cost, political stability, access to financing, minimum corruption and bureaucracy. Using these indicators, Finland succeeds very well. The report describes the history of establishing such a high competitiveness. What are the lessons learnt? And, in particular, what are the reasons for the current high ranking, bearing in mind the deep recession Finland went through in the early 1990s? This study reviews the history of establishing the high competitiveness of Finland, focusing especially on the development in the early 1990s.

In the same competitiveness rankings, Russia performs, at best, only modestly. This study reviews the analysis of Russia's competitiveness, what the main weaknesses are and the prevailing understanding of the reasons for the weaknesses. In addition, we set out to describe the history of those weaknesses – which layers of Russia's history are the weaknesses rooted in?

In the on-going debate about Russia's weak competitiveness, certain perceptions prevail and several arguments are constantly used, and, as a rule, taken for granted. First, the weak competitiveness and lagging behind have been considered the constant faith of Russia. This report focuses on the reason for poor Russian performance and compares it historically with the period in the economic history of Finland. Second, the weak competitiveness has been seen as rooted in Russia's geography. In terms of geography, the argument goes, Russia is highly exceptional and so different from other countries that she has been and is unable to compete. One aim of the study is to challenge the prevailing geographical determinism, i.e. Russia is predestined to under-perform because of the geography.

Finland's geography is also special. The climate is harsh and the location is distant. Of course, a straightforward comparison between

Finland and Russia based on location and physical geography is misleading and of little use. Still, by describing the history of Finland's high competitiveness and adaptation process some remarks can be presented.

The study is organised as follows. The second section analyses the common starting point of Finland and Russia. It briefly canvasses the (economic) history of Finland since the second half of the 1860s.

Finland was part of the Russian Empire for most of the 19th century. True, Finland had an exceptional autonomy and, what is more important for the purposes of this study, a special trade policy regime and room to establish and maintain certain institutions of its own. Still, Finland and Russia had much in common during this period: late but notable industrialisation, peripheral location, etc. Both were also lagging behind compared with other European countries. The section seeks to answer the question of how similar the early steps of industrialisation in Russia and Finland were.

The third section describes the development of the Finnish economy from independence until the late 1980s. The first part of the section briefly describes the development in Finland in the 1920s and 1930s, stressing the rapid re-orientation of foreign trade. The bulk of the foreign trade of Finland pre-1917 was with Russia, but Finland's trade with the Soviet Union was negligible in the 1920s and 1930s. Finland orientated to the west. The section devotes more attention to the post-war period, which is reviewed in the second part. There are two reasons for that. First, it was the period of intensive catching up and establishing the welfare state. Second, it was a period when Finland and the Soviet Union became closely interconnected through bilateral trade. Finland re-established her ties with the Soviet Union and the bilateral trade was of high importance to Finland. Simultaneously, Finland sought to catch up with the industrialised countries of Europe and to establish a Nordic welfare state. The catching up was boosted by a high investment rate in industry and active government policies to maintain the competitiveness of the forest-related and metal industry by devaluations.

However, Finland remained a rather closed economy with limited enterprise-level internationalisation; certain branches of industry dominated and they were devoted more attention, forestry and machine building being the best examples. Towards the end, the section briefly describes certain fundamentals of the Soviet economy. In particular, the very low intensity of internationalisation and cross-border activities of the Soviet economy and enterprises are stressed.

The fourth section focuses on the period of systemic crisis in both Finland and Russia. Why did Finland succeed in restoring the competitiveness while Russia failed to adapt to a completely changed environment? Both were obliged to adapt to a notably more open economy, Finland perhaps inadequately and Russia certainly poorly prepared. Both encountered the global economy but the strategies they adopted had hardly anything in common. Political development and structures are not the main focus of this study. However, they are given more attention in the fourth section to explain the different outcomes of the adaptation processes.

In Russia, the prevailing understanding of the recession in Finland usually stresses the cessation of bilateral trade as a root cause for the recession. There were, however, both external and internal reasons. The mismanaged financial deregulation was the main reason for the recession, but some external factors, including the collapse of the bilateral trade, worsened it. The fourth section describes the Russian transition and the failed adaptation. The last part compares the role and credibility of the State in the recovery processes.

The fifth section focuses on the current competitiveness of Finland and Russia. More precisely, it demonstrates their performance in the New World Economy. Finland conducted adaptation successfully and managed to raise its competitiveness. Finnish industry today is narrowly specialised in high value-added goods, but is competing and operating globally. Further, the bulk of the raw materials are imported, and the major Finnish industrial enterprises are owned globally, not only by domestic shareholders.

Russia's adaptation in the New World Economy has failed, and the process underlines certain differences with Finland. Russian in-

dustry produces a wide range of goods, mostly for domestic markets using domestic inputs and raw materials. Russian industry focuses mainly on low value-added goods, and the ownership of industry is mainly in domestic hands. Special emphasis is given to certain clusters of industry dominating production in both Finland and Russia. Towards the end, the section concludes that differences can especially be found in the role of the State in promoting industry and the infrastructure behind competitiveness. Finland has, throughout its history, built up an able and stable public sector, while in Russia the public sector lacks the credibility to increase the country's overall competitiveness.

The sixth section discusses the differences between the chosen paths of the two countries and summarises the previous sections. The section searches for a wider view on competitiveness and comparison between Finland and Russia. It underlines the fundamental differences in the infrastructure of competitiveness in both countries.

Certain issues are given special attention. First, we focus on the role of the State at different periods in the history. Second, we focus on internationalisation, including foreign trade, technology transfer and FDIs. Third, we stress the importance of stability and different perceptions of stability; is stability something persistent or something that every strong leader establishes?

2.1 SQUARE ONE – TIME TO INDUSTRIALISE

This section focuses on the period of early industrialisation in Finland and Russia. Why do we think it is fruitful for the purposes of this study to focus on the six decades before the First World War and the October Revolution? There are several reasons for this.

First, for both Russia and Finland, the 1860s can be regarded as a clear watershed in their economic history. The industrial revolution and accelerated growth had begun roughly a century earlier in the United Kingdom, followed by other industrial countries like France, Belgium and the United States. During the last decades of the 19th century and the first decades of the 20th century, both Finland and Russia developed rapidly and industrialised, though remained mainly agrarian societies and economies. Both Finland and Russia had been underdeveloped and lagging behind compared with the majority of European countries. During the period under consideration, both developed rapidly and were catching up, narrowing the gap between themselves and the more advanced industrialised countries and societies. We are particularly interested in comparing the catching up in the two countries. What were the differences and similarities? What was the importance of private initiative and State policies in industrialisation?

Second, when observing the Soviet/Russian economy during the 20th century – and especially towards the end of the century – oil and gas dominate any analysis. In the 19th century, however, oil and, especially, gas had negligible importance in the economy. Consequently, the comparison with the 19th century provides an opportunity to study a Russian economy that was not dependent on oil and gas production and exports. In terms of natural resources, and, more generally, the resource base of the economy, Finland and Russia had much more in common in the 19th century than towards the end of the 20th century. Third, Finland had become a Grand Duchy under the Russian Empire in 1809 after being ceded to Russia by Sweden in the peace treaty. Russia was also the most important export market for Finland.

2.2 FINLAND'S INDUSTRIALISATION 1860–1913

2.2.1 The forest sector – the pioneer and flagship

Although Finland had shared a lot in common – in terms of religion and culture – with Western Europe for centuries, she still differed somewhat from the majority of western European countries. Since the 17th century, Finland had been gradually integrating into the market economies of Western Europe. The main export was tar, which was required in vast amounts for sailing ships for both military and civil purposes. The major naval powers – the Netherlands and the United Kingdom in particular – were unable to supply the necessary amount of tar domestically.

In terms of economic development, Finland was different from the most advanced European countries. There are only a handful of other countries in the pre-enlargement European Union (EU-15) that have not had colonies (Greece, Ireland, Luxemburg). While more advanced and favourably located countries developed early capitalist economies through shipbuilding and navigation, maritime insurance and banking, colonial trade and industry, nothing similar happened in Finland. On the contrary, Finland had been

subordinated to Sweden and had served her interests. This had had repercussions in the economic development of Finland, with Sweden blocking the development of some sectors of the Finnish economy. However, Finland possessed the important cornerstones of an emerging market economy: the rule of law and clearly defined private property rights. Becoming the autonomous Grand Duchy of the Russian Empire in 1809, Finland continued to be subordinated to another country. The important institutions continued to exist and function. Still, being a part of the Russian Empire, Finland had no foreign policy of her own and no army to supply and be equipped. Consequently, there was no necessity to establish an excessive metallurgical industry.

The modest industry prior to the 1860s consisted of sawmills and relatively primitive iron production. It has been estimated that the per capita GDP was approximately 40 per cent less than the average per capita in Western Europe. The difference between Finland and Sweden in these terms was approximately 25 per cent.

Apart from industrialisation, the second half of the 19th century was a period of economic liberalisation. It was also a period of national awakening and establishing national institutions. Several important economic institutions had an additional symbolic value. With regard to liberalisation, import and export restrictions were abolished, the import of grain was liberalised, a prohibitive order on the establishment of steam-powered sawmills was repealed, and all limitations on sawing were abolished. The estates were reconvened after an extended adjournment, and Finland gained her own monetary unit (1861–1865). Freedom of business was declared in 1879, the first being of crucial importance to the development of the emerging forest industry. Apart from mere changes in legislation between 1857 and 1864, the 1860s marked a clear shift in ideology and values. The economy was liberalised on many fronts and the stage was open for private entrepreneurs to operate, but the growth in Finland was not stable from the beginning of 1860s onwards – For example, some poor harvests in a row resulted in the last peacetime famine in Western market economies in 1867.

Both fortune and coincidence dictate history. Finland had already exported mainly tar and, to a lesser extent, other forestry goods to Western Europe in the 17th century. Compared with her competitors in sawn wood goods, Norway and Sweden in particular, Finland was distant and virtually non-competitive. Sawing was, however, the pioneer of industrialisation, integrating Finland with Western Europe. Towards the end of 19th century the development of maritime transport equipment cut the costs and changes in trade policy enabled increased sawn wood exports from Finland. Moreover, world trade flourished and industrialisation accelerated in Europe, boosting the demand for forestry goods. The United Kingdom abolished trade barriers and opened its markets for Finnish forestry goods. For example, the import of wood to the United Kingdom tripled during the second half of the 19th century, and Sweden and Finland benefited most from the increase. External changes were important but not sufficient preconditions for industrialisation. Domestic reforms, adoption of new technology and an improved infrastructure were also required.

In the mid-19th century the trading houses were the backbone of export, integrating freights and production. They became increasingly involved in sawmill production, having been predominantly operating in shipping and trade. They had the capital, the experience of foreign trade and the necessary contacts. Apart from the trading houses, the emerging sawmills were founded by new entrepreneurs originating from various backgrounds: nobles, bourgeoisie and countryside establishments.

Apart from the advancement in sawmill production, another major change, or, rather, invention, fundamentally altered Finland's position in the world economy: the discovery of how to produce paper from wood. Although the paper produced in Finland was not competitive in the Western European markets (there were exceptions to the rule), it had a very favourable position in the Russian market. Trade barriers blocked the way of paper imports to Russia from Western Europe, but Finland, being a part of the Russian Empire, was in a favourable position in the Russian market.

The economic growth in Finland since the 1860s was more than the average growth in Europe, and Finland began to catch up the more advanced Western European countries, although still lagged behind. The economic growth until the 1890s, however, was predominantly extensive and based on an increased labour force. The growing forest sector strongly linked Finland to Sweden and Norway but in terms of urbanisation and the dominant position of agriculture, Finland had more in common with Russia. However, Russia only achieved the level of Finland in 1860 by 1890.

The industrialisation was very much based on exports. Domestic demand was limited and producing for the domestic market did not offer the benefits of large-scale production.

The importance of forestry and sawn wood in particular was crucial for growth and catching up in Finland from the 1860s onwards. The role of private entrepreneurship was important. The emerging industry was predominantly financed by domestic capital, with the exception of limited foreign capital acquired by the trading houses. In 1885 units owned by foreigners accounted for only 16 per cent of the production of sawmills. Although the industry was owned by domestic enterprises, the entire industry was strongly linked to foreign markets. Forest goods accounted for the lion's share of Finland's exports and most of the domestic capital originated in foreign trade; the expansion of industry was based on export demand and foreign traders in the export markets played a crucial role in the foreign trade.

The three major trading partners were Russia, Germany and the United Kingdom. The exports to Russia consisted mainly of machinery (80 per cent in 1880) but the proportion of paper increased, especially towards the end of the period. Russia's emerging metallurgy superseded Finnish goods in the Russian market. Russia mainly imported grain from Finland. Towards the end of the century, and especially at the beginning of the 20th century, the competition in the Russian market became harsher and Finland's position weakened. This, in turn, stressed the importance of the western orientation of foreign trade consisting of lower value-added goods.

Finland did not attract many foreign investors. It was a distant country, there was an absence of abundant natural resources, and the market was small. The level of know-how was also relatively low.

Although the industry was mainly owned domestically, the bulk of the technology was from abroad. There were two ways to improve the level of technology. First, advanced technology was acquired from abroad, and, second, foreign experts moved to Finland to assist with the adoption of the new technology. During the early days of the industrialisation, virtually no technology was invented in Finland. The required technology was imported and only gradually did the domestic machine building industry improve its performance. Finland lagged behind Sweden and Norway in sawmill production and new technology was adopted cautiously. Finland learned by doing, gradually adopting the required technology. The technology for sawmills in the late-19th century was mainly of domestic origin.

Because this study devotes some attention to the telecom sectors, it is useful to shed light on the early stages of its development. The Grand Duchy of Finland sought to get the telegram infrastructure and use under the jurisdiction of the Grand Duchy authorities, but failed because Russia preferred to control it for military purposes. To avoid the Russian control of the telephone network, Finland decided to confirm separate legislation on telephones and to keep the sector in private hands. This decision resulted in a high attraction to the sector from the very beginning.

The first telephone connections were constructed in Finland in 1877, only a year after Bell invented the telephone. Bell, Ericsson, and Siemens & Halske have been operating in Finland since 1881. Since then, the telecom sector has operated under severe competition. Consequently, success in the market has required the most up-to-date technology and a strong orientation to meeting customer demand.

Finland's competitiveness during industrialisation and the conquering of Western markets was based on abundant resources (forests) and a relatively cheap labour force. Finland was lagging behind Sweden and Norway in terms of the technology used, and

Russia can also be regarded as a major competitor, especially in sawn wood goods. Russia's share of the total sawn wood exports to Europe was a modest 3 per cent in 1860, but it increased substantially and was almost fifty per cent in 1910. There were even more abundant resources and a cheaper labour force in Russia. Compared with Russian sawn wood goods, however, the exports from Finland were technologically more advanced. Finland learned by doing, and was obliged to improve her performance to succeed in the European markets.

2.2.2 The State and the private sector – who made what?

Although the story of industrialisation in Finland presented here is sketchy and far from complete, some conclusions relevant for later comparison with Russia can be drawn. When industrialisation started, Finland was a poor, peripheral and agrarian piece of land subordinated, and having been subordinated, to a larger neighbouring country. But Finland possessed forests, a natural resource already exploited in the first-wave industrialised countries. The systematic commercial use of forests started with the sawmill production. The urbanisation and accelerating industrialisation in Europe required increasing amounts of wood, and Finland, together with Norway and Sweden, were the most obvious countries to meet the demand. Due to her distant location and technological backwardness, Finland had to rely on her cheaper labour force and gradually develop more advanced technology.

Exports and foreign trade were obviously the driving force of industrialisation. The export demand generated the cash flow to enlarge activities domestically. Moreover, the technology used was predominantly of foreign origin, especially during the early stages of development. The limited domestic market did not offer any of the benefits of large-scale production. The narrow specialisation required the world market to boost demand.

There must have been a clear understanding from the very beginning that Finland could not dictate the rules of the game. Instead,

she had to adapt to meet the requirements of her main markets. Being a latecomer to industrialisation, she had the opportunity to adopt technology invented elsewhere. Domestic technology was only gradually invented, but it focused on the strong sectors of the industry.

Finland did not possess colonies or coal, and the iron ore deposits were of poor quality and of diminutive quantity. These goods, however, had been regarded as an unavoidable precondition for industrialisation in advanced Western European countries.

Although the export income was modest at first, the spillover effects were significant and, what is more important, were being dispersed throughout the country. It has been estimated that up three-fifths of the sawn wood export income went to the countryside, two-thirds to the peasants/forest-owners, and one-third to their employees, boosting rural development and having a remarkable impact on income distribution.

Industrialisation and the rise of the sawmills co-existed with the national awakening, and there was a strong incentive to develop industry to strengthen the nation's economic foundation. Moreover, industrialisation fundamentally changed the structure of a pre-industrial society based on excessive privileges as the government paved the way for private entrepreneurs to compete in the liberalised market. The government was not, however, deeply involved in the emerging sawmill industry itself.

However, the government did actively contribute to the economic development. The backwardness of the transport infrastructure was an important bottleneck hindering economic development. Construction of railways and inland waterways and logistics more generally required an active State involvement. This was an obvious necessity in a country with a sparse population and dispersed raw material for its major industry.

Although the government improved the infrastructure and approved the necessary legislation, the development of industry, and the forest sector in particular, was based on private, mainly domestic, initiative and capital. The crucial State institutions were founded

and the necessary legislation approved, but the State involvement in the economy was limited. The State focused on establishing a legal framework to serve the interests of the emerging industries. In addition, the foundation of a Western market economy – the rule of law and private property rights – existed before industrialisation started.

2.3 RUSSIA'S INDUSTRIALISATION 1860–1913 THE STATE IN CHARGE

Russia had caught up in terms of the development of industry during the era of Peter the Great, when the development of industry was promoted by active State policy. Russia succeeded in developing her industry to challenge other European countries militarily. During the previous two or three centuries, Russia had carried out a massive expansion of her territory and colonised large parts of Europe and Asia. This expansion had required huge resources and, in order to concentrate those resources, an authoritarian government. During the late 18th and early 19th century, however, a growing gap emerged between Russia and her rapidly industrialising European competitors. Russia was one of the European superpowers politically and militarily. Still, it was a combination of economic underdevelopment and the status of a great power.

Russia had been defeated in the Crimean war in 1856. The war revealed the backwardness of her industry and the transportation network, and the urgent need to reform the economy was acknowledged. Without a more effective economy, Russia was almost certainly going to stagnate and lose her status and political influence. The strengthening of the economy was a means to achieve something, i.e. to maintain the superpower status. To improve the living standards of the people was, at best, a secondary goal.

In an important attempt to modernise Russia, serfdom was abolished in 1861. True, the economic structure of the agriculture did not change overnight – it took decades for the changes to become discernible – but the abolition of serfdom had its impact on the en-

tire economy and society. Almost simultaneously, there were efforts to modernise and reform the administrative and judicial systems. It is worth stressing that there was a simultaneous effort to accelerate economic development and industrialise, and to establish the necessary institutions.

Rapid economic growth only took place in the 1890s, when the growth was enabled by a set of government policies, an influx of foreign investment, and a transfer of resources from agriculture to industry. The most important sectors of industry were textiles and metallurgy. Although Russia possessed a vast number of forests, there is very little about forests and forestry in Russia's economic history. The expansion of domestic heavy industry was promoted by a number of State policies, including protective tariffs, tax reductions and government orders at high prices, to ensure domestic demand. The nature of the State intervention was not only supportive. On the contrary, the bureaucracy found it difficult to sit on the sidelines and preferred to meddle in the economic affairs and keep the economy under public control and scrutiny.

The metallurgical industry had started in the Urals and was given high priority during the time of Peter the Great: at the beginning of the 19th century Russia was among the most important producers of iron in Europe. Before the outbreak of the industrial revolution in the West, the iron production in Russia was relatively competitive. The advancement of technology in the West ruined the competitiveness of the Russian production and more than half of the iron and steel consumed in the 1870s was imported. The metallurgical production located in the Urals was not renewed when the industrial revolution skyrocketed the production in the United Kingdom and elsewhere in Western Europe.

The metallurgical industry was highly dependent on State policies for several reasons. First, it had been strictly regulated and had even been put under the military administration in 1854. Several production units were owned by the State. Second, it relied on State orders for its demand. The construction of the railways required huge amounts of iron and steel, and during the peak period of rail-

way construction the domestic production capacity could not meet the demand. Later, during the rapid development of industry before the outbreak of the First World War, the State orders to supply the army accounted for a large part of the demand.

A new metallurgical base emerged in the south during the 1880s, increasing the domestic production, and Donbass and Krivoi Rog became the new centres of production. From the beginning it was technologically more advanced than the Urals basin. The development of the production in the south attracted major foreign investments and investors. By the end of the 19th century most of the production in the south was produced by foreign-owned enterprises. The picture of exports and imports changed dramatically in the 1880s, when only one-fourth of the consumption was imported. Trade barriers had encouraged foreigners to establish production in Russia.

During the early stages of industrialisation both Finland and Russia exported low value-added goods to Western markets – Finland sawn wood and Russia agricultural products, mainly grain. Compared with Finland, the role of foreign trade in Russia was not that important. The main sector of industry – metallurgy – produced mainly for the domestic markets, not for exports. The most important import items were certain raw materials (especially cotton), consumer goods and machinery.

Capital formation was heavily dependent on the State. Apart from foreign capital, the role of the State as a prime mover in capital accumulation cannot be ignored. Still, the basic resource allocation was market-driven. Witte explained the constant and severe deficit of capital by the vast territorial expansion and the resources required for such expansion. Constant expansion and the vast sums required for establishing the infrastructure – railways being the best example – called for foreign investments. The sums required could not have been found inside the country. The larger the territory, the more difficult it was, and has been, to find the financial resources to exploit it.

It has been estimated that as much as half of the investments in 1881–1913 were foreign. The importance of foreign investments

certainly cannot be measured in monetary terms alone. For a backward country like Russia, new skills and know-how were at least as important. They had a clear positive impact on the economy on at least four fronts. First, they provided capital that was otherwise unavailable. Second, they mobilised domestic capital. Third, they implanted foreign technology. Fourth, they revised domestic attitudes towards entrepreneurship, certainly a weakly developed phenomenon in Russia.

2.4 COMPARING THE FIRST STEPS

There are important similarities and differences in industrialisation in both Finland and Russia. The structure of exports to Western markets was quite similar, consisting of both raw materials and other low value-added goods. Sawn wood was the main export item from Finland while Russia exported mainly agricultural goods. They both imported machinery. The machine building sector developed gradually in both countries and was dependent on domestic demand and markets. In Russia there was no necessity to export; to meet the domestic demand was more important. Consequently, only a vague perception of competition in foreign markets emerged.

Several important differences in industrialisation can be stressed. It seems to be clear that the industrialisation in Finland was predominantly based on private entrepreneurship and risk-taking, whereas in Russia the industrialisation was more a top-down process governed by the strong State intervention and policies. True, the Finnish government was active in promoting industrialisation but had no means or resources to govern the entire process or to be directly involved. On the contrary, the State was almighty and only a limited amount of (domestic) private initiative was tolerated in Russia. The major incentive for the industrialisation in Russia was to strengthen the Empire and restore and re-establish its military strength. In Finland, the incentive to strengthen the army was not an option.

The picture differs concerning foreign investments too. Their importance has been perceived as very important for Russia, whereas

their role in Finland was less important. This holds for at least the major sector of the industry in Finland – sawmills and forestry – whereas the metallurgy was, to a large extent, foreign-owned in Russia.

Finland inherited important institutions and established more. The rule of law, private and clearly defined property rights existed before the industrialisation started. In Russia, there was an effort to establish and fundamentally reform several important institutions simultaneously with industrialisation. The efforts to liberalise the economy met stiff resistance and the stability of the society and economic system was re-established by a top-down control. The structural changes in society were by-products that shook the foundations of the Empire. Towards the end of the period, Russia was mix of vague market economy institutions and strict top-down control.

One more difference must be stressed. The privately owned forests had a profound impact on income distribution in Finland. They channelled export income to a large number of households. In Russia, the most important sector of industry was based on concentrated raw materials. The ownership of natural resources – deposits – was also concentrated. As a result, the spillover effects remained limited.

Russia possessed abundant forest resources but the forest sector never gained such importance. It seems it was not given high priority because it did not serve the initial goal of the industrialisation: to increase the military might. Metallurgy was far more important from the army's point of view. The forest sector might have generated export revenue but Russia was not dependent on it. The economy was to be strengthened by mobilising domestic resources.

3

The acceleration of industrialisation: Finland, the Soviet Union and the extensive growth

3.1 FINLAND BEFORE THE WAR – ADAPTATION AND RE-ORIENTATION

Finland's position changed substantially on several fronts after the First World War. During the war, the peaked demand in Russia for all industrial – including machine-building – goods had resulted in a record demand for Finnish goods as there was no access to the markets of Germany and Great Britain. The very unstable situation in Europe during and after the First World War was a great challenge for Finland. The main export market for paper – Russia – was closed and the post-war chaos in the West brought the forest sector to a halt. Once again, able entrepreneurs, coincidence and fortune dictated the recovery.

The rebuilding and recovery in Western Europe meant that a massive demand for wood appeared. Although Sweden was more flexible in taking advantage of the peaked demand, Finland was also able to restart its exports to Western Europe and exports developed favourably. Approximately 90 per cent of the sawn wood production went for export. Between 1920 and 1928 the production of sawn wood doubled. The Soviet Union was absent from the sawn wood goods market in the early twenties and only returned to the market towards the end of the decade.

The paper industry was in a more difficult situation. It had been dependent on the Russian market, which was closed. Compared with Sweden and Norway, Finland had a modest tradition of paper exports to Western Europe. Finland started to conquer the markets by using the strategy of a low-cost producer gradually achieving bridgeheads. Low labour and raw material costs, as well as the devaluation of currency, enabled the successful development. Finnish companies had found it difficult to meet the quality requirements of the Western markets but rapidly improved their performance to meet the demands. The major players in the world paper markets were Canada and Germany. Finnish companies were even smaller than their Scandinavian counterparts. Still, the post-war situation and the demand were enough reason for the Finnish companies to find new markets to replace the lost Russian market. The most important contributor to the finding of new markets and adapting to the changed environment was the initiative of private companies rather than State-driven policy. One more thing deserves to be mentioned. During the aftermath of the war, Finnish companies founded a joint marketing organisation – Finnpap – to pool their limited resources, globally an original and exceptional form of organisation.

Several other branches of industry had been forced to withdraw from the Russian market and were unable to find alternative export markets for their produce. Consequently, they focused on the domestic market. The Russian market had been virtually the only export market for the machine-building sector and it was obliged to focus on the domestic market. Fortunately, the capital stock of both industry and agriculture required investments, and the industry was able to find sufficient domestic demand for its produce.

Moreover, the State generated substantial demand for metallurgy and machine building. Independent Finland now had an army to be equipped. The production of transport equipment, shipbuilding and other branches of industry benefited from the State orders. The expanding railways had to be equipped. The machine-building industry as a whole was able to improve the technological level during

the remaining inter-war period, even though it was predominantly oriented towards the domestic market. Towards the end of the inter-war period, the machine-building industry was able to find some export markets in the West for its produce, though modestly at first. Success was often based on innovation and high quality.

Some mining enterprises were also established and, due to the Outokumpu copper mine, Finland became an important producer in Europe. But the machine-building sector was still dependent on imported raw material. Due to the orientation of machine building, textiles and several other branches of industry towards domestic markets, 60 per cent of the value of industrial production was for the domestic market.

Exports were based on narrow specialisation during the inter-war period. Finland was among the largest of the world's producers of forestry goods – being the largest producer of veneers and rolls – and exported paper to the entire world. Consequently, it was crucial to use all available means to promote the forestry exports. Trade policy measures were used to ensure access to the most important export markets. The competitiveness of the paper industry was good and Finland was the only country in the world in which the production increased every year during the inter-war period. The productivity per worker doubled.

The fundamentally altered environment required flexibility and adaptability. It is hard to assess the importance of State involvement in the adaptation. The rather successful adaptation and the favourable development of the economy during the inter-war period cannot be explained by any single factor. Neither successful State policies nor private initiative alone were the reasons for the success.

Finland adapted to the new environment rather successfully. She was obliged to focus on narrow specialisation in foreign markets during the inter-war period and the forestry sector accounted for the vast majority of the exports. At first, Finland was a low-cost producer adopting technology invented elsewhere and conquering new markets for her forestry goods. The forest sector only gradually shifted to domestic technology. The machine-building industry

focused on the domestic markets – including forest sector equipment – and only very modest export appeared towards the end of the period. The machine-building industry invented technology suitable for domestic conditions. The ownership of industry was predominantly in domestic hands and investments were made by domestic funds.

The importance of the forest sector was widely acknowledged, and the State supported the development. On the other hand, the major burden of constructing and implementing strategies was on the enterprise level. Although several crucial institutions had been developed during the Grand Duchy period, the inter-war period represented a certain sense of economic patriotism. The new Independent Republic had become a Sovereign State and its economic fundamentals needed to be strengthened. Finland succeeded, and the economic fundamentals were strengthened. Prior to the Second World War, Finland had reached at least the average level of development in Europe.

There are important fundamentals that did not change when Finland became independent and, compared with majority of European countries, the political development was stable and the democratic system was maintained in the otherwise stormy 1920s and 30s and the rule of law prevailed. The private ownership was maintained and property rights were left untouched. These elements of stability accompanied by hard work enabled the adaptation.

3.2 THE SOVIET UNION – TO INDUSTRIALISE AT ANY PRICE

Although the economic development of the late Tsarist decades resulted in rather rapid and favourable economic growth, and, in particular, favourable development of industry, Russia was still a predominantly agrarian country after the March and October Revolutions. After some turnarounds in economic policy, namely War Communism and the NEP period, the administrative command economy arose in the late 1920s. Three major changes took

place. First, widespread nationalisation was conducted. Second, agriculture was collectivised and, third, the centralised planning was introduced. From the very beginning the economic system was set out to industrialise the Soviet Union and allocate vast investments to industry.

The vague elements of a market economy established during the late Tsarist era were ignored and a completely new system was to be constructed. Again, accelerating growth was a top-down dictated process and carried out in an extremely brutal way. Moreover, to industrialise the country completely, new institutions were established and previous ones abolished. No private initiative was allowed. There certainly was stability in the system, but it was based on fear and control. The stability of the system and institutions were based on a top-down control. All the individuals and production units were subordinated to the needs of the planned economic system. No decision-making competence beyond this subordinated structure was tolerated. The property rights and political power were strictly in the same hands.

The priority sectors of the industry were the sectors required to strengthen the military capacity: oil, coal, ferrous and non-ferrous metallurgy and machine building. In addition, vast investments were made in the infrastructure: electrification, railroads and inland waterways were constructed. The investments were conducted at the expense of consumption. There was a strong prevailing perception that a high investment rate is an unavoidable precondition for economic growth. The results of the industrialisation were indeed impressive. The volumes of production of major raw materials like iron ore, coal and oil at least doubled during the period of the first five-year plan. In addition, the volumes of production of machine building increased manifold.

The Soviet Union under Bolshevik rule and planned economy turned inwards, isolating herself from world trade, although not completely. Dependency on imports was considered adverse. True, the trade continued, but in a strictly controlled way. Consequently, there was a necessity to replace imported raw materials with do-

mestic ones. These were to be found in the Soviet territory. As an important part of the planned economy, a territorial expansion of economic activities started.

To able to defend itself against foreign threats, the weak agrarian economy had to be transformed into a strong industrial one, at any price. Again, the incentive to accelerate economic growth and industrialisation stemmed from the need to catch up with more advanced countries and strengthen the international position. Moreover, the obvious need to improve living standards was not given priority. There was a similar need to strengthen the economy of Finland, but the living standards rose as well.

To catch up with the more advanced economies, the industry had to be equipped. Because the domestic production of machinery was not at a sufficient level, the machinery had to be imported. The crucial imports of machinery were financed by exporting raw materials. The main items for export were oil and forestry goods. Grain and other agro-food goods were also important. Finland and Russia were competing in round-wood exports and sawn wood goods. In Finland, the countryside benefited from the forestry and export income, whereas in the Soviet Union brutal measures were used to extract the surplus from the countryside and agriculture to accelerate the growth of industry. The forced industrialisation repressed the domestic population and the important exports of agro-food goods did not benefit the producers of those goods. The same holds for the producers of forestry goods.

The impressive growth in industrial production during the first five-year plan was, to a large extent, based on imported technology and foreign know-how. For example, the Soviet Union accounted for 31 per cent of the world's total machinery imports in 1931. The proportion of imported machinery fell substantially during the second five-year plan. Then, the machinery imports were concentrated on narrow segments, on the equipment the Soviet industry could not produce. By 1937, the bulk of the tools of industrialisation were domestic, including arms production. Knowledge transfer took place through machinery imports and a limited number of

specialists of foreign origin. Enterprises were owned by the State, a significant change compared with Tsarist era, when the most advanced units of metallurgy were at least partly owned by foreigners. Moreover, the movement of people was strictly blocked. The volume of interaction between the Soviet people and foreigners was negligible.

3.3 COMPARING FINLAND AND RUSSIA

Compared with the first steps of industrialisation, there are now fewer similarities. Both countries were obliged to adapt to a fundamentally altered environment. Industrialisation accelerated both in Finland and the Soviet Union, but other similarities are indeed limited. In Finland, very few things changed inside the country. The economic development continued to be based on private enterprises. The institutions established during the previous century or earlier during the Swedish rule continued to regulate the economy. The changes in the external environment required adaptation, but because the domestic structures remained mostly unchanged, Finland was able to adapt and the recovery was quite rapid.

The adaptation of the Soviet Union was based on the opposite. Very few things remained unchanged. The external environment obviously required adaptation but the challenge was tackled by changing virtually everything. Once again, there was a simultaneous acceleration of industrial production and establishing new institutions to regulate and govern the economic development.

The rapid industrialisation and growth in production was implemented under strict State control, not relying on private initiative or risk-taking. The Soviet economy was not totally isolated from the world economy, but the interaction was strictly controlled. It was a different picture in Finland. The recovery and adaptation were based on private initiative, and foreign trade was a major constituent. The State was aware of the limits of its competence. In the Soviet Union, there were no limits to the State's competence.

3.4 FINLAND AFTER THE WAR – WESTERN EUROPE CAUGHT UP

3.4.1 Industry – a high priority

The post-war period has been the final step in Finland's route to becoming one of the industrialised countries of Western Europe. In the late 1940s Finland was still a predominantly agrarian country lagging behind its Western European counterparts. The growth of industry was rapid from the 1950s to the 1970s. In the 1970s the per capita GDP of Finland was already above the average of the OECD countries. This section sets out to shed light on the post-war economic development, particularly on the development of industry. The period also demonstrates the change to a more open economy, when Finland became an increasingly foreign trade-oriented country.

Finland was one of the three countries in Europe to have taken part in the war and not been completely occupied. She lost approximately 10 per cent of her territory, and 10 per cent of her industry had been located in the ceded territories. The people displaced from the ceded territories had to be relocated and supplied with housing and other minimum facilities. A major burden on the economy were the reparations that Finland was obliged to pay to the Soviet Union in accordance with the peace treaty. Still, compared with other countries that took part in the war, the capital stock of Finland was not substantially destroyed. The operating environment changed fundamentally again and Finland encountered challenges. Finland survived well and was able to find the ways and means to develop and to establish the welfare state.

The economic growth was based on extensive investments in industry, and its development was given a high priority. The annual growth in industrial production was 6.2 per cent in the 1950s, 7.1 per cent in the 1960s and 4.3 per cent in the 1970s. The average annual growth between 1948 and 1979 was 5.8 per cent. The size of the labour force increased, but less than productivity. The necessity to compete internationally was the main factor contributing to

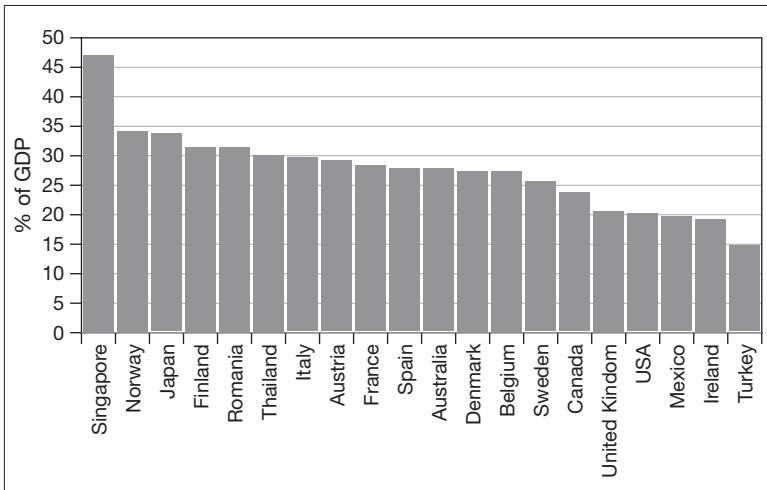
the improved productivity. The opening up of the economy lead to challenges, and not all enterprises or even entire sectors could stand the competition. The liberalisation of foreign trade boosted the development of some industries but also revealed weak sectors.

An important part of the post-war economic development was the bilateral trade with the Soviet Union. In fact, it was rooted in the reparations. The reparations accounted for 5–6 per cent of GDP at the end of the 1940s and approximately 2 per cent in 1950–52. The value of the compensation was 28 per cent of the commercial exports during 1945–1949. The reparations were both a curse and a blessing. Because of the compensation, Finland was obliged to allocate resources – both capital and labour – to metallurgy and machine building. It remains unknown whether the goods taken/exported to the Soviet Union as part of the compensation would have found markets in the West. Although the compensations were not commercial exports, the machine-building industry was obliged to quickly adapt to the altered environment. The production capacity had to be changed to produce the goods required by the Soviet Union. On the other hand, the commercial machinery exports to the Soviet Union, which were negligible during the inter-war period, were started in 1951 simultaneously with the still on-going reparations, and an important part of the economy of the post-war period – exports to the Soviet Union – started.

The forest industry had been virtually the only branch of industry competitive enough to export during the inter-war period. The compensations meant that another branch of industry able to export emerged, although initially only modestly and predominantly to the Soviet Union. The dependence on the Soviet economy and, more generally, on the entire political system emerged.

During the war, Finland had been obliged to virtually totally mobilise the domestic resources, because foreign trade had been substantially reduced. It was very difficult for a small country to survive without foreign trade seeking to produce all the goods required. Compared with the inter-war period, the State involvement in the economy increased between 1950 and the 1980s, a certain continu-

Figure 3.1 Selected countries average investment rate 1960–1990



Source: Penn World Table

ation of the wartime policies. Accelerating the growth of industrial production was perceived as requiring active State governance. The State took the initiative in promoting the growing industries and to assist them with investments. Several large State-owned enterprises were founded. The investment rate was higher than the average of the OECD countries between 1950 and the 1970s. There are several explanations for that. First, Finland urbanised and industrialised later than many other Western European countries. Second, in a country with a sparse population, relatively long distances and a harsh climate, constructing infrastructure requires large investments. Third, the industries given priority were capital-intensive, requiring excessive investments. Investments were predominantly financed by domestic savings.

The State policy had an impact on the economy on at least two fronts. There was a clear incentive to promote the development of industry at the expense of consumption. Whether the efficiency of capital use was high enough is currently being debated. In addition,

several State enterprises were founded during the period. With regard to the locations of these enterprises, regional policy issues and promoting the development of the least favourable regions was given priority. However, from the very beginning, the policy was that State-owned enterprises must compete on an equal basis with their private counterparts. Although there were several State-owned enterprises in the economy, the decisions concerning resource allocation were made by private enterprises and individuals. Moreover, because the bilateral trade with the Soviet Union was of high political importance, political involvement at the highest level was obvious concerning the trade with the Soviet Union.

Simultaneous with the growth in industry, the Nordic welfare state model extended the social sector and had a larger and larger impact on the distribution of income. The stable economic development enabled the development of the welfare state, with an excessive public sector including health care, social benefits and safety nets. Among other things, it guaranteed free education, including higher education, for all. The State was more involved in the industrial policy during the post-war period than it was before the war. Similarly, the emerging welfare state increased the public sector's share of the GDP. A tripartite system was introduced to develop the essential structures of the welfare state. The system – often called consensus – included the government, the trade unions and the employers' representatives. No major decisions concerning social safety nets and labour market legislation were accepted without the approval of all three.

3.4.2 Foreign trade and internationalisation

Finland's domestic demand was still modest, and the growth had to be generated by exporting. Exports increased continuously and substantially during this period. The proportion of exports in the GDP has been at least 20 per cent since the war, although a reduction has taken place with the proportion of approximately one-third in the early 1980s decreasing to 23 per cent by 1991.

The dynamics of foreign trade can be divided into two sub-periods. First, there was a period of regulated foreign trade from 1945 to 1957. After that, since 1958, foreign trade has gradually liberalised and Finland has integrated with the world economy. To be able to export, it was of crucial importance for Finland to ensure access to the most important export markets in Western Europe, and Finland joined the European Free Trade Association (EFTA) in 1961 as an associated member. In doing so, Finland ensured equal access to the important markets of the United Kingdom. Simultaneously, Finland signed the FINN-EFTA agreement with the Council of Mutual Economic Assistance (CMEA) to guarantee equal access to CMEA members. These two agreements typify Finland's policy of ensuring access to Western markets and the necessity to balance the steps of integration with the West by making similar and simultaneous agreements with the socialist countries. When Denmark, the United Kingdom and Ireland joined the EEC in 1973, Finland signed a free-trade agreement with the European Economic Community (EEC).

The exports became substantially more diversified during the post-war period. The change did not, however, take place overnight. In the 1950s, apart from the machine-building exports to the Soviet Union, the structure of Finland's exports resembled the pre-war structure, the forestry exports dominating. Joining the EFTA contributed to a substantial change in the structure of the exports.

From the viewpoint of the diversification of the structure of the exports, the most important change was the increased exports of machine building. In the 1950s the EFTA agreement opened the Western European markets. On the other hand, mutual trade liberalisation forced machine-building enterprises to compete in the domestic market as well. But the domestic market was limited in size and Finnish enterprises were strong there. To conclude, the more diverse structure of exports began to develop gradually from the 1950s to the 1970s. First the machine building sector and then electronics emerged as the second and third cornerstones of exports – amidst forestry.

Foreign trade was the main dimension of internationalisation. Both the inflow and outflow of investments remained negligible until the mid-1980s. The same holds for the acquisitions made by Finnish enterprises. There were some minor exceptions to the rule. There were also obvious reasons for the modest internationalisation: the outflow of capital remained strictly regulated. The same holds for the foreign ownership of Finnish companies. Prior to the 1980s, industry produced in Finland but had very few production units abroad. The paper industry had its worldwide marketing organisation abroad but it predominantly produced in Finland. Attitudes towards internationalisation gradually changed in the 1970s and, particularly, the 1980s but the first efforts to industrialise by acquiring assets abroad failed.

3.4.3 Two pillars of industry: forestry and metals/machine building

The forest sector had been the most important branch of industry ever since the first steps towards industrialisation. The sector remained the most important after the war, but the exports became more diversified. Still, the forest sector accounted for approximately 85 per cent of exports in 1950.

Ten years later, the forest sector accounted for one-half of the exports. The proportion continued to decrease, being 40 per cent in 1970. There were also structural changes in the exports. In 1950 sawn wood goods accounted for 31 per cent and plywood/veneers for 13 per cent of forestry exports. At the same time, pulp accounted for 30 per cent, and paper, paperboard and converted products for 26 per cent. The change towards more value-added goods continued throughout the post-war period. In 1980 sawn wood goods accounted for 22 per cent of exports and plywood/veneers for 10 per cent. Pulp accounted for 7 per cent of exports, and paper, paperboard and converted products for 6 per cent, 24 per cent and 23 per cent respectively. The change towards more value-added goods in forestry continued, and even accelerated, throughout the 1980s and 1990s.

During the 1980s the paper and pulp industry continued to produce mainly in Finland. The first steps in internationalisation, and, in particular, in establishing production units abroad, were taken in the 1980s. Enterprises were domestically owned and the number of employees overseas was limited.

The interdependence between the State and the flagship of its industry resulted in a special relationship. It was important from the State's point of view that the (most) important export sector was competitive. On several occasions, Finland devaluated her currency to restore the competitiveness. Due to the devaluations, Finland went through a continuous cycle of devaluation-inflation and it is hard to argue definitely whether any sustainable benefits in terms of competitiveness were achieved. Apart from the devaluations, the State looked after the interests of the forest sector on several additional fronts. First, the efficient raw material supply required vast investments in the infrastructure. Second, the paper and pulp industries are capital intensive and the State policies sought to ensure the availability of capital for the investments. Finally, trade policy measures were used to ensure access to the important export markets.

What is important in connection with the formation of the entire forest cluster is that the forest industry increasingly used domestic technology, providing the machine building and engineering sectors with good references. Furthermore, the success of the industry resulted in accumulated know-how, and this, in turn, provided markets for forest-related consulting.

The competitiveness of the forest sector required large investments in the infrastructure. The fragmented ownership of the forests resulted in a fragmented allocation of export income. The individual forest owners benefited from the forest sector exports, and this had an important impact on income distribution. The income was of particular importance for peasants/farmers, who were able to invest in agriculture. Furthermore, every forest owner had an incentive to look after his forests. The roots of the current competitiveness of the forestry industry are in the policies and measures carried out during

previous decades, not only by the State but also by enterprises and individual forest owners.

The metallurgy and machine-building sector rose to challenge the forest sector as the only flagship of industry. Although there were slight elements of competition between them, their success has been an obvious win-win concept. Strong links have existed between them, paper mills being the best example. The first paper mill produced in Finland was exported to Czechoslovakia in 1948.

The conditions in Finland in the aftermath of war were not ideal for the development of metallurgy and machine building. The production capacity had been converted to supply the army and it had to be re-converted to produce civil goods after the war. Development requiring adaptation continued during the post-war period. The domestic market opened up for competition and there was competition in the export markets as well. After the war there was a deficit of energy, raw materials and capital. They had to be replaced with innovations.

The overall development, and the development of competitiveness in the sector, can be reviewed in two parts. First, there is the metals industry, including mining and the first stages of adding value. Second, there is the mechanical engineering and electrotechnics industry, characterised by technological inventions.

The proportion of mining in the total production of the metallurgy and machine-building sector was modest at the beginning of the 1950s. The proportion increased, however, in the 1950s and 1960s when new mines were opened. The metals production in Finland had been dependent on imported raw material supplies, and prices were high in the world market at that time. Partly for this reason, a decision was made to found new State-owned enterprises to extract the deposits and produce metals.

The general strategy of the metallurgical industry was to adopt technology invented elsewhere and to gradually establish domestic know-how. A cluster of mining technology was only developed gradually. The improved competitiveness and success of the cluster have been explained by intensive links between the parent industry,

subcontractors, and universities focusing on R & D. Because the volume of mining was modest, the producers of mining equipment were obliged to orientate to exports, as there was not enough demand in the domestic markets.

The pioneer of internationalisation in the metals production was Outokumpu. They acquired mines to ensure the supply of raw material. The mines opened in the 1950s were being depleted in the 1970s and the mining industry was increasingly obliged to supply its raw material needs by importing. The depletion of mines continued towards the end of the 1980s and the need to ensure raw-material supply from abroad became a necessity.

The post-war period, with its strong orientation to exports, was a new era for the machine-building sector. After the reparation period its proportion of exports was a modest 15 per cent. Towards the end of the 1970s the proportion had increased to approximately 35 per cent. In the late 1980s machine building, together with metallurgy, became the most important export sector, superseding the forest sector. Then the proportion of exports exceeded 40 per cent.

Certain flagships of the machine-building industry have had strong links with forestry. During this period the producers of machinery and technology for forest industry began to conquer the world markets. Paper mills represent technology for the final stages of the value-added chain in paper production. Finland's proportion of paper mills' production in the world market gradually increased between the 1950s and 1980s. Harvesters represent technology for the first stages of the value-added chain. Apart from the forest sector, several branches of machine building were based on the special technology invented for the harsh climate conditions – icebreakers being the best example.

The metallurgical and machine-building industries well demonstrate the development of industry more generally. There were very different enterprises. First, there were enterprises originating in the early stages of industrial development. Initially they had produced for the Russian and domestic markets, continuing to produce for

the domestic market in the 1920s and 30s. During the war they produced for the army. After the war they were re-oriented to produce for reparations and continued to export to the Soviet Union within the bilateral trade. Second, there were State-owned enterprises founded during the post-war period. They had been instruments in the industrial policy and were founded to extract domestic deposits and boost regional development in the least developed peripheral regions. Third, there were numerous new enterprises emerging from the individual innovations and risk-taking.

The metals production and machine building internationalised slowly. For the most part they produced in Finland and exported their goods abroad, and were owned domestically. The change only started in the 1980s. However, the importance of the Soviet market was high throughout the entire post-war period. The production of several important goods was planned to function within the bilateral trade system and to supply the Soviet Union with machinery.

An important change took place in the early 1980s when a decision was made to boost high-tech production. The machine-building industry is a demonstration of the improved level of technology. The now crucial electronics and high-tech clusters have their roots in many parts of the machine-building industry. The strong high-tech cluster began to emerge relatively late. At the beginning of the 1980s the proportion of high-tech exports was markedly lower than the OECD average and Finland was a net importer of high-tech goods. Some important decisions were taken at the beginning of the 1980s to promote the high-technology industries. In 1982 the government decided to increase the R & D share of GDP from 1.2 per cent to 2.2 per cent over ten years. Moreover, the National Technology Agency (Tekes) was founded in 1983. The structural change from a metallurgy and machine-building industry into a high-tech industry is described in Chapter Five.

3.5 THE SOVIET ECONOMY AFTER THE WAR – FAILING TO CATCH UP

3.5.1 Focus on investments

There are a massive number of books and other publications studying the Soviet economic system and performance. For the purposes of this study, it is not necessary to review all the themes they investigate, but it is useful to analyse the characteristics of the Soviet economy from the vantage point of the current (poor) competitiveness of the Russian economy. What are the constituents of the current competitiveness rooted in the Soviet period? What was the internationalisation of the economy like? What were the mechanisms of technology transfer like? What were the crucial enterprise-level skills and know-how like?

The communist party set the priorities of the Soviet economic policy. The welfare of the citizens and improving their living standards was not given the highest priority. The highest goal of the economic development was to compete with and beat the United States. The terms of competitiveness were the amount of production and some high-profile and demonstrative projects like the space race. Industrial production increased rapidly during this period, both in Finland and in the Soviet Union. In the Soviet Union the focus was, on the one hand, on some priority sectors of the economy and, on the other, on the volume of production, not the value of the production.

During the post-war period the Soviet Union continued with, and accelerated, industrialisation and urbanisation. The volume of production of raw materials – metals, oil, gas and coal – increased manifold. The same holds for the industrial production. Both Finland and the Soviet Union made vast investments in industry a high priority. Once again, in both countries, the required investments were made at the expense of consumption. In addition, the continuous repression of the labour force enabled the high level of investments in the Soviet Union.

Both Finland and the Soviet Union were among the first countries in terms of investments in relation to GDP. These enormous

investments enabled a rapid growth in industrial production but the efficiency of the investment certainly left room for improvement. As was noted above, the level of investments in Finland was also very high, though it was achieved and maintained by different means and within a different economic system.

The high level of investments was achieved because the planned economy was able to concentrate its resources on investments at the expense of consumption. The economic decision-making was subordinated to political and ideological priorities. The Soviet economy was to be developed to strengthen the military might of the country; other priorities were secondary. Although the industrial production increased rapidly, the living standards in the Soviet Union remained modest compared with the industrialised countries in the West. Once again, the economy was developed to increase the might of the State and its international position. The international position was to be strengthened by mobilising domestic resources, not by benefiting from international trade.

As a logical consequence of the adverse perception of foreign trade, the predominantly extensive growth of the economy and investments had to be supplied with domestic raw materials and capital. To develop industry, resources were extracted from agriculture and the countryside, and this accelerated the growth of industry until the 1960s. After that, continuing to extract resources from agriculture and the countryside could no longer accelerate the growth of industry.

A new source of continuance of the extensive growth of industry appeared in the 1960s and 1970s. To meet the growing demand for raw materials, a hugely expensive territorial expansion of the economy was carried out. Abundant reserves of oil and gas in Western Siberia were taken into use, and they generated a stable and excessive hard currency income. The then (in the 1970s) obvious necessity to fundamentally reform the economy was not implemented. On the contrary, the excessive hard currency income was used to hide the inadequacies of the economic system: the inability to meet the demand for the most basic consumer goods and the necessity to import machinery.

Towards the end of the Soviet era the continued extensive growth of the economy required ever-larger investments. The resources – gas and oil fields, mines and power stations – were constructed farther and farther from the main agglomerations of population and industry. Moreover, they were constructed in more and more northern territories with harsh climates and permafrost.

The post-war economic development of the Soviet Union demonstrates that rapid industrial growth can be achieved, even though the competitiveness of the economy is far from good. The perception of competitiveness, and of both the means to achieve it and the goals to be achieved, were dictated by the communist party. When measured by certain quantitative indicators, the Soviet Union succeeded relatively well in the competition, but, at the same time, was not competitive by other indicators. Towards the end of the 1980s, if not earlier, the growth of the economy slowed down and desperate efforts to improve it started.

3.5.2 Foreign trade and internationalisation

The Soviet economic system developed in isolation. Foreign trade was not regarded as an essential part of the economic development, nor a win-win concept. Rather, foreign trade was perceived as a sign of dependence, to be avoided. This perception of foreign trade cannot be solely regarded as a particularly Soviet phenomenon; it was something that had its roots in the earlier history of Russia as well. Although Russia has been involved in foreign trade throughout her history, she has not been a particular trading nation. Her economic growth has been based on the mobilisation of domestic resources, not on trade.

During the entire post-war period the growth of the Western market economies, including Finland's, was increasingly based on foreign trade and cross-border enterprise activities. Simultaneously, the Soviet economic system relied on the mobilisation of domestic resources. Foreign trade was used to fill certain gaps in domestic production. True, there was foreign trade with the CMEA countries, but the trade was not based on relative advantage.

Frankly, the structure of the Soviet foreign trade can be regarded as “oil-for-food”, with certain amendments. The main goods imported during the post-war period were agro-food goods (mainly grain), other consumer goods and machinery. Indeed, the Soviet economy was dependent on foreign trade for her food supply and machine-building equipment.

Virtually no direct foreign investment was allowed in the Soviet economy. Both the investment capital outflow and inflow were very modest. The integration of the Soviet economy was based on import and export. True, the economic integration with the CMEA countries was different in character, but it did not transfer any advanced Western technology. The Cold War arms race forced the Soviet Union to concentrate massive resources on R & D in military technology. She succeeded in catching up with the United States in nuclear, aerospace and military technology, and rose to challenge it.

For the first time in history the Soviet Union/Russia was at the forefront of technology, albeit only in narrow segments of technology. After centuries of lagging behind, the importance of the catching up, even though it was in narrow segments and at the expense of other sectors, must have been huge. The increased level of technology was based on domestic skills, technology and raw materials. Although some technology transfer took place, the bulk of the invented technology was domestic. The cross-border transfer of technology, crucial for the development of Finland throughout history, was negligible compared with the intensity of the technology transfer in the Western market economies. The non-existent cross-border enterprise structures did not enable technology transfer either. In addition, the movement of people was strictly limited and interaction controlled. Consequently, a very modest tradition and little experience of adopting foreign inventions existed.

The education system provided students with excellent skills in sciences but very modest skills in adopting foreign technology. There was clear incentive and a goal of making the necessary inventions in the Soviet economy. One must stress the importance of this heritage of the Soviet education system for current competitiveness.

Throughout this study we have stressed the importance of the private enterprises and private initiative in adapting to the changed environment in Finland. The competence of the enterprise level in the economic decision-making markedly differed in the planned economy.

It is misleading to argue that there was no entrepreneurship and private initiative in the Soviet economy. On the contrary, the micro-level to survival strategies unavoidable in everyday life representable private initiative. The networking of people guaranteed the everyday survival. On the other hand, the functioning of the enterprise level and separate enterprises was to a large extent dependent on unofficial channels in acquiring inputs. Initiative and innovation were required to keep the enterprise running and to fulfil the plans. It was not, however, channelled to improving the technology or efficiency.

The Soviet system seemed to be relatively stable, the fundamental institutions having remained virtually unchanged for some decades. The economy was developed within the guidelines set by the party and planning system. A very modest amount of individual initiative was used to promote economic growth.

3.6 COMPARING FINLAND AND THE SOVIET UNION

Compared with the pre-war period, there are now more similarities between Finland and Russia. Again, both countries encountered the challenge of a changed external environment. The Soviet Union adapted by accelerating industrial growth to succeed in the competition with the United States. Industrial growth was to be achieved with domestic resources and domestic technology. No major institutional changes were conducted. The persistent institutions of the Soviet Union had been established in the 1920s and 1930s. The Great Patriotic War had required a total mobilisation of resources, and the mobilisation continued after the war. No private initiative was allowed to have any serious impact on the economy. The

economy continued to grow until the late 1980s, but it stagnated seriously. The growth was achieved with a high level of investments.

The prevailing perception in Finland stressed the importance of a high rate of investment in accelerating industrial growth. Similar to Russia, Finland achieved substantial results. Even so, the use of capital was rather inefficient. The structures of the Finnish economy were, however, more diversified. There were large State enterprises, but growing private enterprises as well. The institutions regulating economic development allowed, tolerated and, at best, promoted the growth of new enterprises.

There were certain similarities with regard to internationalisation. Enterprises were owned by domestic entities and invested with domestic capital; they employed Finns and produced mainly in Finland. The most important differences were that many Finnish enterprises used imported raw materials, and they were involved in foreign trade. As a result, there was a widespread understanding of foreign competition and foreign trade in general.

The Soviet economy was involved in foreign trade but the enterprise-level skills in foreign trade were negligible. Soviet enterprises were bound to the Soviet territory and were owned domestically (by the people). No inflow of foreign investments was allowed, nor was investment abroad. The channels of technology transfer were very limited.

The Soviet Union achieved some results in the social sector, including health care and, in particular, education. The Soviet Union seemed to be relatively stable; the institutions had been left untouched for some decades.

To sum up, Finland remained a relatively closed national economy, regulating both capital inflows and outflows. Compared with the later fundamental change in the 1990s, the 1950s-1980s represent a period of slow and cautious internationalisation. Although the economy was rather closed, the importance of foreign trade was remarkable. The foreign markets and exports boosted the growth of industry.

The established welfare state provided virtually equal opportunities for all the citizens to work their way to decent positions. Educa-

tion – including higher education – was provided for all the citizens. Moreover, social safety nets provided minimum living standards for all.

Certain new institutions and practices were established in Finland during the post-war period. The increased involvement of the State in industrial policy was carried out, but it left the existing fundamental institutions untouched. Private property rights and rule of law were not undermined, although State-owned enterprises began to operate in the economy. They were not above the law and operated under the same principles as other enterprises. The active involvement of the State was designed to improve the system and create an additional fundamental institution – the welfare state – but the existing fundamental institutions were left untouched.

4

Two systemic crises and two adaptations: Finland and Russia in the 1990s

4.1 NEED TO REFORM

Both Finland and Russia faced simultaneous systemic crises in the early 1990s. There is certainly no reason to overstate the similarities of the countries and systems, but simultaneous crises with certain similarities provide an opportunity to compare. Both countries developed relatively favourably and with good results from the 1950s –1980s. Both economic systems and societies seemed to be relatively stable, though, of course, totally different. The Nordic welfare state seemed to be immune to the increased unemployment prevailing in Western Europe. The Soviet Union seemed to be a relatively stable society even though the economy was stagnating.

The challenges they encountered, forcing them to be reformed in the late 1980s, were, in some sense, similar, but incentives to carry out the reforms differed substantially. Both countries were obliged to conduct reforms to maintain or restore competitiveness. The main incentive for Finland to carry out the liberalisation and deregulation of certain critical functions of her economy and, in particular, foreign economic relations was to follow the path other European market economies had taken earlier or simultaneously. Finland hardly had an opportunity to implement any distinctive national strategy fundamentally different from other European market economies. In that sense, the necessity to deregulate represents

yet another external change and challenge that a small country can only adapt to. Finland's path became the strategy of openness, and, as a result, re-established competitiveness, while Russia struggled without a clear strategy.

The question of incentives for the Soviet Union to carry out reforms – perestroika, glasnost and uskorenie in the first place – is a question for debate. However, there seems to be a consensus that the Soviet Union was losing the battle with the United States for world supremacy and that a striking difference existed between the requirements of a superpower and the ability of the Soviet economy to meet them. To continue along the path of stagnation was not an option.

Both reform processes had a fundamental impact on the competitiveness of the countries. Moreover, they revealed the weaknesses and strengths of the countries. The systemic crises revealed what, if any, were the cornerstones of economies and societies that enabled the adaptation. In other words, reviewing the crises provides us with an opportunity to investigate the sustainability of systems and institutions, and their ability to contribute to adaptation.

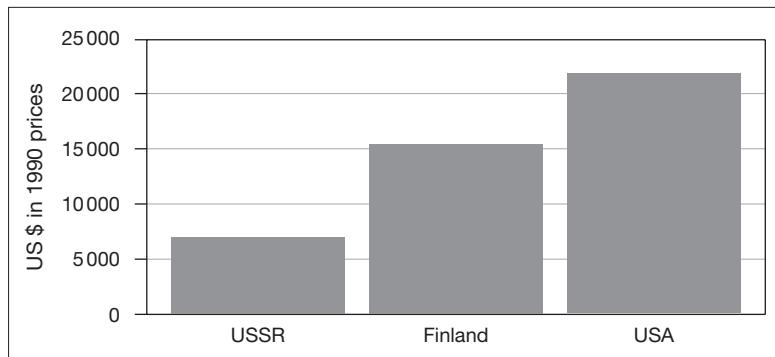
The prevailing perception in Finland during the immediate pre-recession years also stressed the relatively good competitiveness. The economy was growing and GDP per capita figures indicated that Finland was among the richest countries in the world just before she encountered the worst peacetime recession in the Western market economies. To conclude, one must be very careful in assessing the competitiveness or sustainability of growth, even during times when the economy is developing favourably in terms of GDP. This holds for Finland and, in particular, the current Russian Federation.

4.2 RECESSION IN FINLAND

4.2.1 Background

Towards the end of the 1980s, and after four decades of industrial growth, Finland had become one of the relatively rich Nordic welfare states. Finland had an average growth rate above the OECD-

Figure 4.1 GDP per capita in selected countries in 1987



Source: Groningen Growth and Development Centre

Europe level and had not faced increased unemployment. However, towards the end of the 1980s all Nordic countries faced an economic crisis and increased unemployment. The recession in Finland turned out to be the worst one.

The recession during the first half of the 1990s was exceptionally deep and long. For example, output was reduced to almost 14 per cent for four years and unemployment increased to almost 17 per cent. The reasons for the extraordinarily deep recession are briefly reviewed in this section. For the purposes of this study, it is essential to focus on how the reforms carried out and the changes that took place during the recession contributed to the improved competitiveness. The reforms conducted in the 1980s were introduced to improve and maintain the competitiveness.

To put it briefly, the main reason for the recession was the mismanaged liberalisation of the financial markets, which, in turn, resulted in the economy overheating. In addition, the large-scale banking crisis resulted in severe fiscal problems for the public sector. The welfare state model had to be reshaped and reformed, but the fundamentals were maintained. Apart from the macroeconomic outcomes, the other outcomes of the recession – mainly reduced

living standards and, especially, increased unemployment – shook the foundation of the welfare state. Still, the adaptation and recovery were rapid, perhaps demonstrating the ability of Finns and Finland to adapt and survive.

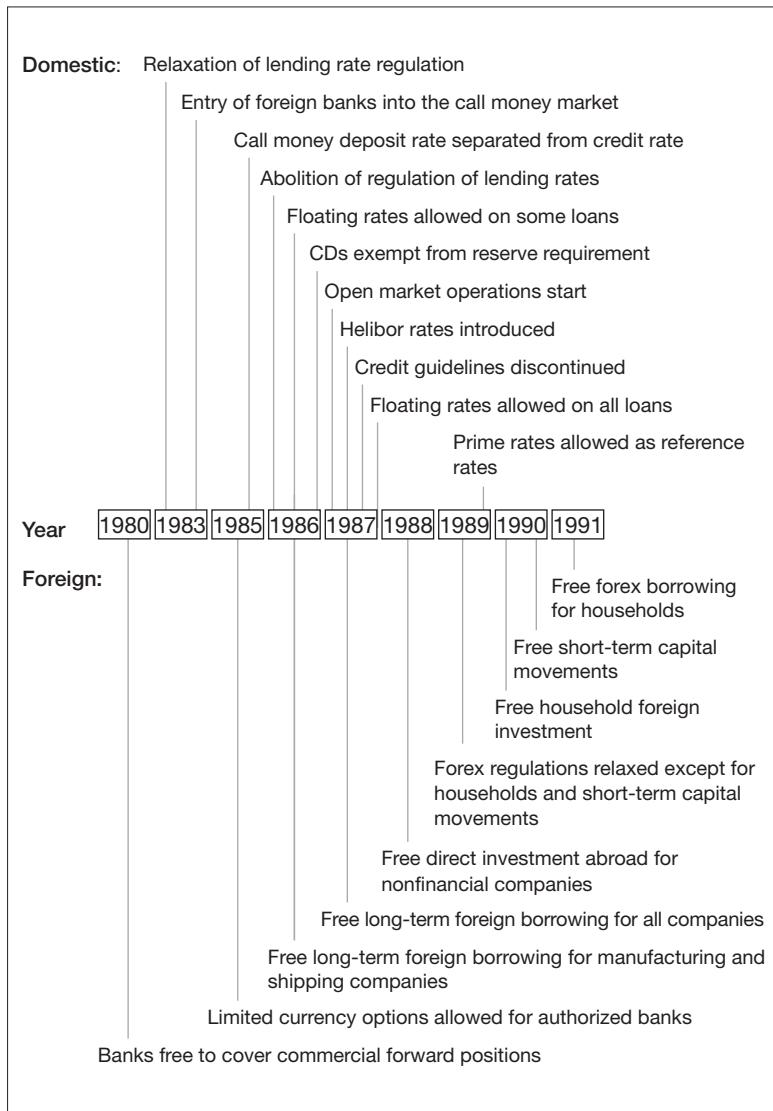
4.2.2 Overheating

As has been argued in the previous section, the growth during the post-war period had been export-driven. The competitiveness of the export industry had been boosted by the inflation – devaluation cycle. Unlike other European countries, Finland did not suffer any severe recession after the oil crisis in 1979. The increased oil prices were compensated by increased exports to the Soviet Union in the bilateral trade.

An important challenge Finland encountered in the 1980s was the inevitability of liberalising the financial markets. Like other Western market economies, Finland also started to liberalise and harmonise her financial markets in the 1980s. The deregulation of the financial markets was gradual and lasted from 1980 to 1991. Most of the reforms were carried out during the second half of the decade, during the upswing of the business cycles in the Western market economies. The deregulation of the financial market led to the abolition of the regulation of the domestic bank lending rates, and the restrictions on private foreign borrowing were also abolished. Despite the liberalisation of the financial markets, the rules or bodies supervising, monitoring and regulating the banking system were not changed.

The adverse effect of the devaluation – inflation cycle was recognised and the policy of fixed exchange rate was introduced. The fixed exchange rate was considered to be an anchor that would keep inflation under control, an effort to improve competitiveness. This policy was quite successful during the first half of the 1980s, but during the second half the inflow of capital to Finland created pressure on the currency to appreciate, which led to a increasing current account deficit. This policy, combined with a capital inflow, forced

Figure 4.2 Deregulation of financial markets in Finland



Source: Honkapohja & Koskela, 2001

the central bank to raise its interest rates. The increasing difference between the interest rates in Finland and Germany, the anchor of the European monetary system, gave even more impetus to the foreign capital flowing into Finland, which further weakened the current account deficit.

The problems were not recognised early enough. The growing export incomes – including the high world market prices of forestry goods – improved the exchange rate and strengthened the perception that Finland was performing successfully.

In 1989 the government decided to revalue the currency. The revaluation was motivated by slowing down the overheating. However, it also deteriorated the competitiveness of exports and caused an even larger capital inflow to Finland and raised devaluation expectations. In 1991 Finland bound her currency to the European Monetary System (EMS) led by the German currency, and strengthened the dependence between the currencies.

The favourable economic development during the 1980s led to increased private and public consumption. The booming economy, and the general perception of the sustainability and immunity of the welfare state model to crisis, led to a fiscal policy of even more excessive public spending in the welfare state. Finns lived in consumerism and did not see the warning signs of an overheating economy and the related increasing current account deficit. The rapid growth was mainly financed by credits. The most revealing examples of the overheating were the stock and real estate markets. Stock prices increased and the Helsinki Stock Exchange Index (HEX) tripled between 1985 and 1990.

The deregulation also provided opportunities for speculators, who took advantage of the booming markets with underdeveloped financial market steering mechanisms. These speculators became the symbols of the new economy, and almost national heroes at that time. Later, many of these players were prosecuted in the courts for financial mismanagement. At that time there were very few voices pointing out that sustainable economic development and competitiveness should be based on wise investments, not on stock market

operations. If such voices existed, they were not loud enough. Apparently, the initial aim of the liberalisation and deregulation was to improve the competitiveness and promote economic development. Unfortunately, the outcome of the mismanaged deregulation was a bubble, during which the weaknesses of competitiveness were not recognised and little was done to improve them.

4.2.3 Recession

When entering the 1990s, the boom at the turn of the decade turned into a deep and severe recession. There had been periods of slow growth before, but the recession Finland experienced was something previously unseen. The most demonstrative outcomes of the recession were skyrocketing unemployment, bankruptcies and State debt, as well as the banking crisis.

Because of the recession, the growth in GDP changed from +5.4 per cent in 1989 to -6.5 per cent in 1991. All indicators, such as private investment, private consumption and net export of goods and services, fell rapidly. The decline continued in 1992 and the first half of 1993. Finally, in the autumn of 1993, the decline in GDP ceased and growth began.

The major strategies of the economic policy introduced and conducted in the late 1980s appeared unsustainable, the policy of a fixed exchange rate being the most revealing example. The current account deficit was around 5 per cent of GDP between 1989 and 1991. In 1989 investors started to lose confidence in the Finnish economy due to the growing current account deficit and declining company profits. Competitiveness and export incomes declined due to international business cycles and high European interest rates. This development led to continuous market pressure against the fixed exchange rate. The policy was abandoned when the currency was devalued.

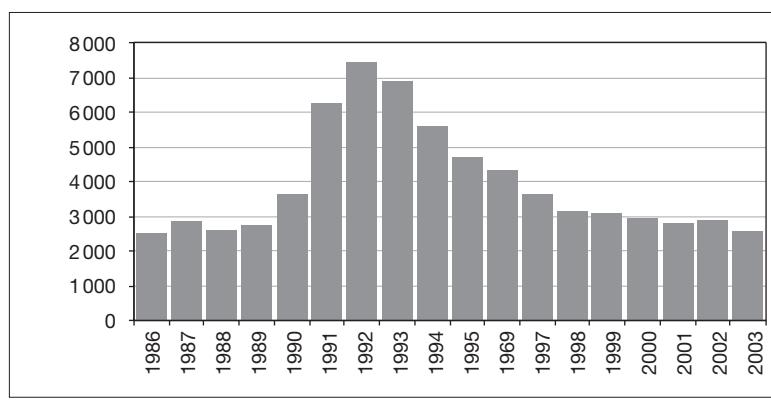
Contrary to the prevailing view, the fall in Soviet trade was not the main reason for the recession. Although it contributed significantly, it was only one of the external influences that worsened the

recession. Exports to the West had already declined as a result of the loss of price competitiveness. When the Soviet markets collapsed due to the sudden collapse of the Soviet Union, the Finnish export to Russia diminished by 70 per cent in 1991. This partly contributed to the decline in Finland's GDP. The Soviet trade had accounted for 15 per cent of the total exports in 1991, when the share of exports in GDP was 23 per cent.

As the currency reserves declined in the defence of the fixed exchange rate, Finland was forced to devalue her currency, first in November 1991 and later again in September 1992, leaving it to fluctuate until it was anchored to the EMU system in 1996. The devaluation of the currency was also an effort at restoring competitiveness and promoting an export-based recovery. As a result of the devaluations, however, the credit stock of both the public and private sector increased, because a large share of the credits had been foreign. The increased credit stock resulted in a skyrocketing number of bankruptcies. In consequence, the credit losses for the banks grew and a large-scale banking crisis was faced.

In order to shield the banks from bankruptcy and maintain trust in the financial markets, the government had to cover the banks'

Figure 4.3 Bankruptcies in Finland 1986–2003



Source: Statistics Finland

losses. The subventions paid between 1991 and 1996 have been estimated at 6.7 billion euro, which accounted for about 8 per cent of the GDP. The subventions also increased the foreign debt, which grew from 23 per cent of GDP in 1989 to 57 per cent in 1994. From being a country with one of the lowest foreign debts in Europe, the debt turned into one of the highest.

The increasing number of bankruptcies and the desperate need to restructure enterprise, and the reduced public spending, resulted in increased unemployment; unemployment increased from 3.2 per cent in 1990 to 16.3 per cent in 1993.

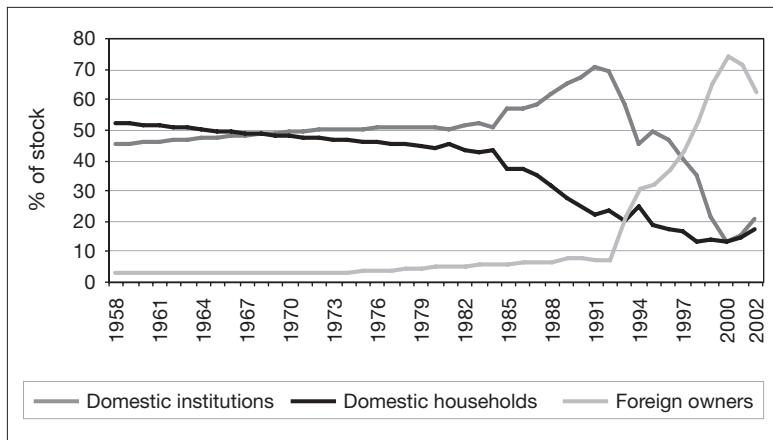
4.2.4 Adaptation and recovery

Finland after the recession fundamentally differs from the pre-recession Finland. Several important structural changes took place. Perhaps the most important changes concerned the intensified internationalisation of enterprises, improved productivity and competitiveness, and the rise of the ICT sector. However, as a result of the recession, several handicaps still remain relatively high, unemployment and foreign debt being the most important.

The Government certainly sought to find the correct measures to restore the competitiveness and promote recovery. A clear goal of promoting exports was set. Numerous decisions were made, but, without enterprise-level decision-making and the ability to make use of the changed environment, no recovery would have taken place. The government decisions were one precondition for recovery and restored growth. The recovery was rooted in government policies, successful enterprise-level operations, favourable trends in the world economy and, last but not least, good luck.

The mismanaged liberalisation of the financial markets due to the pressure from similar reforms elsewhere was one main reason for the recession. However, the liberalisation combined with the structural changes implemented during the recession completed the opening up of Finland. As a result of the liberalisation, Finland became a more open economy, providing enterprises with improved oppor-

Figure 4.4 Foreign ownership increase on the Helsinki Stock Exchange

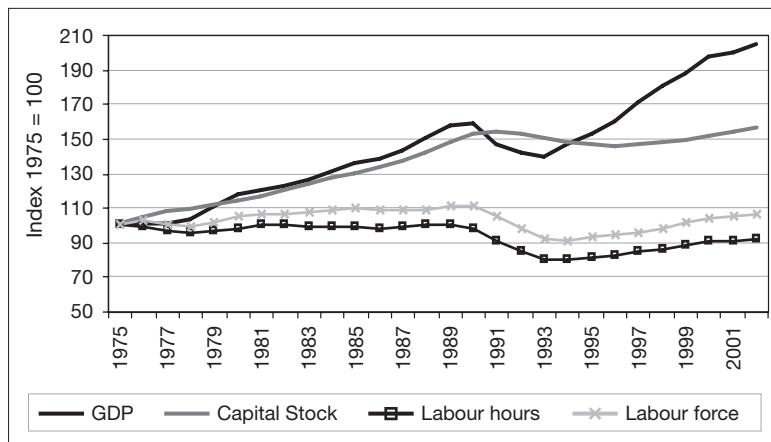


Source: Vartia & Ylä-Anttila, 2003

tunities for competing in the world market. In addition, the government shaped taxation to favour internationalisation and investments. Until then, Finland had been careful in internationalisation. This policy was changed at the beginning of the 1990s, although the attitudes towards it had already started to change in the 1970s. The opening up of the economy and internationalisation now constitute a crucial factor in the high competitiveness.

One important constituent in restoring competitiveness was the determined process of integration with the EU. Finland negotiated with the European Commission (EC) about a joint European Economic Area (EEA) together with the other EFTA countries. The negotiations had just started when Sweden suddenly announced her aim to apply for EC membership. Finland finally handed in her application in March 1992, after the fall of the Soviet Union in December 1991. A referendum on membership was held in October 1994. After intense campaigning, membership was approved by 57 per cent against 43 per cent. Finland soon became a very active member of the EU and was the only Nordic country to join the

Figure 4.5 Development of capital use



Source: Vartia & Ylä-Anttila, 2003

European Monetary Union (EMU) in 1999. Membership of the EU and EMU has opened new markets for Finnish products and services, and promoted trade and industry.

As a result of the internationalisation, two important changes took place. First, the possibilities for Finnish enterprises to extend their activities abroad were improved. The internationalisation took place late, but fast. Second, the deregulation of the financial markets also opened Finland to foreign investments. Of the 500 largest companies in Finland, 70 were foreign-owned in 1990; in 1995 the figure was 130. Foreign investments were gradually made easier during the deregulation. The law was changed and foreign ownership was liberalised in the middle of the recession in 1993. Prior to that, the FDI flows into Finland had been modest and their impact on technology transfers was limited.

Another important change was the improved productivity. There were several factors contributing to this. Enterprises were forced to rationalise and cut costs during the recession. They were also obliged to adapt to the increased international competition.

There had been earlier periods of rapid growth in Finland, but the growth after the recession has been rapid, , and, more important has been different to the previous periods of rapid growth. Production has increased markedly, but fewer workers have been employed and the investments have been more effective. Reducing the number of employees led to huge unemployment, but also intensified production and increased labour productivity. It also improved the use of capital, because deregulation opened the competition for capital (see Figure 4.5).

The rationalisation at the enterprise level and the reduced public sector spending resulted in preserving a high level of unemployment. Unemployment has decreased very slowly since the recession and was still at 9.1 per cent in 2002. The high unemployment, the subventions paid to banks and maintaining the welfare functions have laid a heavy burden on the budget. The State has been forced to borrow and, as a result, the foreign debt has increased.

4.2.5 The political system and society

The recession was deep, unexpected and something that Finland had not encountered before. Still, unlike many other countries, no political crisis existed in the 1990s and the society remained relatively stable. In this study the systemic crisis in Finland is being compared with its counterpart in Russia. Therefore, it is useful to discuss the reasons for the stability and to review the issues that have remained unchanged.

The Finnish political system remained consensus-driven and governments remained in office for the four-year interval between parliamentary elections. Harri Holkeri led a four-party right-left coalition from 1987 to 1991, Esko Aho a four-party centre-right coalition 1991–1995, and Paavo Lipponen a five-party rainbow coalition 1995–2003. Of course, the parties in opposition challenged the government policies, but when in office the former opposition parties did not change the policy fundamentally. This demonstrates that there has been a consensus concerning the fundamentals. The

consensus has characterised Finland's political system since at least the 1980s.

Economic fundamentals and stable institutions are more important than the political system. The banking system was supported and maintained, even through the worst recession when the State guaranteed the banks' assets with substantial foreign loans. It was a primary goal for the government to maintain the trust in the banking sector. The judicial system also remained unchanged. Illegal practices certainly existed during the banking crisis, but they were investigated and prosecuted. The juridical system was not an instrument in policy making. What is more important, the property rights remained unchanged. It does not mean, however, that property was not lost or confiscated; numerous people lost their property because of insolvency, and numerous enterprises went into bankruptcy and the shareholders lost their property. The bureaucracy continued to function without blocking any reforms. On the contrary, the public sector authorities understood the unavoidable need to reform the economy and to reduce the public sector.

With regard to any Western liberal market economy, these issues are self-evident and there is nothing particularly special about Finland, except, perhaps, seeking consensus. Political instability would have worsened the crisis and made most people even worse off. For Finland, there was no turning back; there was no previous system to return to. Turning inwards, isolating, refusing to liberalise the financial markets was not an option.

The Nordic welfare state model with its social safety nets generally provided minimum living standards. It smoothed the effects of the recession. No doubt poverty and income inequality increased. The Finnish welfare state model was reduced and developed towards a more liberal model during the recession. Parliament, trade unions and the employers' representatives were all involved in the economic decision-making, and, consequently, had an impact on the inevitable reforms. Even the painful and unpopular budget cuts that shook the foundation of the welfare state were carried out with a modest number of demonstrations and strikes.

We are far from arguing that nothing changed during the recession and subsequent recovery. On the contrary, a lot did change. For the purposes of this study, it is important to stress which structures should, by their changes, indicate the adaptation. But, there are institutions that should remain untouched during a crisis, and it is important that the political system remains and the changes are indicated by shifts in electoral behaviour, and by new rulers taking office.

Bankruptcies and lost property are an essential part of a functioning market economy. It is important that the markets decide which enterprises survive. Strictly defined property rights do not mean that property is not lost. The bureaucracy and juridical system are essential cornerstones of any economic system, and they certainly represent an element of stability. State policies are also an essential part of the market economy, and there are functions that only the State can take care of. The State policies in Finland focused on certain issues, including promoting R & D, to promote the recovery. The next section demonstrates that government policies are only a precondition for recovery or growth. Enterprise-level initiative and operations are decisive in shaping the competitiveness.

4.3 RUSSIA: FROM PERESTROIKA THROUGH TRANSITION TO RECESSION

4.3.1 Necessity to reform

Towards the end of the 1980s the Soviet Union had begun to encounter a systemic crisis, just like Finland. Prior to that, both countries had, at least partly, based their wealth on extensive investment in industry. The extensive growth had required continuous expansion of the economy to exploit the natural resources of ever more distant territories. During the latter decades the Soviet economy became increasingly involved in the vicious circle of extensive growth. The systemic crisis in the Soviet Union did not restore the competitiveness.

The Soviet economy had begun to stagnate before perestroika was launched. It was isolated from the main channels of technology transfer, an issue of outmost importance as the West was taking the first steps in the ICT economy. The gap between the advanced market economies and the planned economy was widening rapidly.

The primary aim of the Soviet economy had not been to promote the welfare of its people. Instead, the aim had been to maintain the achieved position of superpower. The efforts to demonstrate competitiveness were focused on narrow sectors of military and space technology. Towards the end of the 1980s the Soviet economy lagged further behind in the bulk of the sectors of the economy. For sure, the Soviet Union had failed in the competition with the advanced capitalist countries regarding the growth of output, productivity, standard of living and general dynamics of economic development.

4.3.2 Russia: from the beginning of Perestroika to the fall of the Soviet Union

When Gorbachev came into office, he launched perestroika to conduct substantial economic and political reforms. He recognised the structural, political and economic problems in the Soviet Union and wanted to strengthen the Union to maintain its superpower status. He wanted to move the USSR from the extensive growth path to a more intensive one. Gorbachev had the perception that the Soviet system could be reformed from inside and that the fundamentals of the system could be maintained. Two important observations deserve to be stressed here. First, and certainly not for the first time in Russia's history, he launched economic reforms to overcome the gap between Russia and her competitors. Again, economic reforms were carried out as a top-down process to improve the position of the State. Second, the fundamentals of the system – both political and economic – were to be maintained.

One can justifiably argue that the first stages of the reforms, like the anti-alcohol campaign, were cosmetic, leaving the fundamental problems untouched, and, certainly, unsolved. The aim of the

five-year plan for 1986–90 was to accelerate growth by increasing investments in machine building. There were also efforts to improve the quality of production and enterprise-level incentives, and to decentralise the foreign trade system. Needless to say, the demands for more fundamental reforms were strong.

Several new laws were implemented. It is indeed misleading and inadequate to focus on laws promoting the development of private enterprises in order to understand the full nature of the reforms, for several reasons. First, the crucial and necessary infrastructure of the rule of law was lacking. Second, one must bear in mind that the entire concept of law in the Soviet Union had been something totally different from the Western market economies, where the rule of law had prevailed for centuries and where all were equal before the law.

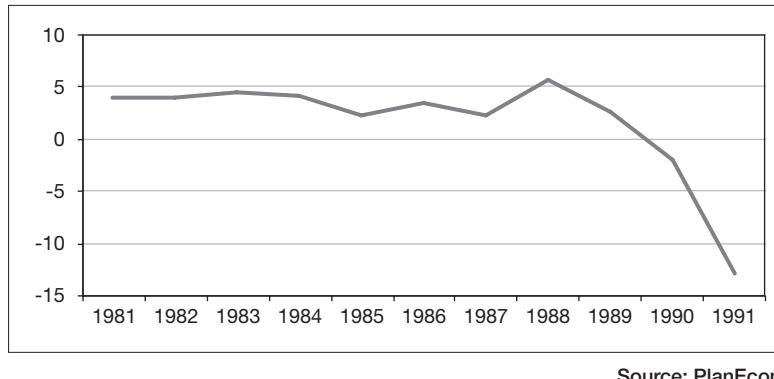
As a result of the first reforms, the certain stability of the Soviet society deteriorated and the support for the reforms was being undermined. Still, the fundamentals were not touched. The efforts to change the fundamentals, for example the private ownership of land, met stiff resistance and the reforms were withdrawn.

The reforms sought to increase industrial production. Exactly the opposite took place. The industrial production had been steady during the beginning of the 1980s, but started to decline after 1988. The same holds for the GDP.

The reform programme did not manage to change the direction of the Soviet economy, but it caused a deterioration in the stability. Worse, it destroyed the macroeconomic balance. When the reforms started in 1986, the budget deficit was 2–3 per cent. The fall in the world oil prices started in 1986, which reduced the export incomes and heavily disturbed the Soviet foreign trade. The foreign trade started to diminish in 1987.

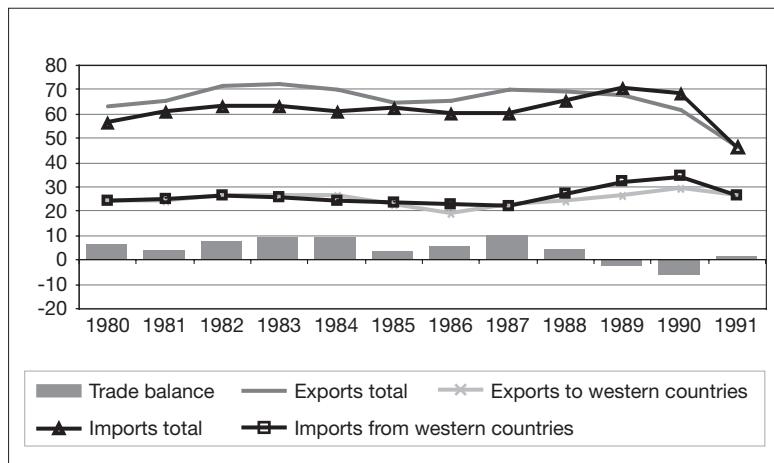
Foreign loans were used to finance the budget deficit. In 1991 almost all gold and hard currency reserves had been used up and the USSR was deeply in debt. The Soviet foreign debt at the end of 1991 was \$ 67 billion. In 1991 the budget deficit exploded to more than 20 per cent of GDP. During the second half of 1991 the

Figure 4.6 Annual change in GDP growth (%) in the Soviet Union 1980–1992



Source: PlanEcon

Figure 4.7 Soviet foreign trade 1980–1991, billions of dollars



Source: PlanEcon 27–29/92, The World Bank, 1992

Soviet Union faced a complete financial crash. Open inflation raged and prices almost tripled in 1991. The system of supply of consumer goods came to a halt.

The Finnish example demonstrates that an economic crisis and even declining GDP do not necessarily mean that the structures that

are important to competitiveness do not develop favourably. For example, the internationalisation of the Finnish economy accelerated during the economic crisis and enterprises expanded abroad. The last years of the Soviet Union resulted in adverse development from the point of view of internationalisation. True, the eased interaction between foreigners and Soviet citizens and the gradual liberalisation of foreign trade promoted some interaction, but it must have been clear that no real catching up would place without an increased transfer of technology and increased interaction.

The recession in Finland, and the relatively rapid recovery, demonstrated the importance of the elements of stability in adaptation. There were permanent elements of stability – rooting back centuries – which enabled the adaptation. The Soviet Union, however, undermined the – as it turned out – vague stability of the system and was not able to manage the situation when the reforms went wrong.

Gorbachev was popular at the beginning of the reforms and, prior to him, the Soviet system seemed to be stable. Of course, the Soviet legislative and economic systems were not a suitable foundation on which to establish a market economy, although it might have been stable enough to carry out certain limited market reforms. The stability of the system rapidly deteriorated when the reforms started and met stiff opposition. It soon became apparent that the stability had existed because of control, not because of any stable institutions. It is indeed tricky to reform a system when its stability is based on the popularity of the leader. Moreover, the competence of the leader – the ability to conduct reforms – is dependent on the willingness of the State apparatus to support him. By refusing to implement the decisions, the bureaucracy was able to block any reform. The absence of the rule of law means that merely approving laws is not sufficient for conducting reforms. Personal power (or strict control) would have been required to impose reforms on the system. The laws were approved but did not guarantee any profound changes.

The final years of the Soviet Union have been regarded as a period of instability. This is not completely true. The withdrawal of the

almighty communist party was carried out, but it turned out that there had been nothing except plans and control of critical fields regulating the interaction of enterprises, individuals and authorities. The vacuum left behind was not fulfilled by the rule of law, although the laws existed.

It is misleading, however, to argue that there were no elements of stability in the Soviet Union, even during the perestroika years. On the contrary, the reforms were blocked by the ample Soviet bureaucracy, which, in essence, constituted the juridical system, planning system and other civil servants. By controlling the economic assets, it had all the means of blocking reforms and defending the existing system. Because the economic decision-making, juridical system and bureaucracy constituted a hybrid well above the law, the emerging political reforms and laws approved by the established parliament were doomed to failure in terms of gaining any serious competence in reforming the economy.

Moreover, the crucial issue of property rights was left virtually untouched. True, the laws on co-operatives and new enterprises allowed them to exist, but as long as the property rights for land, real estate and existing economic assets were defined either poorly or not at all, the new enterprises and co-operatives remained weak. They certainly had huge dead capital, meaning that their poorly defined assets could not have been used to promote their businesses and, therefore, the development of the whole economy. The connection between property rights and political power remained strong. The maintenance of political power was a means of maintaining control of the economic assets. And, similarly, achieving political power was a way of acquiring the economic assets.

4.3.3 The transition period

This study sets out to focus on certain issues in the systemic crises that demonstrate the differences between the two systems. There were certain similarities in the systemic crises in Russia and Finland, especially in terms of macroeconomic indicators, but the indicators

do not tell the essentials. It is fairly easy to compare the development concerning basic macroeconomic indicators like GDP, industrial output and unemployment. This study has also focused on various indicators demonstrating internationalisation. Foreign trade, foreign investments and, in particular, the channels of technology transfer have been crucial for the development of Finland. The opening up of the economy was one of the most important changes in Russia in the 1990s.

The Russian federation certainly did not inherit an even tolerable starting point for the unavoidable reforms. The gold and hard currency reserves were depleted, which reduced the State finances, and the domestic industry and trade could not guarantee even the most basic supply of goods. The political system was in turmoil; the previous system had lost its legitimacy, if it had ever possessed one.

The list of the tasks to be implemented was massive. The State finances had to be stabilised to fight the inflation, the enterprises had to be privatised and the economy in general had to be liberalised. The last included foreign trade as well as internal economic affairs. Only the liberalisation of prices could fill the shops and guarantee the supply of goods. Obviously, the list of fundamental tasks was far more challenging than the challenges Finland encountered. During the decade, however, several fundamental changes took place and market reforms were carried out.

The majority of the enterprises were privatised and the connection between property rights and power was abolished. Moreover, private enterprises gained substantial competence in economic decision-making and superseded the State in running the economy. The government struggled to achieve macroeconomic stability, achieving some results but ending in default in 1998. Foreign trade and the bulk of the internal prices were liberalised. However, the results of reforms carried out were far from complete and serious inadequacies can easily be found in all areas. The privatisation did not gain legitimacy because of, for example, the loans for shares schemes. The inflation abolished the savings of entire generations and the stabilisation policy gained a bad name. The liberalisation of

prices shook the foundations of everyday life. The visible outcomes of the reforms gave them a bad name and undermined the popularity and legitimacy of the reforms, although fundamental changes for the better were achieved.

Although the economic reforms sought to solve the inadequacies of the economic system and improve the competitiveness, the performance in the 1990s was far from favourable. The macroeconomic results of the transition years are rather gloomy: GDP decreased throughout the decade until 1999; industrial production decreased and unemployment increased. Moreover, the Soviet State debt at the beginning of the 1990s rose to over 50 per cent of GDP. During the very first years of the 1990s in particular, these macroeconomic indicators looked fairly similar in Finland and Russia. Both countries went through a macroeconomic crisis. Beyond the macroeconomic indicators, several fundamental differences existed.

Several cornerstones of a functioning market economy remained underdeveloped. First, the banking sector was not able to fulfil its basic functions in allocating savings and export income to investments because there was no experience and no trust in the entire financial sector. Second, the legislation was still underdeveloped for a market economy. Third, the widespread bureaucracy and corruption did not encourage the real market economy reforms that would have favoured entrepreneurship.

The depression in Finland resulted in recovery and substantially more competitive structures in the economy. The structural changes in Russia demonstrated the opposite. With regard to industry, the proportion of sectors producing the most value-added goods decreased and, consequently, the proportion of industries producing low added value increased. The same structural problem holds for the foreign trade.

This section seeks to discuss why a similar structural change for the better did not occur in Russia. Obviously, very similar assessments of the same issue have been presented throughout the 1990s and the discussion on why the transition failed has been vivid and profound. Moreover, there has been ample finger pointing and a

search for the guilty. Still, in addressing the development, we seek to provide some fresh views.

The opening up of the economy as such is certainly not a sufficient constituent to improve competitiveness; it merely creates pre-conditions. The structure of foreign trade and the modest amount of FDIs did not promote the important transfer of technology. Apparently, the position of Russia in the world economy was weakened and, consequently, the country's political weight in the world diminished. Finland was able to attract investments but Russia failed. Both exported capital but the massive capital outflow from Russia has been regarded as an adverse phenomenon, for obvious reasons. A massive capital outflow does not automatically generate favourable results, especially if it is spent on luxury assets.

To liberalise the markets was certainly not enough to promote growth and structural change, even in Finland. The State policies were crucial in supporting the recovery. Important decisions were made to support R & D activities; the taxation was shaped to serve the interests of investors and enterprises. Even during the peak of the crisis, the actors in the political system were able to manage the crisis and take the decisions required. Laws were approved and the corresponding measures taken. Still, the political actors – both parties and individual politicians – were and are aware of the limits of their competence. Important decisions concerning economic policy were taken, but the decisions concerning individual enterprises were made exclusively at the enterprise level. There was a stable situation in Finland, in which the fundamentals of the political or economic system did not change.

In Russia, the aim of increasing the importance of enterprise-level decision-making at the expense of political structures was at the heart of the reforms. The State withdrew from economic decision-making and ceased to dictate what the enterprises should produce, etc. The State sought to withdraw and leave the field open for private enterprises to operate and compete. The problem was that there were no other legitimate institutions to regulate the interaction of the actors in the economy. Free markets require independent

institutions – a juridical system, for example – to regulate the markets. The State sought to withdraw from controlling everything, but failed to fulfil those tasks that any State fulfils in a market economy. The State was not transparent and was not able to establish the rule of law and equal opportunities for competition.

Because the State lacked the resources, competent instruments and institutions to steer the development of the economy, the enterprise level became decisive in conducting the structural restructuring of the economy. However, it lacked the experience of functioning independently. The environment the enterprises were forced to operate in was something completely new and previously unseen. The liberalised foreign trade resulted in fierce competition in the domestic markets, and enterprises did not have experience of competition, especially with foreign competitors. Although the Finnish economy had been relatively closed before the recession, the enterprises possessed experience of foreign competition.

In an open market economy, enterprises are decisive in dictating the success of the national economy. There were very different enterprises in Russia in the 1990s. The bulk of the former Soviet enterprises continued to operate as private enterprises, often owned by the managers or other insiders. Moreover, the State kept a minority ownership in many privatised companies. It is obvious that the bulk of the Soviet enterprises struggled hard in the new environment, but relatively few of them ceased to operate completely. In a functioning market economy, bankruptcies are a common phenomenon. This was not the case for Russia. The number of bankruptcies was modest. One can argue that the markets did not function properly and that the structural change was not given the chance to take place. The large number of enterprises continuing to operate in the 1990s represents yet another element of stability that blocked the unavoidable structural change.

Even the largest enterprises are surprisingly modest by international standards. The adverse development of the structure of the industrial production reveals that enterprises in the area of high added-value production could not stand the fierce competition in

the domestic or, even less, foreign markets. There were hundreds of thousands of new enterprises, mainly small. Apparently, there were no adequate skills available at the enterprise level to compete with experienced competitors. These skills only developed gradually.

The economic reforms were an effort to diminish the role of the State in the economy and to promote private initiative and entrepreneurship. They were released and began to develop. They might have promoted structural economic changes stemming from the grass-roots level and private initiative. Still, certain elements determined that the roles of the State, the entrepreneurs and the independent institutions remained confused.

4.3.4 The State, stability and confused roles

The crucial role of the State in shaping the competitiveness should be at the heart of the debate. The development of Russia in the 1990s underlines the importance of transparent State institutions for competitiveness. Those elements of stability that were the cornerstones in Finland were lacking in Russia. Worse, they became issues for quarrel, like property rights.

There was a serious effort to separate the historically connected power and ownership. The privatisation process must be seen against this background. An effort to separate power and ownership was inevitable. Unfortunately, establishing such a bread and butter issue as a market economy was poorly managed and did not gain legitimacy. There had been efforts to separate property rights and political power in the late 19th and early 20th centuries, but no tradition of private property of any significant economic asset was established. The property rights are not just an issue of ownership. Rather, they demonstrate the ability of the juridical system to decide the quarrels over ownership. The unpopularity of the entire privatisation and the dubious practices undermined the legitimacy of one of the cornerstones of the market economy. The bureaucracy still possessed the means to control property rights. The property rights became an issue in the struggle for political power. One of the paradoxes in the

debate concerning property rights was that the obvious unwillingness to deliver the rights was the lack of tradition. Following this logic, any inadequacies in previous practices justify the continuation of those practices.

Another factor that further paralysed the reforms and the transparency of the State was the high level of corruption. Even if one level sought to carry out reforms, the implementation on the lower levels was seldom carried out as planned. Instead, different kinds of rent seeking occurred. The important role of the State in supervising biases in the markets was paralysed by the corruption. The problems with corruption will be reviewed more thoroughly in the next section.

One can hardly regard the Russian political system as stable. The continuous changes Ministries and Deputy Ministries, and the constant discussions about the impeachment of the President in the late 1990s are demonstrative examples of the instability of the political system. Focusing on the number of cabinet members or the average length of stay in office, however, misses the point. It is much more important to focus on the functions and tasks the political system should fulfil. The political system should have withdrawn from many fields it had previously controlled. And it did. This does not necessarily demonstrate the weakness of the political system although it seems to be that if a Russian politician cannot demonstrate his almighty in relation to business, he is considered weak. The political leader is still the man who should make things happen. In market economies, there are no-go zones that are not controlled by the political system. Unfortunately, the rule of law could not fulfil the vacuum. The say-so of a civil servant remained strong.

The elements remaining relatively unchanged were the bureaucracy, the corruption and the Soviet enterprises. The bureaucracy was doing its best to block any serious reforms. Even if it supported the reforms, it did not facilitate them by operating transparently. The widespread corruption provided the bureaucrats with more incentives for rent seeking in enterprises instead of supervising the functioning of the market mechanisms. A third relatively stable element

was the Soviet enterprises continuing to operate. They represented a false stability, blocking structural changes.

Again, the effort to reform the economy revealed fundamental weaknesses in the Russian system. There were no stable and unchanged fundamental institutions like property rights, rule of law and politicians aware of the limits of their competence. Again, the reforms were dependent on the popularity of the government and the president. The reforms unavoidably shook the foundations of society and, in doing so, undermined the popularity. The political rulers sought to withdraw from certain fields previously controlled by political structures. The vacuums were not, however, fulfilled by stable, neutral and transparent institutions. The institutions would have been an unavoidable precondition for a functioning market economy. The withdrawal of the State was perceived as a sign of weakness. Carrying out reforms was not possible without neutral and transparent institutions. The legitimacy of the State was undermined in the mismanaged reforms and the State lost the ability to remain strong where it should have been strong: in guaranteeing the rule of law and promoting the development of economy by industrial and innovation policy.

4.4 CONCLUSION: FINLAND AND RUSSIA IN THE 1990S

At the heart of this study is the comparison between Finland and Russia, and we have been discussing the development of two very different countries in the same breath. One might expect that, as a result of the market reforms, the countries should have become more similar. Certain similarities can be listed. Both have operated in the world economy with a relatively liberal trade policy regime. Foreign trade and capital inflow were liberalised simultaneously. The market mechanisms were able to function and the invisible hand of the markets should have steered the development of the economies. The privatised enterprises in Russia and the private enterprises in Finland are now the primary economic decision makers. In the

1990s, both countries held free and democratic elections. Needless to say, the political systems are very different.

The paths of the two economies in the 1990s have, however, been very different. The reasons for the differences are numerous and we focus on three groups of reasons. First, the State policies in promoting recovery. Second, the enterprise-level skills to operate in the changed environment. Third, the importance of stable institutions and their continuity. In Russia there were stable, or, rather, unchanged, structures and institutions, but they did not facilitate stability. There were structures that are the cornerstones of economic stability elsewhere, but in Russia they became issues of constant quarrel.

In Finland the State policies were crucial in supporting the recovery. Even during the peak of the crisis, the actors in the political system were able to manage the crisis and agree on the reforms. In Russia the policy was to promote enterprise-level decision-making and liberalisation. However, the reforms were poorly implemented due to the high level of rent seeking. The State failed to fulfil those tasks that any State should fulfil in a market economy

In Finland the enterprise level adapted to the changed environment and improved competitiveness. Finnish enterprises had had previous experience of competition and they adapted to compete in global markets. Finland's internationalisation will be thoroughly described in the next section. In Russia the enterprise sector lacked the experience of independence and how to operate in a free market. Their strategy has been to avoid foreign competition and block reforms, certainly not a strategy for improving competitiveness.

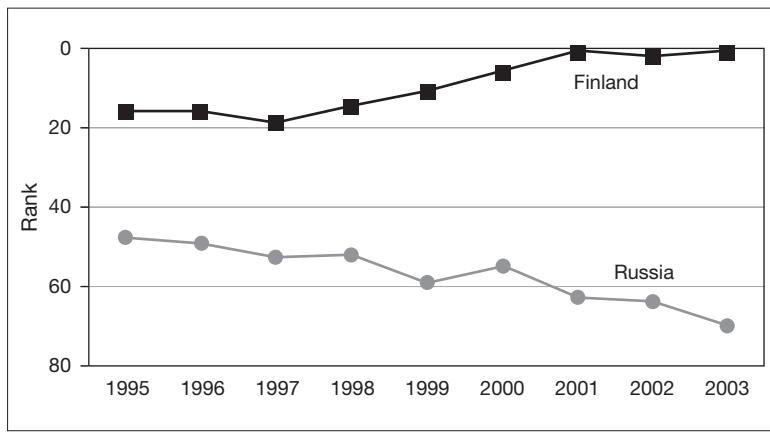
The question of the role of the institutions is also crucial. Finland possesses institutions rooting back centuries. The continuity of the institutions maintained the stability during the worst recession and prevented all kinds of rent seeking. Russia's development in the 1990s underlines the importance of transparent State institutions for competitiveness. Those elements of stability, which were the cornerstones in Finland, were lacking in Russia.

5.1 FINLAND, RUSSIA AND THE NEW WORLD ECONOMY – SOMETHING NEW, SOMETHING PERSISTENT

The mid-1990s have been called the starting point of the New World Economy. It is illustrated by the globalisation of the markets and a rapidly growing Information and Communication Technology (ICT) sector. A lot seems to have changed, at least in the Western market economies. The development of the world economy in general, and the success of separate national economies in particular, seem to be dependent on the success of the ICT sector. Comparing Finland and Russia reveals, however, that in defining the competitiveness of national economies and the general well-being of the people, the ICT sector and the sexy and much hyped New World Economy is only one constituent. In an ever more global world economy enterprises and national economies encounter increasing competition, but, on the other hand, there are increased opportunities for benefiting from the open world economy, although the ability to compete in the open world economy requires much more than a dynamic ICT sector. There are very persistent issues dictating competitiveness.

Throughout this study we have compared Finland and Russia, their performance, similarities and differences during different

Figure 5.1 Finland's and Russia's performance in WEF



Source: World Economic Forum

periods and even economic systems. The last section sets out to compare the two countries in the context of the ICT-dominated current world economy. In the previous section we described two systemic crises and economic recessions following the period of extensive growth in the economy. Both countries encountered the global challenge at the beginning of the 1990s. No doubt, the paths have been very different.

This section makes extensive use of the most respected and often-cited competitiveness rankings, i.e. the World Economic Forum (WEF) and the International Institute for Management (IMD) rankings. According to both, Finland is the most competitive country and Russia lags far behind, ranking 70 out of 102 in WEF and 26 out of 30 in IMD.

We now present their performances in the rankings. After that, we investigate and review the economic performances behind the indicators. In addition, certain country-specific issues are reviewed for both Finland and Russia, with special emphasis on certain clusters of industry dominating production in Finland.

5.2 MEASURING COMPETITIVENESS

WEF and IMD have published the annual competitiveness reports since 1980. Until 1996 they published joint reports, but since 1996 they have published separate rankings using slightly different measurement methods. The IMD uses approximately 320 criteria on economic facts and survey data from a large survey of company executives. The IMD study is divided into two categories, one for small countries (population under 20 million), which includes 29 countries, and the other for large countries (population over 20 million), which includes 30 countries. The WEF ranking is also based on hard data combined with an executive opinion survey of company executives in 104 countries. The WEF overall competitiveness ranking is divided into two sub-rankings: growth competitiveness and business competitiveness indexes. Our next analyses of competitiveness are partly based on the IMD's and WEF's reports for 2003.

5.3 FINLAND TODAY

5.3.1 Finland – world number one in competitiveness

Finland ranks first in both WEF and IMD competitiveness studies, with the United States ranking second in WEF and first in the large country category of IMD. Finland has climbed from a middle-class country to the top since the beginning of the 1990s.

Finland is the most sophisticated user of technology and possesses the best legislation for ICT in the WEF Growth competitiveness index. Finland is on top concerning property rights, judicial independence, company spending on R & D, and the diversion of public funds, preventing organised crime and favouritism in decisions by public officials. Also, the government's budget balance and public trust in politicians are ranked third in the world.

In the WEF Business competitiveness index, Finland scores well in issues like the quality of the national business environment and the sophistication of company operations and strategy rankings. The

capacity for innovation, the productivity of process sophistication and the value chain presence score best in the world. Finland is also a world leader in the extent of the collaboration among clusters and university-industry research collaboration.

According to the IMD study, Finland is the best performer in issues like total expenditure on R & D, total R & D personnel in business per capita, the achievements of higher education and the value traded on the stock market. Finland also scores among the top countries in competition legislation, knowledge transfer between the universities and the private sector, and the transparency of government policies. Finland also scores well concerning infrastructure in both rankings. According to the studies, Finland provides a very good healthcare, education and technological infrastructure. Finland also leads the rankings in mobile and computer access.

Both rankings recognise the current weak macroeconomic situation. WEF and IMD warn Finland about her high income tax rate, and the tax bureaucracy is listed in the WEF study as one of the most problematic factors for Finland. IMD stresses the high structural unemployment and the need to improve incentives for entrepreneurship. WEF considers the restrictive labour regulations one of the most problematic factors for doing business in Finland, and the lowest score in the WEF study is for the recession expectations index, in which Finland ranks 62 out of 102. The IMD study mentions the following challenges for Finland: to reduce unemployment, to reduce income tax rates, to improve incentives for entrepreneurship, to transfer decision-making power from authorities to individuals and firms, and to tolerate increasing income dispersion. Still, despite criticism of some weaknesses, Finland still performs as the most competitive country in the world in both WEF and IMD rankings for 2003.

5.3.2 Finland's economic performance

To be able to understand how Finland has been able to become the most competitive country and the flagship of ICT sector in one

Figure 5.2 GDP growth in Finland and OECD Europe 1970–2002
(at 1995 prices and purchasing power parity exchange rates)



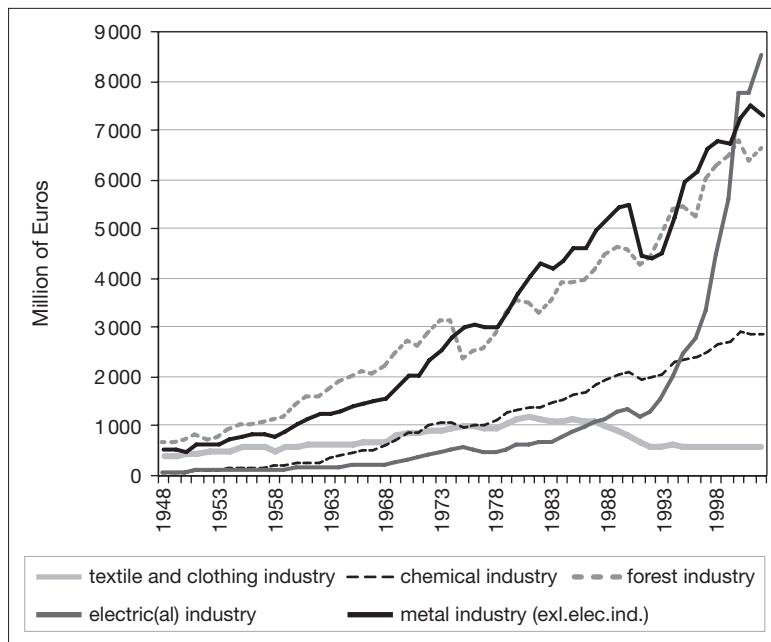
Source: OECD

decade, we must review some fundamental changes in her economy. During the past decade Finland has survived the recession and recovered very rapidly. Moreover, the ICT sector has become the engine of growth along with the traditional clusters of the economy. The growth, boosted by the new ICT sector, was fast between 1995 and 2001, after which it slowed down in 2002–2003.

The most important change that took place in the 1990s was that the ICT sector grew rapidly and became the third pillar of industry along with the machine-building/engineering and forest sectors. At present, ICT accounts for the largest share of industrial production.

Amidst the rise of the ICT sector, other important changes took place in industry. The changes shaped the ownership structures, the range of goods produced and the geographical pattern of the enterprise structures. The ownership of Finnish enterprises became global; they focused on a narrower range of goods and started to

Figure 5.3 Share of production of different sectors in Finland



Source: Vartia & Ylä-Anttila, 2003

operate globally, not just exporting their goods. True, there is nothing extraordinary in the development except the belatedness of the process compared with other Western European countries, but it fundamentally shaped Finland's competitiveness.

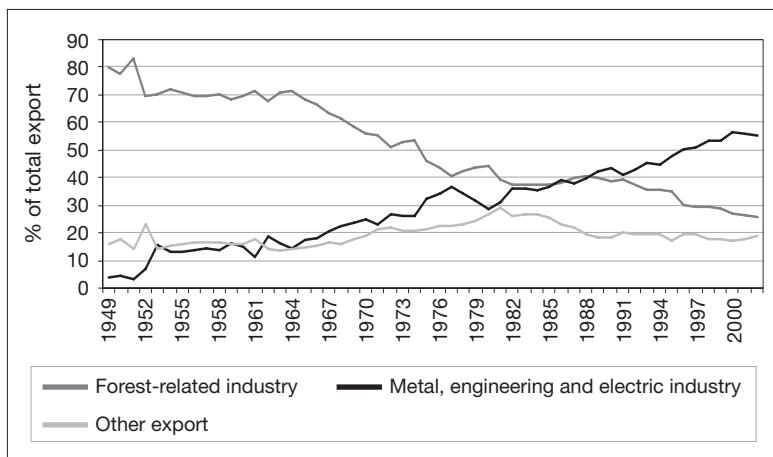
Finnish companies started to internationalise carefully, initially by going abroad themselves in the 1980s. Only later did investments start to flow into Finland. Since 1993, when the law preventing foreign ownership of enterprises in Finland was abolished, there has been rapid growth in foreign ownership of industrial enterprises. Figure 4.4 demonstrates that foreign ownership was very modest, even in the late 1980s.

Foreign ownership accounted for more than 70 per cent of the Finnish stock-listed companies in 2000. The increased foreign own-

ership has had an impact on enterprises on several fronts, and the impact has been predominantly positive. First, the foreign ownership has improved the technology and know-how. Second, it has improved corporate governance skills, previously inadequate in Finland. Third, the foreign investors demanded, and have continued to demand, more efficient use of capital. Fourth, foreign investors have enabled expansion into new foreign markets. There are several examples of a Finnish company being acquired by a foreign company and the foreign company is now selling Finnish goods, albeit under its own brand. On the other hand, Finnish companies acquired by foreigners have continued to produce the goods they produced before the acquisition. Fifth, because of the internationalisation, Finnish companies have been obliged to adapt to the demands and conditions of global competition.

The investments made by Finnish companies increased before the investments started to flow into Finland. Although Finland ranks high in foreign ownership, the stock of investments abroad is still double the amount of foreign investment made in Finland (see

Figure 5.4 Finnish foreign trade since 1950–2003



Source: Vartia & Ylä-Anttila, 2003

Table 5.1 Some large Finnish companies by personnel in 1983 and 2002

Company	Industry	1983		2002		Net sale (€ mil.)
		Personnel	of abroad (%)	Personnel	of abroad (%)	
Nokia	Mobile technology	23 651	18	52 700	57	30016,0
Stora Enso	Forest-related products	15 315	10	43 900	66	12782,6
UPM-Kymmene	Forest-related products	16 087	15	36 900	43	10475,0
M-real (Metsälaitto)	Forest-related products	7 891	8	31 000	67	8867,8
Kone	Metal and engineering	13 137	66	29 400	87	4341,8
Metso	Metal and engineering	15 371	13	29 300	63	4691,0
Outokumpu	Metal and engineering	10 089	1	20 200	72	5558,0
Fortum	Oil and gas	7 076	21	14 100	39	11148,0
Rautaruukki	Metal and engineering	7 712	2	13 300	40	2884,0
Karl Fazer	Food and drinks	4 211	10	11 400	51	842,7
Kemira	Chemicals and plastics	8 159	3	10 400	55	2612,3
		190 881	15	292 600	61	

Source: Vartia & Ylä-Anttila, 2003 & Talouselämää 2003

Figure 5.7). The largest outward stock from Finland is to the EU area. As a result of the large investment abroad, the largest Finnish companies employ more people abroad than in Finland.

The high share of foreign ownership and, at least equally important, the investments abroad have both contributed to a significantly improved and intensified technology transfer.

Yet another structural change deserves to be mentioned. Many industrial enterprises in Finland were multi-sector conglomerates until the late 1980s. After that they reduced the number of goods

produced, focusing on narrow specialisation. Moreover, they went global. Nokia typifies all three structural changes that took place in the 1990s. First, it became mostly owned by foreigners. Second, it invested heavily abroad. Only certain functions were left in Finland. Nokia has more workers abroad than in Finland. Third, it focused on a narrow range of goods, reducing the number of sectors in which to operate.

A fundamental change in the 1990s was the significantly increased productivity, an important constituent of improved competitiveness. Overall production increased by 29 per cent from 1990 to 2001, even though the average number of working hours or the demand for labour did not increase; neither did the amount of capital invested in production (see Figure 4.5). The explanation is increased labour productivity and more efficient use of capital. The more efficient use of capital superseded the extensive investment policy of the 1950s–1980s.

The improved competitiveness and the structural changes in the economy are demonstrated in the structure of the exports. As was noted in the previous sections, the forest-related industry and the metal and engineering industry accounted for the majority of exports. The emergent ICT sector now accounts for a large share of exports.

Finnish companies specialise in high added-value production, R & D activities, and the sectors of industry demanding high technology and skilled labour. Low added-value production in Finland is not worth producing because of the high labour costs. At present, exported goods are more processed than before. Even in the traditional sectors of the industry, exports are now based on more value-added goods than before, the forest sector being the best example.

The imports consist of mainly raw materials and low added-value inputs for industry. Finland is much dependent on imports because Finland is a small country with limited natural resources. Consequently, the electronics, chemistry and metal industries are not able to function without imported raw materials. Only about one-fourth of the imports are consumer goods.

5.3.3 ICT sector, industrial and innovation policy

The economic growth under the last decade has been technology driven and the ICT sector, being the engine for the growth, also became the third industrial pillar. Finland has shown her adaptability to new technology and international competition; she has also changed from one of the least ICT-driven countries to the most ICT-driven.

Like many other European countries, the Finnish government at the beginning of the 1980s decided to promote a technology-driven policy by increasing spending on education and R & D activities. The State also had an ambitious goal of doubling the share of GDP spent on R & D. This goal was reached and raised in 1992, during the worst recession. This policy also aimed at a greater number of students majoring in the sciences. This policy has since proved to have been very successful.

The successful development of the ICT sector could not have taken place without the necessary infrastructure that the public sector offers: good social infrastructure and good public education, both of which can be seen as preconditions for achieving high competitiveness. There are measures that only the State can implement; on the other hand, there are measures that the State cannot have responsibility for. The rise was a combination of correctly-chosen long-term strategies and pure coincidence.

The ICT sector grew in parallel with the worldwide expansion of the ICT sector. The preconditions were favourable. There were skilled and well-educated people available and a liberal environment favoured the development of ICT products. The development of the ICT sector was further promoted by the chosen policy strategies and the public-private co-operation in technology and science. Telecommunication dominates the Finnish ICT sector, but it also includes IT and smaller software companies. It is estimated that the ICT cluster comprises more than six thousand firms. The largest contributor to the ICT sector in Finland is Nokia.

Finnish telecom know-how dates back to the end of the 1870s, when Finland was one of the first countries to construct telephone

Table 5.2 Largest ICT companies in Finland

Rank	Company	Description	Net sale (€ mil.)
1	Nokia	World leader in mobile communication	30 016,0
20	TeliaSonera (figures for Sonera)	Leading telecommunication group in Nordic and Baltic regions	2 241,0
29	Elisa	Second largest telecom operator in Finland	1 563,1
36	Tieto-Enator	Leading supplier of high-value added IT service in Europe	1 271,1
104	Perlos	World's largest supplier of mobile phone precision components	364,6
119	Novo Group	Large provider of business-to-business IT services in Nordic countries.	308,5

Source: Rouvinen & Ylä-Anttila, 2003

networks. More recently, the Nordic countries were among the first countries to agree on a common standard for mobile telecommunication (NMT) in 1969. This provided Scandinavian companies with a large market and the incentive to develop the mobile telecommunication technology. In 1987 the State-owned post and telecom company was privatised and broken up, and separate companies for post and telecom services were established. In 1990 Finland opened the telecom sector to competition. Finland was also the first country to open up a commercial digital mobile network (GSM). Setting standards is a task only a government can conduct.

Nokia has played a crucial role in the growth of the ICT cluster. The worldwide growth in the mobile sector has helped Nokia to grow. Nokia is responsible for about half of the growth of the ICT sector. The rest of the ICT sector consists of smaller firms. Nokia's success has provided smaller Finnish companies with credibility.

The story of Nokia demonstrates the development of the telecom sector in the 1990s. At the beginning of the 1990s Nokia was

an almost bankrupt multi-branch conglomerate company producing electronics, rubber, cables, forest-related products and some telecom equipment. The company made the strategic decision to focus on just telecommunication and abandon other

goods and businesses. The rest is economic history. Nokia possessed the correct strategies and benefited from the global telecom boom. It became the leading telecommunication company, now accounting for approximately 40 per cent of the market share in mobile handsets and strong in the network infrastructure as well. Nokia has also succeeded in establishing a globally respected and recognised brand, something unusual for Finnish companies.

Nokia's contribution to the growth of the economy has been significant; it accounted for about 3 per cent of the GDP in 2002 and today accounts for one-fifth of the total exports and about 60 per cent of the value of the Helsinki Stock Exchange. Nokia's role was even more significant during the recovery of the economy. Nokia's role in strategically important activities like R & D, internationalisation and networking has been considerable. The company accounts for about 35 per cent of the R & D conducted in Finland, which is more than the R & D conducted in the Finnish universities and about a half of the total R & D expenditure by the private sector. Nokia employs about 20,000 people in Finland, more than half working in R & D. Moreover, it has a wide range of subcontractors in Finland. Finally, because of Nokia, the entire ICT sector in Finland has become attractive.

There is an advanced co-operation between the universities and the private sector. The universities carry out most of the fundamental research, mainly financed by public expenditure. The private sector conducts most of the advanced R & D. Furthermore, it purchases R & D from universities and research institutions. This pub-

Table 5.3 Nokia in the Finnish economy 2002

Share of GDP	2,70 %
R&D	35 %
Exports	21 %
Employment	1 %
Market value of HEX	60 %

Source: Rouvinen & Ylä-Anttila, 2003

lic-private co-operation is an important mechanism in knowledge transfer. It also links public education and research with industry, serving the interests of industry. This can be seen as one key factor in the high competitiveness of Finnish industry.

Another factor seems to have been the long-term State technology policies, which, through channelling resources on R & D and education, showed a clear direction for what to invest in. The policy was shaped in close co-operation with the private sector and trade unions. Now, we can argue that the policy has achieved results. The expenditure on R & D – 3.5 per cent of GDP – is the second highest and the ICT sector is blooming (See Figure 5.8). Finland seems to be attractive for foreign companies in product development because of the highly educated labour force and labour costs that are lower than in many Western European countries or the United States. Companies like Honeywell, Ericsson, Fujitsu, IBM, HP, Lotus and Siemens have established R & D activities in Finland in recent years. Most of the international R & D units have been acquired through FDIs in existing Finnish firms. However, all R & D investments do not go to ICT. Finland has constantly promoted R & D in all of her important sectors of industry.

Finland's good performance consists of several factors. It has been a combination of the right policies at the right time, opening up the economy for competition, and a good public infrastructure. None of these can alone explain the good performance. In fact, Finnish industry and technology policies have not differed much from other Western European countries. The opening up of the economy was not a coherently planned process. The deregulation of the financial markets that ended in EMU membership fundamentally changed the environment in which Finnish companies operated. They were forced to adapt to global competition. There was no particular long-term strategy to make Finland the most competitive country. True, there were correct decisions at crucial moments, but coincidence was also involved. Nokia would never have become such a large company if the worldwide mobile telecom sector had not bloomed in the middle of the 1990s. Moreover, without the public funding

from Tekes for Nokia's research, it would not have developed such a high level of mobile know-how and technology to conquer global markets. And without Nokia, many things would have been different in Finland. Therefore, one can argue that Finland has been able to adapt to the New World economy. Still, in order to adapt during sudden changes, one must be prepared.

5.3.4 Forest and Metal; the backbones of Finnish industry

Forests are virtually the only natural resource Finland possesses. The forest industries have been the backbone of industry during the entire history of industrialised Finland. The industry has increased its level of processing during the entire development of the sector. At present, Finland accounts for 0.5 per cent of world's forest resources and 1 per cent of the coniferous forests, and 5 per cent of the global forest industry production and, what is more important, 10 per cent of global exports. The share is even larger in certain high added-value goods – for example, Finland accounts for 20 per cent of printing and writing paper exports.

The structure of the forest industry changed substantially in the 1990s. Domestically, many small forest companies were acquired by larger ones. The companies also invested heavily abroad and acquired assets there. Moreover, Finnish companies specialised in the more added-value goods. Finally, the efficiency of the use of capital was improved.

The largest Finnish forestry companies are the largest in Europe. Only certain American companies are larger. At present, the three largest Finnish companies rank in the top 15 forestry companies of the world – Stora-Enso ranks 5th, UPM-Kymmene 7th and M-real (Metsäliitto) 11th; in Europe, their rankings are 1st, 2nd and 4th respectively. There is only one Russian company in the top 100 forest companies, Ilim Pulp (67th).

At present, Finland is one of the leading centres of know-how in forest-related industries, where a lot of R & D is being conducted. Moreover, there is an entire cluster producing goods related to for-

Table 5.4 World's 15 largest forest-related companies and sales

	Company	Country	Net sale (2002)
1	International Paper	US	Million \$ 24976
2	Georgian Pafic	US	23 271
3	Weyerhaeuser	US	16 771
4	Kimberly Clark	US	13 566
5	Stora Enso	Finland	12 090
6	Procter & Gamble (Paper)	US	11 877
7	UPM-Kymmene	Finland	9 907
8	Nippon Unipac	Japan	9 696
9	OJI Paper	Japan	9 635
10	Svenska Cellulosa	Sweden	9 091
11	M-real (Metsäliitto)	Finland	8 387
12	Smurfit-Stone	US	7 483
13	Boise	US	7 412
14	MeadWesivaco	US	7 242
15	Anglo American (Mondi)	UK	4 805
67	Ilim Pulp	Russia	974

Source: Global Forest and Paper Survey 2003, PwC

stry, which includes machine building and engineering producing equipment and services for the forest industry. Furthermore, large consulting businesses are related to the forest sector. Certain fields of chemistry and the automation industry have emerged to supply the forest industry. Paper mills are the most telling example of machine-building goods supplied by the forest sector.

At present, metallurgy and machine building includes electronics and electrotechnics. This means that some parts of the ICT sector are also included. There is, however, a fundamental difference between forestry and the whole metals, engineering and machine-building sector. The post-war industrial policy resulted in an increased supply of domestic raw material, but now the sector is dependent on imported raw material.

Table 5.5 Some products from the technology industries in which Finnish manufacturers hold a significant market share globally

Electronics	Market share 2003	Engineering and metals	Market share 2003
Mobile phones	38 %	Forest machinery	45 %
Meteorological radiosondes	67 %	Agricultural tractors (more than 120 hp)	9 %
EL displays (electroluminescent displays)	60 %	Pulp and paper machines	40 %
MEMS Sensors	6 %	Diesel and gas engines	25 %
Low-g acceleration sensors	50 %	Lifts and escalators	9 %
Heart rate monitors	48 %	Cranes and hoists	18 %
Mammography	15 %	Special ships	25 %
Dental extraoral imaging	30 %	Plywood machinery, laminated Veneer Lumber	17 %
		Glass bact plants	30 %
		Plaster and mortar pants	10 %
		Sheet metal fabrications equipments (wxl. car industries)	20-50%

Source: Technology industries of Finland

There is, however, still metals production in Finland, consisting of steel and copper products, stainless steel, zinc and nickel. The products are refined for the needs of the mechanical engineering industry, the electronics and electrotechnical industry, and construction. The metals production is based on high technology, not on bulk.

The mechanical engineering industry manufactures equipment, machines and vehicles. Recently, the entire sector was renamed the technology industry, stressing the importance of technology in all the goods produced. The flagships of the technology industry have had rather similar strategies and they were restructured rather similarly during the internationalisation. The recession and the cessation of bilateral trade forced enterprises to adapt and restructure. Similarly, the increased foreign ownership demanded restructure. As a rule, the focus is on a narrow range of goods and global operations. Some of them are largely foreign-owned. Some of the enterprises focus on a very narrow range of goods but account for a large share

of production globally (see Table 5.5). The largest enterprises in the technology sector are no smaller than the enterprises in the Russian metals and machine-building sector. The total R & D expenditure was 2.1 billion € in 2001. The sector accounts for 80 per cent of the R & D spending, and the value of the sector's exports was 26.1

Table 5.6 Finland's and Russia's largest Metals and Machine-building companies

Company	Field of industry	Country	Net sale	Personnel
Outokumpu	Metallurgy and mining	Finland	Million € 5558,0	20 196
Metso	Metal	Finland	4691,0	29 258
RusAl	Metallurgy and mining	Russia	4594,4	76 200
Kone	Elevators	Finland	4341,8	29 407
AvtoVaz	Machine building	Russia	4333,4	119 000
Norilsk Nickel	Metallurgy and mining	Russia	4108,0	89 400
Rautaruukki	Metal	Finland	2884,0	13 325
Wärtsilä	Metal and machines	Finland	2519,0	12 417
Alrosa	Metallurgy and mining	Russia	2129,9	n.d.
Severstal	Metallurgy and mining	Russia	2011,0	44 300
RusAl	Metallurgy and mining	Russia	4594,4	76 200
AvtoVaz	Machine building	Russia	4333,4	119 000
Norilsk Nickel	Metallurgy and mining	Russia	4108,0	89 400
Alrosa	Metallurgy and mining	Russia	2129,9	n.d.
Severstal	Metallurgy and mining	Russia	2011,0	44 300

Source: Talouselämä, 2003 (Finland), Expert, 2002 (Russian figures for 2001)

billion €. The important electrotechnics and electronics (and Nokia) are included in the figures.

The recent development of the forest and technology sectors demonstrates that even the most traditional sectors of industry changed in the 1990s. They have focused on R & D and their strategies are based on high-tech production, specialisation and global operations. They have also been able to improve productivity, quality and capital use.

5.3.5 Public sector performance

The Finnish public infrastructure is evaluated as the best in the world in the WEF ranking. The current well-functioning public infrastructure consists of numerous constituents. The constituents are rooted in different periods of Finland's history. Moreover, one can find different layers of public infrastructure. Some of them – the rule of law, clearly defined property rights, transparent and efficient bureaucracy – form the foundation of a functioning market economy. These constituents ought to be self-evident in a market economy. At present, there are no fundamental differences between the countries of Western Europe concerning these constituents. In Finland, they go back centuries. The political system has left them untouched during the entire history of industrialisation. True, the bureaucracy has been expanded together with the increased public sector share of GDP. However, the ability of a State to guarantee the rule of law, the transparency of the bureaucracy, and property rights has virtually nothing to do with the public sector share of GDP, which is approximately 45 per cent in Finland, close to the OECD average.

Finland scores well in the WEF and the IMD studies for good governance and low corruption. Finland is the least corrupted country according to the Transparency International corruption survey. Moreover, the juridical system is effective and fair, and legislation encourages companies to function legally and to pay taxes. Finland ranks the best in the IMD concerning the transparency of government policies. In addition, the legislation scores very high in

the WEF study, and the competition legislation scores the best in the IMD study. To conclude, these constituents are strong because they go back centuries and the political system has left them untouched.

In Finland, the State – the authorities of the Grand Duchy – began to get increasingly involved in the economic development on several fronts in the 19th century. First, the legislation was reformed to enable private entrepreneurship. Second, the required infrastructure was built. Third, important State institutions were established – the Bank of Finland being the best example. Still, the State focused on legislation and establishing infrastructure. The enterprise level dictated the bulk of the resource allocation.

The State increased its involvement in the economy after World War II. There are certain constituents of the current competitiveness of Finland rooted in the period of establishing the welfare state. The foundation for the welfare state was already established in the late 1960s. The principles of the welfare state were and are based on services provided by the public sector and institutions. Several achievements of the welfare state are key constituents of the high competitiveness. The welfare state model includes free education (from primary school to higher education), and heavily subsidized and, consequently, low-cost health care. Moreover, it includes state pensions, unemployment benefits, maternity leave, etc., and the social safety nets provide a minimum income for the worst-off.

At present, Finland's competitiveness is based on know-how, R & D and a high degree of processing. Therefore, it is worth focusing on education and research. Investments in education have been crucial for the competitiveness. The public school system is of a proven high quality; Finland ranks first in the PISA study conducted by the OECD.

The higher education is based on a countrywide network of polytechnics and universities. At present, the share of students majoring in sciences is 29 per cent, which is the third highest share in the OECD countries after Germany and South Korea. Students are financially supported by a student benefit scheme that provides

all higher education students minimum funding for living during the time of their studies, reflecting the principles of the welfare state. Everybody has equal opportunity to work their way to better positions in society, regardless of their financial, ethnic or family background.

There are more recent and very important constituents of competitiveness. During the period of establishing the welfare state, the competitiveness of industry was promoted by devaluing the currency. During the 1980s and, if not earlier, after the recession in the 1990s a widespread understanding emerged that the competitiveness should be based on know-how and high-tech production. The stable institutions and the well-organised education would not have been sufficient to facilitate the structural changes to the economy in the 1990s.

To invest in high-tech and R & D, and, consequently, to improve competitiveness, was the only way to maintain the welfare state. To achieve this aim the State became increasingly involved in the technology and industrial policy promoting R & D and high-tech production. The flourishing ICT sector and advanced industry have required co-operation between the public and the private sector. This would not have been possible without a widespread and general trust in the public sector. The State has also played a crucial role in supporting necessary networks of public-private co-operation. The participation of the public sector has been a reference, stressing the importance of a project.

To conclude, the competitiveness of a nation consists of different layers of constituents. Concerning the constituents reviewed here, they all require the State to fulfil certain tasks. The first layer – the foundation – calls for the State to establish and guarantee that the rules of the game are equal for all and that a certain stability and predictability exists. Moreover, the State must operate transparently and not favour anyone.

The second layer of competitiveness is the welfare state, offering equal facilities and services for all the citizens. Again, the State is required to offer equal services for all citizens. The State cannot,

however, possess information on how to succeed at the enterprise level. In 1990 internationalisation became the prerequisite for competitiveness. The tasks that the State fulfilled in the welfare state did not guarantee competitiveness in the global economy.

To promote internationalisation, Finland joined the EU and, later, the EMU. Both decisions demonstrated that Finland was determined to be one of the European Union countries and to be a part of the integrated Europe. The EMU area offers good opportunities for businesses to compete inside the area and the EMU area accounts for almost 30 per cent of Finland's exports. Finland's external environment is predictable.

The third layer of competitiveness calls for the State to promote the preferred sectors of the economy and, by doing so, provide the opportunity for citizens and enterprises to contribute to a successful performance in the global economy. In Finland, the preferred activities have been high-tech production, R & D, and, in particular, the ICT sector. They have enabled the high competitiveness. Due to the high competitiveness, it has been possible to maintain the welfare state. Apparently, both the welfare state and the advanced ICT sector are included in Finland's competitiveness. This mixture has been perceived as something unique. Compared with previous periods of history, the State has been obliged to fulfil new functions and co-operate more intensively with the private sector. The co-operation would not have succeeded if the State had not possessed a good reputation and a long tradition of transparency and very low corruption.

However, the State alone cannot guarantee the competitiveness of the nation. It is a result of synergies between all the actors in the society. In Finland the State has provided certain stable elements and institutions that are the basic infrastructure for competitiveness. Though the world economy has fluctuated, the State has maintained a high state of preparedness. Suddenly, when the ICT boom occurred, that preparedness offered the perfect conditions for Finland to adapt to the New World economy. Coincidence seems to favour those who are prepared.

5.4 RUSSIA: LARGE COUNTRY, SMALL ECONOMY, SMALL ENTERPRISES, AND HEAVY GOODS

This chapter reviews the recent economic development in, and important structures, of the Russian economy and society. Russia's ranking in the referred competitiveness rankings is modest. The performance in the rankings does not, however, demonstrate all the essentials impacting on her competitiveness. Worse, there are persistent elements in Russia that reduce her competitiveness, which are not even indicated in the surveys. The competitiveness studies initially invented to study developed market economies inadequately address the weaknesses or lack of some of the fundamentals of a functioning market economy. But, on the other hand, there may be some issues in the recent development that are not targeted in the studies.

Moreover, the chapter studies those issues that have been of special importance for Finland's success in the 1990s; how do they look in Russia? Special emphasis is devoted to the internationalisation of enterprises – one of the major constituents of Finland's competitiveness – innovation and industrial policy. The development of small (and medium) enterprises is also briefly reviewed. The small enterprise sector demonstrates certain weaknesses in the economy and, in particular, the weaknesses concerning the rule of law. Finally, the chapter reviews Russia's weak public infrastructure behind the competitiveness.

5.4.1 Russia today – performing weakly in competitiveness

In the WEF competitiveness ranking, Russia ranks 70 out of 102, and 26 out of 30 in the IMD study for large countries. Russia's performance has declined a little since she was first included in the rankings in the middle of 1990s. However, the rankings have changed their methodology and included more countries almost every year, which makes it hard to make a coherent analysis of Russia's performance in the competitiveness rankings.

In the WEF Growth Competitiveness index, Russia scores well in macro economic issues like national saving rate 2002 (10/102) and

government surplus (12/102). However, Russia scores unfavourably in public trust in politicians, diversion of public funds and extent of distorting government subsidies. In issues like high inflation and public institutions, Russia ranks weakly. In organised crime, judicial independence, favouritism in decisions of government officials and irregular payments in export and imports, Russia performs among the worst in the world. Russia's weakest ranking is in the issue of property rights (96/102), the issue having been highlighted throughout the study. Russian technology also scores unsatisfactorily. Government success in the promotion of ICT, laws relating to ICT, FDI and technological transfers and university/industry research collaboration are all listed among the notable competitive disadvantages, exactly the opposite to Finland.

Russia scores quite well in the WEF Business Competitiveness index for innovation, railroad infrastructure development and quality of maths and science education. However, Russia scores poorly in the prevalence of foreign technology licensing, value chain presence, foreign ownership restrictions and extent of bureaucratic red tape. In the protection of minority shareholders' interests, Russia scored second from bottom in the entire WEF Business Competitiveness rankings.

In other indicators used in WEF Competitiveness ranking, Russia ranks well in flexible hiring and firing practices, and the flexibility of wage determination. However, Russia ranked very weakly in the burden of regulation, the transparency of government policy-making, the efficiency of the tax system and the effectiveness of government in reducing inequalities in income.

Russia's strongest performances are found in the large number of R & D personnel in business enterprises, average corporate tax rate on profits, central government budget surplus and electricity costs for industrial clients. Moreover, the ranking concerning science in schools, the education system and university education is quite good. However, Russia performs poorly in energy intensity, banking sector assets, collected indirect tax revenues and country credit ranking. Russia performs the worst in the whole IMD study

for alcohol and drug abuse, the confidentiality of financial transactions, access to foreign capital markets, and health, safety and environmental concerns.

The IMD lists the following challenges for Russia: to modernise her social sphere and improve the well-being of the population, to accelerate the growth of the manufacturing industry, to continue the public sector reforms, to reform the management organisation system and government finance system from a cost approach to result-oriented methods. According to the WEF business leader survey, the most problematic factors for doing business in Russia are the tax regulations, corruption and difficult access to financing.

Despite the criticism towards the competitive rankings, they still demonstrate the most problematic issues and obstacles to Russia's competitiveness. Similar conclusions have been made in other surveys studying the enterprise sector.

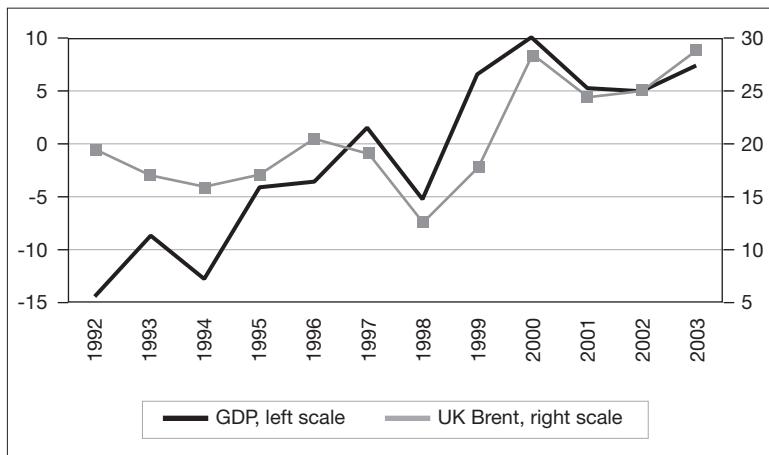
5.4.2 Economic performance

This section reviews some equivalents of the current Russian economy compared with Finland, including the basic structures of industry. We set out to discuss whether Russia is able to use the window of opportunity she is now offered. Is she prepared or preparing to benefit from the favourable external development?

The economic crisis and the devaluation of rouble 1998 highlighted the adverse macroeconomic development of Russia in the 1990s. Since then, the economy has developed favourably. The GDP has increased annually since the default in 1998 and the growth has continued, even though the country has already exploited the price advantage she gained after the devaluation. The budget deficit has turned into a strong surplus and some foreign debts have been repaid.

Russia's best score in the WEF ranking is the budget surplus. This is largely due to high world oil prices. The IMF estimates that the oil and gas sector income accounted for 25 per cent of government revenues in 2003. Moreover, the IMF has estimated that a one-dollar

Figure 5.5 Russian GDP growth (% pa) and international oil prices (US\$/barrel), 1992–2003



Source: Goskomstat, IMF (IFS)

change in oil prices changes federal budget revenues by an estimated 0.35 per cent of GDP, stressing the federal budget's high dependence on oil prices.

There seems to be a weak consensus that a slight reduction in oil prices would not significantly deteriorate the growth in GDP. It was pointed out that, apart from oil and gas, domestic production has increased since the recession and the dependence on energy prices should have decreased. However, this argument is not supported by the fact that the structure of Russia's export trade remains unchanged and no major new export goods seem to have emerged. Instead, the share of oil and gas products in exports has even increased (see Table 5.7). Furthermore, the federal budget is heavily dependent on energy prices, the revenues from the energy sector accounting for 25–30 per cent of the federal government's total revenue. Moreover, the energy sector accounts for half of all investments made after the recession. There seem to be no grounds for arguing that the dependency on oil and gas revenues has markedly

Table 5.7 Russia's Current Account Balance and Foreign Trade (\$ million)

	1994	1995	1996	1997	1998
current account balance	7 844	6 963	10 847	-80	219
export	75 802	92 987	102 966	100 975	86 816
of which oil&gas related products (%)	33,3	32,8	37,0	38,1	32,2
import	65 887	82 809	86 757	92 008	74 471
	1999	2000	2001	2002	2003
current account balance	24 616	46 839	33 935	29 520	29 520
export	84 618	114 598	113 325	120 912	120 912
of which oil&gas related products (%)	36,5	46,1	46,0	46,5	52,4
import	52 888	61 092	74 336	84 463	84 463

Source: Bank of Russia

diminished. Russia is still largely dependent on the production and export of the energy sector.

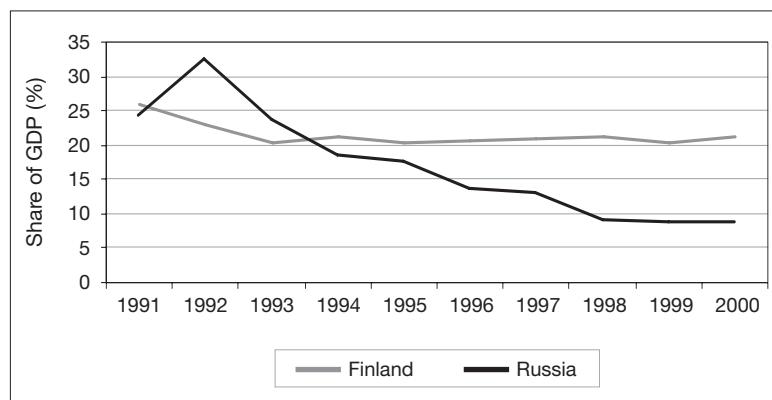
Needless to say, there is a significant difference the Finnish and Russian export structures. Russia's export mainly consists of energy sector goods. The trade balance has been positive for the last ten years, and the share of oil and gas and related products has increased during the past year. These products compete on the world market with price, not quality. One can argue that the Finnish economy is vulnerable because of the high specialisation. However, Russia's economy is even more vulnerable because of the high dependence on historically highly fluctuating oil prices.

Russia's imports mainly comprise consumer goods and equipment for industry. About one-fifth of Russia's imports come from other CIS countries. The exports to CIS countries mainly comprise cheap oil and gas. The share of CIS trade was higher at the beginning of the transition but has gradually decreased. The major problem with the CIS trade in terms of improving competitiveness is that it does not contribute to narrowing the gap in technology

– the technology used in the CIS countries being even more outdated than in Russia.

We set out to discuss whether Russia is preparing to use the opportunity being offered now. As stated above, the Russia's favourable macroeconomic development since the recession has been facilitated by the high price of oil. To investigate the structural changes possibly taking place or being prepared, we focus on investment, enterprise structures, and R & D, as well as industrial and innovation policy. We are far from arguing that policies similar to Finland's should be carried out in Russia. Still, it is obvious that by maintaining the existing structures of the economy and society, Russia is unlikely to use the offered opportunity. Excessive investments are required just to maintain the inherited infrastructure. This holds for private industrial enterprises as well as the public infrastructure. Figure 5.6 demonstrates that the previous – i.e. Soviet – high but ineffective rate of investment has diminished to a level that will not facilitate long-term economic growth. It is also obvious that such a low level of investment will not promote competitiveness. The share of investment in GDP is a general indicator, but this fails to shed

Figure 5.6 Investments in Russia and Finland



Source: Penn World Tables

light on the detailed structures of industry and the policies that promote production.

The development of industry well demonstrates the structural changes in the economy. In Finland, several important changes took place in the 1990s. The productivity and the efficiency of capital use were improved. Moreover, the added-value of the production increased. As a rule, it was no longer profitable to produce low added-value stages of production. In that regard in particular, quite the opposite happened in Russia in the 1990s. The distribution of industrial production among the branches of industry changed and the share of low added value increased. The proportion of high-tech branches decreased at the expense of low added value – at least in relative terms.

Russia has not yet managed to effectively use information technologies in industry. The number of businesses developing consumer ICT technology is limited. Among the sectors having invested in ICT, a distinctive leader is the gas and oil sector, which possesses sufficient financial resources and requires good communication solutions due to the large distances between the separate units of an enterprise. Other industrial sectors have, at best, adopted and introduced integrated information system services in limited parts of their production. The domestic ICT sector is still developing and predominantly focuses on export markets.

Other important differences can be found in the enterprise structures. In the 1990s Finnish enterprises focused on producing those goods in which they were the most efficient, either selling or

Table 5.8 Industrial production in Russia, 2003

	Share of production (%)
Machine building	19,9
Fuel industry	18,5
Food industry	14,1
Power Industry	12,0
Ferrous metallurgy	9,8
Non-ferrous metallurgy	7,4
Chemical industry and petrochemistry	5,5
Forest industry	4,2
Construction material industry	3,1
Light industry	1,4
Others	4,1
Total	100,0

Source: Goskmonstat

otherwise abandoning such activities that they regarded as not being in their core competence. Again, the opposite happened in Russia. The largest conglomerates of the economy expanded their activities and acquired assets outside the initial sector, becoming multi-sector enterprises. Such a multi-sector approach differs from the current global trends praising outsourcing and concentration on the core competence of a given company. The strategy of the largest conglomerates seems to be the horizontal integration, a strategy used by Finnish and other European companies in the 1980s. In Russia it is not necessarily an adverse phenomenon from the vantage point of growth because the conglomerates possess resources to invest, an important asset in a country with underdeveloped financial markets. However, for the competitiveness of individual companies, vertical integration on the global market instead of horizontal integration on the domestic market would, perhaps, be the best way of promoting internationalisation.

5.4.3. Internationalisation

Soviet enterprises were huge units in terms of number of employees and the amount of production, often expressed in quantitative terms. The contribution to the industrial production and economy in general by large enterprises is large. But even the largest enterprises are relatively small in comparison with their foreign counterparts. For example, there are only four Russian enterprises in the Forbes 500 list ranking the 500 largest enterprises in the world. To compare, there are seven Finnish enterprises in the ranking. Even the largest Russian enterprises are modest in a global comparison.

For some reason, the second largest Russian company, RAO UES, is not included in the initial list. There are also two enterprises – Nordea Bank and TeliaSonera Group – which are initially at least half-Finnish companies now merged with Swedish companies and registered in Sweden. Even though Finland's total GDP is 2.5 times smaller than Russia's, the Forbes 500 list shows the differences between enterprises. The largest Finnish companies are no smaller

Table 5.9 Finnish and Russian companies on the Forbes Global 500 company list

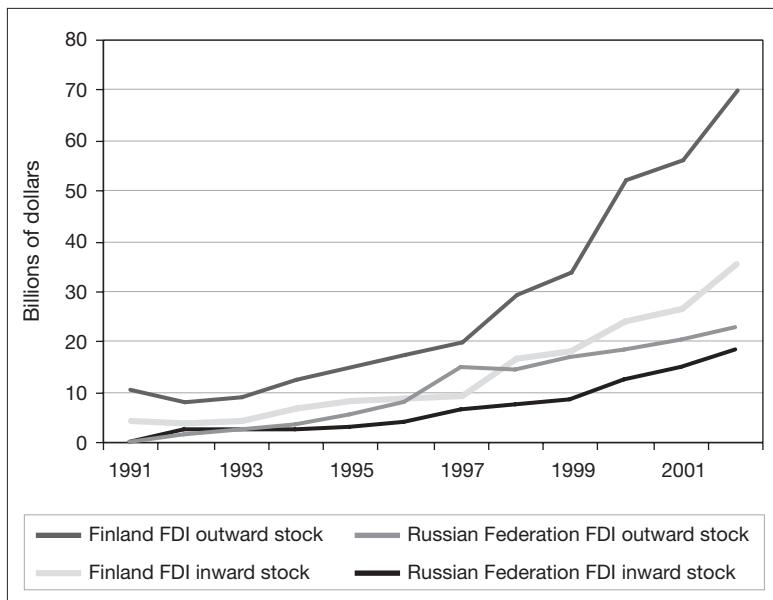
Rank	Company	Country	Industry	Revenues (\$ mil)
82	Nokia	Finland	communications equipments	28 249
129	Gazprom	Russia	oil & gas	19 205
202	Lukoil Holding	Russia	oil & gas	13 338
223	Stora Enso	Finland	paper & forest products	12 030
247	Yukos	Russia	oil & gas	10 914
259	Fortum	Finland	oil & gas	10 492
276	UPM-Kymmene	Finland	paper & forest products	9 858
430	M-real (Metsäliitto)	Finland	paper & forest products	6 178
439	Kesko Group	Finland	food & drug retail	6 086
451	Surgutneftegas Oil	Russia	oil & gas	5 928
491	Outokumpu	Finland	metals & mining	5 231
	RAO UES	Russia	electrical energy	15 575
224	Nordea	Sweden	bank	12 015
435	TeliaSonera Group	Sweden	telecom services	6 109

Source: Forbes Global 500 company list 2003 & data for RAO UES from Expert, 2002

than their Russian counterparts. Moreover, the enterprises operate globally. On the other hand, Russian companies are modest by the global comparison and they operate mainly in Russia, although they do export their goods.

More important differences can be pointed out: Russian enterprises are mostly owned by domestic shareholders; Russian industrial enterprises sell predominantly in the domestic market; and Russian enterprises have a very limited number of assets abroad – for example, they have a limited number of employees abroad. True, the enterprises exporting raw materials have expanded their activities abroad over the past few years, but the scale is still limited.

Figure 5.7 Foreign direct investment stock – Russia and Finland



Source: UNCTAD, 2003

The enterprises exporting minerals and other raw materials abroad are rare exceptions of internationalisation.

There are obvious reasons for the modest internationalisation in Russia. Even compared with Finland, the internationalisation has been even more belated. There was no tradition or gradual wave of internationalisation beginning in the 1970–80s. In addition, there was virtually no experience of internationalisation at the enterprise level.

There is wide evidence that internationalisation improves competitiveness. In Finland, it improved productivity and the quality of products. Both the Soviet Union and Finland had invested inefficiently. Finland learned how to use capital more effectively during the recession. At the same time, investments have declined in Russia and asset stripping has been a common phenomenon at the enterprise level, further exploiting the capital stock.

Table 5.10 Labour productivity in some North-West Russian Companies

Company	Sector	Owner	Sale 2003 (\$ million)	Productivity* (\$ thousand)
Soufflet St.Petersburg	Food & beverages	Grouppe Soufflet (France) & Baltika	43,4	867,9
Philip Morris Izhora	Tobacco industry	Philip Morris Holland BV (Netherlands)	584,5	730,7
Petromax	Metallurgy	Kuusankoski (Finland)	38,7	386,8
Rothmans Nevo	Tobacco industry	Rothmans International Tabak (UK)	103,2	344,2
Petersburg Products International	FMCG (Fast Moving Consumer Goods), razors	The Gillette Company (USA)	130,6	326,5
Kraft Foods	Food & beverages	Kraft Food Inc. (USA)	64,2	320,9
Petro	Tobacco industry	GT International (Switzerland)	513,5	285,3
Amcor Rench Novgorod	Tobacco industry	Amcor (Australia)	44,1	220,6
Pskovalko	Food & beverages	Regional authorities	21,3	212,9
Telebalt	Household appliances assembly	Company's management	71,0	177,6
Pirometr	Instrument-making	Several instrument making companies	123,3	171,9
Pfleiderer Chudovo	Construction materials	Grupo Uralita (Spain)	45,2	150,8
Dirol	Food & beverages	Cadbury Schweppes PLC (UK)	51,1	127,9
Vena	Food & beverages	Oy Sinebrychoff Ab (Finland), EBRD	86,2	123,1

* Sales divided by number of employees
 Source: Dudarev & al, 2003

Both Finland and Russia opened up for inward and outward investments in the early 1990s. Figure 5.7 shows that the FDI stock both to Finland and from Finland is larger than the corresponding Russian stocks. However, the outward stock of FDIs from Russia does not mean that Russian companies are deliberately internationalising. Instead, it demonstrates the outflow of capital and the underdeveloped financial markets.

The amount of FDI to Russia has increased during recent years and foreign companies seem to have an increasing interest in and trust of the country. There are still numerous obstacles left, the high corruption and lack of a proper infrastructure being the worst of them.

Internationalisation is not a goal as such; rather, an effective way of improving productivity. Of course, there are other ways of improving productivity, but they do not seem to offer adequate solutions for Russia. The amount of investment has been modest and the best results from modernising production have been achieved either by the domestic raw material sector or foreign investors. The foreign-owned firms in Russia have significantly higher productivity levels per worker than the domestically-owned. However, the number of foreign companies is still limited and there are still many restrictions on foreign ownership. This issue was also stressed as a notable disadvantage in the WEF ranking.

Table 5.10 lists the 14 most productive companies when it comes to use of labour in northwest Russia. The productivity is calculated by dividing the sales by the number of employees. The Table shows that 12 out of 14 of the companies are foreign-owned.

There are other factors for the low productivity. An inadequate number of new investments have been made, and the bulk of the factories are postponing the renewal of their out-dated technology. The low salaries do not offer incentives to improve skills, which preserves the low labour productivity. Moreover, the low productivity levels of Russian industries do not favour long-term growth. It seems there are not enough incentives in the domestic markets to encourage Russian companies to increase their productivity.

Russia remains heavily dependent on raw material production and low added-value products. Russia's quest for better competitiveness can be achieved by increasing the degree of processing and adopting more advanced technologies. The innovativeness will be reviewed briefly below. We will discuss the channels of technology transfer and the individual skills required to adopt them.

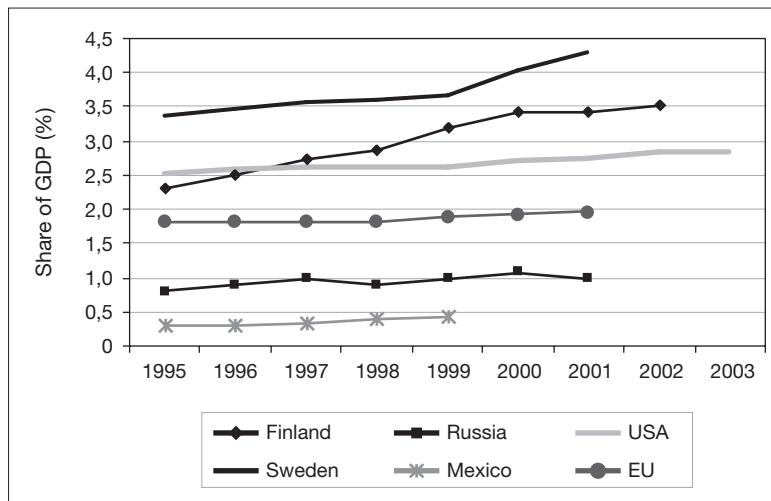
5.4.4 Innovativeness and technology policy

One of the crucial factors explaining Finland's overall competitiveness and the sudden rise of the ICT sector has been the high spending on R & D. At least equally important has been the ability to adopt innovations and technologies invented elsewhere.

The share of R & D spending is markedly lower in Russia, but still higher than in other countries exporting natural resources. It is important, however, that most of the R & D is carried out by the energy sector. Figure 5.8 shows that the R & D expenditure is still alarmingly low.

Russia scores well in the IMD ranking for large countries concerning R & D. Last year she attracted some FDIs for R & D activities in generic pharmaceuticals, the banking sector and nuclear technology. However, the R & D activities in Russia are still modest and Russia scores modestly in innovation capability in the WEF ranking (43/78). Still, the R & D indicators are among the best of Russia's indicators.

Figure 5.8 Expenditure on R & D in selected countries (as % of GDP)



Source: OECD, World Bank and Statistics Finland

There are several reasons for the current modest amount and quality of innovativeness. First, at the enterprise level it is more profitable to improve corporate governance, because, by doing so, enterprises can receive better returns in the short and, perhaps, mid term. It is risky to invest in R & D that brings returns later. No doubt enterprises are behaving rationally from their point of view. One should, however, express concern about such a state of affairs because the enterprises' rational behaviour may well reduce the mid- and long-term competitiveness of the national economy. It is a globally widespread phenomenon that the State is required to promote R & D, either in its own institutions (universities) or in co-operation with the private sector, to fill the gap between the long-term development of the national economy and the shorter-term interests of the enterprises.

Successful and effective industrial and technology policies have been major contributors to Finland's success. In Russia, the achievements of the industrial and innovation policy have been modest indeed. There are often different priorities at the regional and federal levels. There is virtually no co-ordination, resulting in chaotic implementation of policy. At the moment, there seems to be a weak consensus that to continue with the conventional industrial policy predominantly channelled to defending non-competitive sectors is not an option. The State policy has focused on cashing in non-competitive industries, without a systematic approach and only achieving short-term goals, and, worse, often being delivered non-transparently for dubious purposes. Consequently, there seems to be a widespread fear that increased resources for the industrial policy would result in more State subventions to certain preferred fields, deteriorating the preconditions of the markets' abilities to function and decide which sectors are able to succeed in competition.

Still, there seems to be a widespread understanding of the need for some State promotion of emerging industries and start-ups. But as long as there are no competent structures to implement such policies, it is better to focus on the rules of the game, to make them equal and transparent.

Russia also lacks any kind of structured technology policy. The current priorities are in military technology, leaving other research institutes without adequate State funding. Moreover, the educational potential in technology and science accumulated during the Soviet period has deteriorated. The number of students majoring in science and technology has diminished and the entire educational sector is struggling with inadequate resources. Moreover, the industrial enterprises and universities should co-operate closer in developing the technical education that is in crisis today.

To conclude, enterprises are unwilling to focus on developing technology in the short term because they receive better returns by improving other activities, corporate governance being the best example. Moreover, profits can be increased by using the existing assets more efficiently or by reducing the labour force. In facilitating long-term economic development, the State could significantly contribute to long-term development of the national economy. For example, the government could play an important role in improving the level of know-how in close co-operation with the private sector. There is, however, a widespread perception that State involvement in promoting industries is an adverse issue. Some oppose the State involvement due to the principles of the laissez-faire view, others because the State involvement is not transparent and does more harm than good.

5.4.5 A comparison – the forest sector and the metals and machine-building sectors in Russia

It is worth briefly comparing the forest and metal/machine-building sectors in Finland and Russia. They adapted to the changed environment and increased competition very differently. In Finland, the level of added value was increased, whereas in Russia it decreased.

The forest sector has never been a priority sector in Russia. It accounted for only 2.9 per cent of GDP and 5 per cent of total exports in 2001. By global comparison, the forest industry is small. Although Russia accounts for approximately one-fourth of the world's forest

reserves, Finland's forest sector is much more important globally. The forest sector production decreased substantially at the beginning of the 1990s and has remained low since then. At present, most of the exported forest-related goods consist of round wood or low added-value basic commodities, competing on the world markets by price. The machinery is mainly outdated Soviet technology and very few new investments have been made. The infrastructure is also inadequate and out-dated, and has deteriorated.

Even with regard to low added-value goods, Russia and Finland are roughly at the same level in terms of production and exports. For example, Russia's production of coniferous sawn wood was 19.9 million tonnes and Finland's 13.3 million tonnes in 2002. The total production of veneer was slightly more in Russia than in Finland, 1.8 and 1.2 million tonnes respectively. Russia's exports were 1.2 million tonnes and Finland's 1.1 million tonnes. Finland ranks sixth globally in paper and paper board production, whereas Russia is not in the top ten.

Russia's forest sector still faces the challenges of internationalisation. It does not have assets abroad, and it is predominantly owned domestically. Moreover, improvements to the efficiency are in their infancy. Historically, the development has been very different, not only concerning the industry but also concerning the infrastructure and forest ownership. Due to the State ownership of forests, there have been no incentives for silvicultural measures. Neither have the forests been perceived as objects of long-term investment. Only recently have the State policies started to concentrate on developing the forest sector. One of the important up-to-date decisions is to define the property rights for forests. Finland's experience demonstrates that development of the forest sector requires decades of work by the State, enterprises and individual forest owners. There are functions that only the State can fulfil, but, on the other hand, there must be incentives for individuals to look after a dispersed resource.

Unlike the forest industry, the metals, machine building and engineering companies are comparable with their Finnish counterparts

in size (see Table 5.4). There are, however, other fundamental differences in the structures of the enterprises and their current development. Finnish enterprises have focused on high added-value goods, and this trend even accelerated in the 1990s. In Russia, exactly the opposite took place. Manufacturing did not stand the competition and the sector was forced to produce products of low added value. Concerning Russia, only products of low added value are competitive on the world markets. The same structure holds for exports as well. Russian enterprises focus on the export markets, where they compete with low prices. In 2001 metals accounted for 15.3 per cent of (non-CIS) exports, the value being \$ 15.7 billion; machine building accounted for 8.6 per cent, at \$ 8.5 billion. It is worth comparing the exports of the corresponding sectors in Finland. In 2001 they were € 26.5 billion, roughly at the same level.

So far, only a few Russian companies have modernised and specialised their production, Severstal possibly being the best example. Most of the production facilities are still owned by large conglomerates and more investments in the infrastructure are crucially needed in order to improve productivity. Furthermore, the internationalisation of the sector, excluding exports, is in its infancy.

Although the metals, machine building and engineering sector survived the transition with a smaller decline in output than most other industry sectors in Russia, its competitiveness is highly dependent on cheap, subsidized energy and transportation, which only promotes competitiveness in the short and mid term. However, the long-term competitiveness of the industry cannot be dependent on subsidized energy and transportation costs. Instead, investments in infrastructure and R & D, improving labour productivity, and specialisation could be essential for improving the competitiveness.

5.4.6 Small and Medium Enterprises

At the beginning of the transition period there were widespread doubts about the possibilities of SMEs developing in Russia; the 70 years of Soviet rule might have repressed the spirit of entrepreneur-

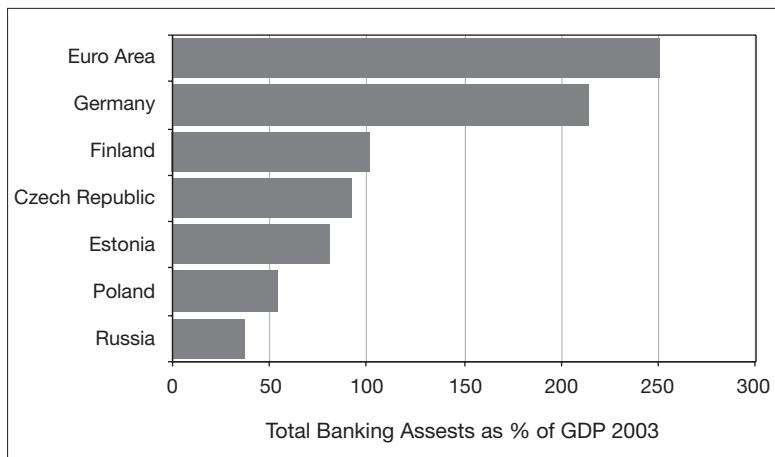
ship. There has, however, been a significant number of people willing to become entrepreneurs. Still, to become an entrepreneur has not been an option for the worst-off people because the main source of initial capital has been the entrepreneurs', or his/her relatives', own savings. Neither the banking sector nor the State has been able to establish structures to promote emerging enterprises.

The share of SMEs in production is modest. A well-functioning SME sector would contribute to sustainable growth and a more diversified economical structure. Moreover, an increasing and diversified SME sector would demonstrate that certain critical weaknesses of the economy, and, more generally, society, have been solved. Dynamically growing small and medium businesses would indicate that such rules of the game have been established that enterprises of different sizes can compete and that the small ones also have an opportunity to catch up. Of course, development of the SME sector has been declared one of the priorities of the economic policy, but no competent policies have been launched to promote such development. There have been obvious obstacles, all demonstrating the crucial problems of the economy and competitiveness.

The Soviet heritage – large companies producing most of the production – has been an obvious obstacle for development. True, there have only been ten years of transition and the freedom of entrepreneurship. The problem is that the SME development has stagnated.

One often-mentioned obstacle is the poorly functioning banking sector. This was highlighted as one of the most problematic factors in the WEF business survey. There had been problems throughout the 1990s, but the crisis in August 1998 had an additional negative impact on the development of the financial sector. In addition, the crisis reduced the vague trust in it. The number of credit institutions has decreased gradually, the number of banks now being approximately 1300. However, most of them are very small and their assets are still much smaller than their Western counterparts. Only a small proportion of banks operate like banks in the Western market economies, serving both individuals and companies. The financial

Figure 5.9 Total banking assets in some selected countries



Source: International Financial Statistics

markets are predominantly an option for large companies. If credits are delivered to SMEs, they are usually short-term with high interest rates. The venture capital and private equity markets are also in an early stage of development. However, some recent positive development is being seen as the mortgages markets are rapidly expanding in Russia. The weakness of the banking sector is, however, a sign of the low monetisation of the economy. The financial sector is suffering from insufficient capitalisation.

Even if the banks could provide SMEs with credit, there are still obstacles to growth. Virtually all SMEs have some part of their business in shadow, meaning beyond the bookkeeping and, consequently, beyond the taxation. Their competitiveness may well be based on operating in the shadow beyond taxation. There are several disincentives to disclosing the extent of the SME business. First, the competitive advantage may be lost. Second, the enterprise becomes an attractive target for the authorities' predatory practices. Disclosure of the entire business is, however, often the prerequisite for receiving bank loans. To conclude, it is not completely correct to

blame the underdeveloped banking sector for the underdeveloped SME sector. On the contrary, banks have gradually been obliged to focus on SMEs in their search for new clients with which to expand their activities.

The present structure of the SME sector reveals certain weaknesses in the national economy and it is misleading to expect that the SMEs would be able to solve the fundamental problems of the economy. The proportion of SMEs operating in industry is modest. They are mainly operating in services and trade. Therefore, they offer jobs and guarantee income for the entrepreneur. Moreover, the SMEs mostly operate in the domestic markets, and, often, locally. In addition, they do not seek to grow, at least to extent of their Western counterparts. To conclude, the SME sector offers jobs and guarantees the survival, and even well-being, of the entrepreneurs and provides them with an opportunity to work independently. The SME sector does not, however, contribute to solving the major problems in the economy. It is very unlikely to have an effect on diversifying industry. In addition, it does not contribute to innovativeness and the technology transfer required to increase the level of processing. Finally, because of the weaknesses of the financial markets, it does not provide opportunities for the worst-off people lacking starting capital.

We are far from arguing that Finland is a wonderland of entrepreneurship, but there are structural weaknesses in Russia that hinder development. First, there is still a widespread perception that only large enterprises can solve the economy's problems. Second, the authorities' predatory practices have an adverse impact on the incentives to grow, especially concerning SMEs.

5.4.7 Public infrastructure

Russia's performance in the WEF and IMD studies concerning her public infrastructure is poor. According to the WEF Business Leader Survey, the two most problematic factors for doing business in Russia are tax regulation and corruption. Other problems listed by the

rankings are the (non-)transparency of government policy making, the protection of minority shareholders' interests, the extent of distorting government subsidies, and, worst of all, property rights.

Moreover, continuing the public sector reforms and modernising the social sphere are listed among the major challenges. Obviously, there are numerous reasons for the current weak public sector performance. Similar to Finland, the roots of the current public sector performance and the state of the public infrastructure are rooted in different periods of Russia's history.

Already the first layer of competitiveness – the stable institutions of a market economy – demonstrates significant differences between Finland and Russia. The rule of law, a transparent and efficient bureaucracy, and clearly defined property rights have hardly any traditions in Russia. Certainly they do not go back centuries. There may have been times when those cornerstones of a market economy existed, but they have not remained untouched by the political system or, rather, the ruler of the country. As a rule, the property rights, as an institution, have been subordinated to political power, and they have not existed as an independent institution untouched by the political system. In addition, the prevailing corruption has made the administrative system non-transparent. There were efforts to strengthen the property rights in the late 19th and early 20th centuries but the Bolshevik rule carried out a universal nationalisation.

Important differences between Russia and Finland can be found in the State economic policies and, in particular, in the roles of the State and private sector. Both countries began to industrialise in the 1860s. In Finland the State focused on certain functions named in the previous section, whereas in Russia the State sought to govern the industrialisation more actively. Moreover, the industrialisation was launched as a top-down process. The goal was to narrow the gap between Russia and the more advanced industrialised countries. True, several important changes to the legislation were approved and there was an effort to offer entrepreneurs – both foreign and domestic – opportunities to operate. Still, the State accounted for a sub-

stantial share of the resource allocation by, for example, constructing railways. During the period of industrialisation there were, however, efforts to establish a market economy, with the corresponding institutions, and the public sector withdrew to certain extent, leaving the enterprises to decide. The institutional foundation was not, however, allowed to develop, gain legitimacy and stabilise. The State's involvement remained strong.

The Soviet Union did not allow the vaguely developed institutions of the Tsarist era to remain. On the contrary, the Soviet rule established completely new institutions and public sector. The accelerated industrialisation was governed by the State as a top-down process and the aim was to strengthen the international position of the Soviet Union. The shape and functions of all institutions were subordinated to these goals. There were no areas of society or life that the State and the Party were not allowed to reshape if it served their interests. The rule of law did not prevail. The Party was well above the law. The bureaucracy was not transparent and corruption was not adequately tackled.

Similar to the period of rapid industrialisation in Finland, the State was deeply involved in providing welfare. Education, health care and the social sector were being developed, and they were allocated substantial resources. Some success was achieved. Even now, the achievements of the Soviet education system are reflected in the competitiveness ranking.

The challenge the reformers encountered in the 1990s was certainly not easy. Several fundamental preconditions for a functioning market economy were lacking. The Soviet rule had eaten away at the legitimacy of the public sector. There was no trust in the public sector. The inadequacies of the economy reviewed in this chapter call for effective and transparent government policies, but the public sector performance is unable – as the surveys demonstrate – to fulfil the tasks required.

The policies and activities required from the government are various. To demonstrate the challenges the public sector encounters, we focused on several issues that are important for improv-

ing competitiveness and the diversification of economy. First, the development of the SME sector should be promoted. Second, it is necessary to promote the process of catching up with technology and innovations. Third, it should take care of the worst-off and offer them opportunities to work their way to a decent standard of living. It is obvious that in Russia today no other institution is able to take on the responsibility for these issues.

According to the studies on competitiveness, Russian managers have heavily criticised the widespread corruption. Russia ranks 86 out of 133 in the Transparency International corruption index. Surprisingly, there seemed to be a vague consensus among the interviewed academics that corruption is not a major obstacle to running or starting a (SME) business. Although corruption is widespread, the entrepreneurs have found ways of doing business with corrupt civil servants. We are willing to challenge this argument. In doing so, we seek to discuss the challenges the public sector is encountering in Russia and argue why tackling corruption is important for the performance of the entire public sector.

First, in the economic theories, corruption is considered an obstacle to achieving long-term growth as it reduces the potential growth levels.

One can justifiably argue that corruption reveals serious fundamental inadequacies, rather than being a mere reason for adverse development. The widespread corruption is indicative of several issues being reviewed throughout the study. First, the element of pernicious stability – the bureaucracy – is still well above the law and certainly does not demonstrate that the State apparatus itself should also be equal before the law. Worse, the prevailing corruption in the existing businesses erodes any efforts to conduct, for example, a State-led industrial policy. The lesson learned from the Finnish experience is that if the State has been involved in industry/innovation/R & D-promotion programmes, it was an important reference demonstrating that the programme was worth joining. The corruption paralyses and gives a bad name to any policies the State seeks to promote.

The State is, however, the only institution able to promote the well-being of the weakest in society by maintaining certain institutions: education, health care and social safety nets. If the State lacks any credibility and is not trustworthy, and is, therefore, unable to run efficient policies, which institution is to organise the health care and social safety nets? They require urgent modernisation.

Second, we have argued that there are certain lines and no-go zones in the Finnish political system and society that no political leader can cross or go into. Widespread corruption abolishes the borders of those no-go zones.

Moreover, there can be no fair competition between small and large enterprises. In the 1990s there was obviously a situation in which the largest enterprises were well above the law – paying taxes on an inconsistent basis, if at all. On the other hand, there were (small and medium) enterprises dependent on the say-so of the bureaucracy, not defended by the law. Worse, the juridical system has been working under the control of local, regional or federal authorities.

Such a state of affairs is by no means a surprise. The understanding of the rule of law has been weak and the tradition diminutive. During the Soviet era the plans set the targets and guidelines for enterprise activities.

It is an unsustainable perception that an economy can remain a separate island where corruption can flourish without major damage being done. Fine, the entrepreneurs have invented ways of dealing with the authorities regulating business on a case-by-case, person-by-person basis. Can anyone possibly imagine that other State institutions could remain corruption-free: health care, education, and the armed forces? There are very different people dependent on them. The entrepreneurs are not the weakest in the society; they can afford to pay bribes, especially if all other competitors are acting in a similar way. Moreover, it is misleading to argue that corruption is an equal burden for all. It may be. What is more important, however, is that it offers better opportunities for the most well-off. The State, which should guarantee equal opportunities, at least before the law,

is doing exactly the opposite. It has established a system in which the most well-off have the best opportunities.

One more issue must be stressed. Running any sort of successful and profitable business is suspicious in an extremely corrupt environment. There is a widespread perception that virtually all businesses are involved in corruption to some extent. One can ask how well public opinion tolerates successful businesses – even completely legal business – in such an environment. There is no such thing as a successful economy and competitiveness without successful businesses. Furthermore, the steps of working one's way to economic well-being are non-transparent in a corrupt society. This is a fundamental difference between Russia and Finland.

It is, however, not only the weakest in the society who face troubles with the corruption and unjust treatment. Foreigners can enter the markets and play along the corrupted business environment, but more often they choose not to. Therefore, the corruption also deters foreign investors and companies from entering Russian markets.

To conclude, the poor performance of Russia's public sector is related to the country's poor competitiveness. Moreover, the poor performance of the public sector is rooted in different periods of history. There is no tradition of the stable foundations of a market economy. Instead of stable institutions untouched by the political system, virtually all the rulers have set their own institutions based on power. New institutions have been established for each reform or effort to accelerate growth. The stability has stemmed from a top-down control, not from the foundation of stable institutions. The indicators evidencing the poor governance demonstrate the lack of tradition. They also demonstrate that the public sector failed to establish such stability. The public sector remained non-transparent, which reduces its ability to fulfil the tasks it is encountering. The strengths of the public sector performance are rooted in the Soviet period and its welfare dimension and, in particular, in education. Similar to Finland, the welfare state period provided some strength for the current competitiveness but Russia has not been able to take the step Finland took in the 1990s, partly because the public sector

has been unable to fulfil its tasks in promoting competitiveness. In addition, the non-transparency and the bureaucracy have suppressed the enterprise-level development by preventing grass-root level initiative contributing to diversification.

5.5 CONCLUSIONS: FINLAND AND RUSSIA – COMPARING COMPETITIVENESS

In comparing the current competitiveness, we have ascertained that Russia could learn a lot from Finland and Finnish enterprises with regard to management skills, specialisation, developing technology and internationalisation. The step Finland took in the 1990s was decisive, but there are only very weak signs of such a process in Russia. An important fundamental difference is the public infrastructure behind the competitiveness.

In Russia the institutional foundation has not been allowed to develop, gain legitimacy, or stabilise. As a result, Russian institutions are unstable and further weakened by the high corruption and rent seeking. Unlike Finland, the rule of law and equality before the law are not public goods in Russia.

One fundamental difference between Russia and Finland is the time-scale of decision making. Establishing Finland's competitiveness has been a patient accumulation of successes. Finland has not rushed to change the foundations. Public policy making has had a relatively clear direction. There has been a determined policy of increasing the wealth of the nation. Several issues typify this. First, Finland's integration with Western Europe did not take place overnight. But, as a result, Finland joined the EU and its fellow market economies in Western Europe. The opening up of the economy and internationalisation are part of the same process. Second, establishing the welfare state took decades, and required that the tripartite system was committed to it. It was a patient process.

Russia has lacked such determination. In international affairs, there has been a lack of commitment to integrate in any direction. In the 1990s Russia was obliged to become a market economy,

without previous experience. At present, Russia lacks the required determination to benefit from free and open competition, which would offer the mechanisms narrow the gap between Russia and the rest of the world. By preventing competition, Russia is preventing her enterprises from learning to survive in the global markets. Russia is a small economy in terms of internationalisation and there are very few enterprises operating abroad.

Finally, Finland's industrial policies have governed a certain share of resource allocation and supported strategic sectors, to mention technology and ICT. In Finland the State has taken the lead in creating favourable conditions for the private sector to function in the markets, yet limited its own interaction. Unlike Finland, in Russia the State still has the idea that it can interfere in business and that the markets have to serve the State. Russia lacks proper channels of interaction between the private and the public sector. Consequently, the public infrastructure cannot be used to promote business. In Russia today, the State lacks the channels and is not a trustworthy partner to govern the resource allocation to priority fields.

This study set out to compare the competitiveness of Finland and Russia – roots and current state. In the fifth section we argued that the roots of the current competitiveness and its various constituents are in different periods of history, including very recent history. The decisive infrastructure, and public infrastructure in particular, dictating competitiveness is the fundamental difference between Russia and Finland. We have focused on certain issues constituting competitiveness throughout the study. We have sought to ascertain what the roots of the current competitiveness are and how they have developed. There are both very persistent and, on the other hand, rapidly changing issues dictating competitiveness. In this section we draw some conclusions and, towards the end, raise some issues for discussion concerning some up-to-date issues and challenges Russia is encountering.

The starting point of the study was the mid-19th century, when industrialisation started in both countries. Prior to that, both Finland and Russia had been lagging behind the majority of Western European countries. They had not industrialised in the first wave of industrial revolution. Both began to industrialise at approximately same time. The resource base of Finland and Russia was rather similar in the 19th century. One should bear in mind that the agglomerations of industry were located in St. Petersburg, central Russia, the Urals and the Donbass region. The geographical conditions of

those regions are no worse than in Finland; like Finland Russia possessed abundant forest resources.

The early stages of industrialisation were rather different in Finland and Russia. The differences included the role of the State, internationalisation and stability. This section reviews and discusses the separate paths taken by the two countries and the roots of their present competitiveness issue-by-issue.

The role of the State

On several occasions throughout the study we have ascertained the importance of the State's role in competitiveness. One of the most fundamental differences in the development and constituents of the competitiveness in the two countries is the role of the State. Finland and Russia have adapted very differently at the turning points in their history and the role of the State has been one of the cornerstones dictating the ways to adapt. The starting point of the industrialisation demonstrates the difference. The State – the Grand Duchy of Finland – focused on legislation and on constructing an infrastructure. In addition, several important institutions were established. There were also certain critical institutions – rule of law, clearly defined property rights – inherited from the previous Swedish rule.

The allocation of resources was, however, dictated by the private sector and entrepreneurs. True, Finland – the State – did not possess sufficient resources to dictate the resource allocation. The national awakening was a simultaneous process with the industrialisation. The State sought to promote the development of the economy to support the national awakening, but was aware of the limits of its competence.

Finland accelerated the process of industrialisation during the 20th century, and the role of the State changed somewhat, especially during the post-war period. The State aimed at increasing the GDP share of investments and, by doing so, accelerating industrial development and raising living standards. The State became more

involved in the economic development and the share of the public sector in GDP increased simultaneously with the established welfare state.

Despite the increased State involvement in the economy, the enterprise level dictated the bulk of the resource allocation. The Finnish economic system provided structures and institutions through which the grass-root-level initiatives were able to work their way to growth and benefit the entire society. Among even the current large machine building and ICT enterprises there are scores of examples demonstrating how an individual's know-how and innovativeness can be turned into a multi-million enterprise.

The State's role changed again in the 1990s. The recession had revealed that the previous path of extensive investments and artificial boosting of competitiveness were no longer an option. The recovery had to be based on know-how, high-tech production and the emerging ICT sector. The State had already increased the spending on R & D spending in the 1980s. The new era stressed the importance of the public-private co-operation. Because the public sector had operated transparently, a widespread trust in it existed. The economy was internationalising rapidly and the globally operating enterprises became the decisive factor in dictating the competitiveness. The State did what was within in its competence: joined the EU and the EMU, shaped taxation and promoted technology and R & D – all important decisions but strictly within its competence.

Russia started to industrialise and modernise her economy in order to narrow the gap with the more advanced industrialised countries. The State actively steered the process. True, certain reforms were conducted to liberalise the economy, but, compared with Finland, the State had greater control of the resources allocation. A certain amount of foreign investment was welcomed, but the importance of the domestic grass-root-level initiative remained limited.

Some efforts to establish the rule of law and clearly define property rights were carried out in Russia during the early stages of industrialisation but the decades before the October revolution were

too short a period for forming traditions and legitimating them. In addition, the connection of property rights with political power remained strong.

The 20th century provides even more striking examples that demonstrate the difference. The Soviet Union set a target of accelerating the industrialisation. Again, the structural change was conducted as a top-down process. The Soviet Union established a totally new system, including new institutions. The construction of the institutions was subordinated to ideology.

The contribution of the grass-root-level initiative to the national economy was not encouraged, if even tolerated. The stability was dependent on control, not on the stability of institutions. A very limited amount of individual initiative was tolerated and the efforts to accelerate growth were based on extensive investments and top-down dictation.

In 1990 the State sought to withdraw from certain fields dictating the rules of interaction among individuals and enterprises. However, there were no stable institutions to fulfil the vacuum. The difficult years of transition and reforms called for some State involvement in the economy, but the State was unable to find and define the functions and means with which to participate. Moreover, the legitimacy of the State institutions had deteriorated during the Soviet period and the absent tradition of a transparent State undermined the efforts to establish one. To conclude, the State was not able define the limits and no-go zones of its operations, neither was it transparent or able to establish the equal rules of the game. A market economy would have also required a competent State and, what is more important, a State that was aware of the limits of its competence.

Internationalisation

Being an open economy has been the precondition for Finland's success. Still, the dependency on the outside world has also meant that Finland has been obliged to adapt to external changes. Often, Finland's opportunities to have an impact on the external environ-

ment have been negligible. A small country cannot dictate the rules of the game.

From the very beginning, the internationalisation and industrialisation have been simultaneous processes, because there has not been enough demand for industrial goods in the domestic market. At the beginning of the industrialisation Finland was lagging behind her main competitors in sawn wood goods. Finland narrowed the gap gradually. From the very beginning of the industrialisation the entrepreneurs experienced competition and learned to compete. Moreover, in narrowing the gap, foreign technology and specialists were used.

Finland's exports were dominated by the forest sector until the 1960s. , Finland was already a global scale exporter of forestry goods before World War II. In the 1970s the machine-building industry became the second strongly export-oriented sector. Foreign trade and operating in the world markets provided at least the minimum channels for the transfer of technology.

The growth of the national economy during the post-war period was based on exports. Other dimensions of internationalisation were limited. Finland was a relatively closed national economy until the early 1990s, and the bilateral trade with the Soviet Union was very important. The enterprises mostly produced in Finland and were in domestic ownership. Moreover, many enterprises were multi-sector conglomerates. Internationalisation was based on foreign trade. A fundamental change took place on several fronts in the 1990s. The bilateral trade with the Soviet Union ceased and the competitiveness was reduced. Several changes took place and they restored the competitiveness. First, the foreign ownership increased markedly. Second, enterprises acquired assets and invested abroad. Third, enterprises focused on a narrower range of goods, abandoning other sectors. The internationalisation was belated and rapid. It changed the structures fundamentally. It improved the efficiency of capital use and enhanced the previously inadequate channels for the transfer of technology.

There has been a widespread perception in Finland that foreign trade and internationalisation are predominantly win-win con-

cepts. There has never been a perception that everything needed in Finland could be done inside the country. The open economy has provided opportunities, but has also meant adaptation. Historically, one important issue has been that the spillover effects of forest sector exports have benefited numerous forest owners. The benefits of foreign trade have been widely dispersed. At present, the skilful and highly educated labour force in the export sectors receives rather high salaries. Again, the benefits of foreign trade and internationalisation spill over. Moreover, the banking system is able to allocate the export revenue to other sectors of the economy, including emerging sectors.

Russia's path towards internationalisation has been very different. During the early stages of industrialisation, and before the Soviet rule, Russia allowed foreigners to invest, operate and, therefore, promote economic development. Foreign know-how was required to narrow the gap. Historically, however, Russia has relied on the mobilisation of domestic resources in accelerating economic development. Russia has not been a trading nation.

This tendency was strengthened during the Soviet period. Foreign trade was not considered a win-win concept. The growth of the Soviet economy was based on domestic resources and know-how. Foreign trade was important for the Soviet economy, but it was used to acquire the goods in which the Soviet economy was deficient. Technology transfer was limited and strictly controlled. No experience of foreign competition was accumulated at the enterprise level. Dependency on the hostile West was to be avoided. The Soviet Union deliberately isolated herself from the West, and the most advanced countries of the world economy. Not surprisingly, her economy stagnated.

The market reforms opened up the economy and offered opportunities for enterprises to internationalise. However, the enterprise structures were still reminiscent of the structures of Finnish enterprises in the 1980s: enterprises are owned by Russians, they produce in Russia and they have very limited assets abroad. In addition, there were several multi-sector conglomerates. By opening the domestic

markets, Russia only gained limited benefits from the internationalisation. The inadequate skills to operate abroad reduced the benefits of the internationalisation.

Although the reforms have created preconditions for a different kind of internationalisation, Russia, and, in particular, Russian enterprises, have been unable to take advantage of the opportunities. Foreign trade is predominantly perceived as a dependency to be avoided rather than a win-win concept. With regard to the perceptions of foreign trade and internationalisation in general, the dependency on other countries is still being perceived as an adverse phenomenon. A comparison with Finland may, at least partly, explain the different perception of foreign trade. Throughout Russia's history the export revenues have been controlled by a small number of people. The natural resources have been geographically concentrated and, consequently, owned by a limited number of people. The benefits of foreign trade have not spilled over. The current structure of Russia's export continues this tradition. The concentrated ownership of natural resources and the inability to achieve a more equal distribution of income undermine the legitimacy of an open economy. Moreover, the banking system has been unable to effectively allocate the export revenues to other sectors. Furthermore, the deteriorating education standards and scarce investments undermine the possibilities of increasing labour productivity. This, in turn, reduces the opportunities for workers to benefit from internationalisation.

Stability – instability

According to the competitiveness ranking, some of the major weaknesses of Russia's competitiveness are rooted in the poorly functioning public sector. This study has demonstrated that, for Finland, stable institutions constituting the foundation of the market economy have enabled its adaptation at the turning points of her history. Finland already possessed the necessary institutions – the cornerstones of a market economy – before industrialisation. In the

1920s, late 1940s and early 1990s, Finland adapted to the altered environment. Enterprises were able to adapt and the State was able to promote the adaptation in all of these periods. The fundamental institutions remained untouched by the political system during even the stormiest periods. .

There seems to be rather different perceptions of stability in Russia and Finland. The reviewed periods of the Russian history demonstrate that stability is something that is established by each leader, not something that a leader inherits and leaves untouched for the next one. During Alexander II's time, in the 1920s and 1930s, and during perestroika, the rulers set out to accelerate the economic development by establishing either additional institutions or by establishing completely new institutions. At the same time, they sought to accelerate economic growth. There are very few occasions during which economic growth has been promoted on the basis of the existing systems and institutions. On the other hand, the Brezhnev era left the institutions untouched, but then the economic growth stagnated and no acceleration was achieved either. Apparently, there were no mechanisms of a stable system to accelerate growth.

Often, the stability has been based on control and imposed institutions. Some results have been achieved by the top-down reforms, but if conducting reforms is based on a stability based on control, some proportion of grass-root-level initiative and innovativeness is suppressed and lost.

There are some short periods in Russia's history during which the efforts to reform have been based on the popularity of the leader – the first years of perestroika, the first year(s) of the Yeltsin era – but the reforms failed. The reforms undermined the popularity and, in doing so, deteriorated the stability. There has been no systemic stability or stable institutions with which to continue the reforms once the stability has been lost.

This study particularly focused on the systemic crisis in the late 1980s and early 1990s. We focused on them, and devoted ample attention to them, because the crisis – recession – in Finland was something previously unseen and it shook the foundations of the

existing system. Similarly, the systemic crisis in the Soviet Union shook the foundations of their system. The Russian system could not survive, and collapsed.

We argued that Finland was able to adapt and recover because she possessed several elements of stability that did not change during the crisis. The political system did not cross the lines of the no-go zones. In Russia, the political leader is the man to make things happen. In Russia, the political leaders are perceived to be in charge of everything.

The last chapter of the study focused on the current development. It sought to answer the question of whether Russia is using the opportunity offered by the very favourable external environment. The development throughout the 1990s has not significantly improved the situation. Compared with Finland, there are several inadequacies hindering a more successful integration into the world economy. Even the largest Russian enterprises are modest compared with their Western, and even Finnish, counterparts. Moreover, they mostly operate in the domestic market. True, they export, but their assets abroad are limited. The favourable macroeconomic development has not been achieved because of any success in the foreign market, other than high oil prices. Russia's economy is not performing well, although it is performing better than it did last year.

Finland's structural change in the 1990s demonstrates that change is possible but does require a fundamental change. There are only very weak signs that the Russian economy is becoming more diversified and less dependent on oil. A change for the better would require that the State apparatus learns some new ways of functioning. Several important challenges call for the State to act. The required roles are linked to the challenges the previous chapter canvassed. It seems there are virtually no enterprises or individuals focusing on long-term development; virtually all the economic actors are focusing on short-term revenues and benefits. Enterprises are, perhaps, operating rationally from their point of view, but focusing on short-term interests reduces the chances of grasping the opportunities, because that would require investments that only brought

revenues in the mid or long term. It seems that stability established by increased control has not yet succeeded in ensuring that the economic actors invest in or even think about long-term benefits. The same holds for the financial sector, which is unwilling to provide long-term credits. Moreover, foreign enterprises are cautious about investing in the unstable environment. Establishing control seems to undermine stability.

Further, a more diversified economy is required in order to take advantage of the opportunities. To develop the SME sector and promote innovativeness would promote diversification, but they both require stability and long-term thinking. To be able to carry out the functions called for, the State should restore trust. Only after that, it is useful to conduct, for example, an industrial policy, as an industrial policy only generates benefits after several years, even decades.

However, diversification would mean that the State is not able to control the strong enterprises creating the economic wealth. The tradition of top-down reforms has meant that the State has sought to control the dynamics and the direction of the economy. The strong State has been in charge of everything. This must be changed in order to make use of the opportunities. The State cannot possess enough information about what enterprises should do, especially in the foreign market. We have already argued that the poor record of transparency reduces the possibilities of governing the economic development.

In the 1990s Russia lost her status as a superpower. Previously, such a development has resulted in efforts to accelerate growth, which has previously been accompanied by establishing new institutions and abolishing the existing ones. At the moment, we can see something similar happening in Russia. Again, the obvious, and understandable, Russian target is to become more powerful, both in terms of the economy and international politics.

There are several reasons why the previously conducted policies for catching up were almost certainly doomed to failure. Previous efforts to accelerate growth were based on the mobilisation of domestic resources. In addition, they sought to increase the resources

the State possessed. Finland's success has been based on openness and foreign trade, and, recently, intense internationalisation.

Finland has succeeded in establishing the stability and stable environment in which it is worth investing and thinking about long-term profits and benefits. Foreign policy has been one constituent of that stability. For decades, and even centuries, Finland's determined foreign policy has been to integrate with the West. A determined foreign policy has sought to maintain the external environment in a stable and predictable state. Finland has been aware that she cannot dictate the rules of the game. Consequently, she has obeyed the rules of international relations. There are very few, if any, periods in Russia's history during which Russia has been determined to integrate into Europe or any other continent. A determined foreign policy means the difference between isolation and expansion. Determination in very different issues is required in order to strengthen the position in foreign economic relations. What Russia needs in order to strengthen her foreign economic relations is the willingness to integrate under the same rules as any other country.

It is obvious that intensified internationalisation would narrow the gap. Both internationalisation and diversification would reduce the ability of the State to control the economy. An authoritarian government does not tolerate that invisible hand – market mechanism, something beyond its control – and dictates resource allocation. Even so, the mere ability to tolerate economic success beyond the competence of the State is not yet an adequate precondition for a more diversified economy. There are important gaps in the system that prevent individuals and enterprises working their ways to growth and a decent living.

The strengthening of the international position cannot be conducted by the State alone. On the contrary, acquiring assets abroad and, more generally, competing in the world economy is a task that enterprises should conduct. So far, however, the record of internationalisation by private enterprises has been modest. True, even State-owned enterprises could expand abroad, but their record in succeeding in competition, even in the domestic market, has been modest.

The State can promote the process but it requires competent public-private co-operation. It might be hard for Russia to accept that State-owned enterprises should invest abroad when investments are required in Russia. Investments abroad were important in restoring the competitiveness in Finland in the 1990s. Another way of improving competitiveness and efficiency would be to allow foreign enterprises to compete on the domestic market. Both ways would improve the long-term competitiveness. At the moment, the atmosphere of short-term profit seeking and the predatory practices of the State bureaucracy is undermining foreigners' willingness to enter Russia.

The poor competitiveness is certainly not explained by the geography. True, there are distant territories with a harsh climate and permafrost, but geographical factors do not explain the low competitiveness on the Black Sea coasts, or in St. Petersburg or Moscow. Neither does geography explain the weaknesses of the State apparatus.

The planned administrative reform is indeed a required effort to tackle the problems of bureaucracy. Russia does not necessarily require new leaders. More than that, she requires a new State. However, the experience and tradition of simultaneous efforts to accelerate growth and to establish new institutions is not encouraging. A more competent State apparatus is certainly required, but, again, the reform is dictated top-down. In the long-term, Russia certainly requires institutions and state apparatus that remain, even when a leader goes.

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Esko Aho, Former PM of Finland and chair of board, Verbatum, Helsinki, 11.2.2004

Tuovi Allén, Programme director, Finnish National Fund for Research and Development (Sitra), Helsinki, 12.2.2004

Eric Brunat, Deputy Resident Representative, United Nations Development Programme (UNDP), Moscow, 29.1.2004

Galina Ermilova, Expert in SME research, Russian SME Resource Centre (RCSME), Moscow, 29.1.2004

Oleg VFomitchev, Deputy head of department, Department of Economic Development Programs and Co-operation with International Financial Organizations, Ministry of Development and Trade of the Russian Federation, Moscow, 28.1.2004

Farid Garakhanov, Programme Co-ordinator, United Nations Development Programme (UNDP), Moscow, 29.1.2004

Evgeni Gavrilenkov, Chief Economist, Director, Troika Dialog Investment Bank, Moscow, 27.1.2004

Hannu Hernesniemi, Research Director, Research Institute of the Finnish Economy (ETLA), Helsinki, 3.2.2004

Yanovskiy Konstantin, Chief of Department of Social and Political Analysis, Working Centre for Economic Reforms under the Government of the Russian Federation, Moscow, 28.1.2004

Pavel Vladimirovitsh Kuznetsov, Acting Director of the Working Centre for Economic Reforms under the Government of the Russian Federation, Moscow, 29.1.2004

Raimo Lovio, Professor, Helsinki School of Business (HKKK), Helsinki, 5.2.2004

Vladimir Mau, Rector, Academy of National Economy under the Government of the Russian Federation, Moscow, 28.1.2004

Igor Mikhalkin, Director, Russian SME Resource Centre (RCSME), Moscow, 29.1.2004

Vladimir Padalko, Deputy Executive Director, All-Russian Public Organization of Small and Medium Businesses, OPORA Russia, Moscow, 28.1.2004

Jukka Palokangas, Economist, Technology Industries of Finland, Helsinki, 13.2.2004

Niina Pautola-Mol, Counsellor – Economic Affairs, Finnish Embassy, Moscow, 26.1.2004

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- Matti Pohjola*, Professor, Helsinki School of Business (HKKK), Helsinki, 16.1.2004
- Aleksei Nikolajevitsh Prazdnitsnyh*, BaumanInnovation, (BMSTU), Moscow, 27.1.2004
- Seppo Remes*, Director, Vostok Nafta, Helsinki, 15.12.2003 & Moscow, 27.1.2004
- Petri Rouvinen*, Researcher, Research Institute of the Finnish Economy (ETLA), Helsinki, 5.2.2004
- Aleksei Olegovitsh Shekhotsov*, Deputy Director, NISSE (National Institute of Entrepreneurship Studies), Moscow, 27.1.2004
- Viacheslav Shironin*, Director of Research, Institute for Socio-Economic Analysis and Private Sector Development (IPSSA), Moscow, 30.1.2004
- Juri Simachev*, Research Director, ICSS (Institute for Complex Strategic Studies), Moscow, 26.1.2004
- Pekka Sutela*, Head of department, Bank of Finland Institute for Economies in Transition (BOFIT), Helsinki, 9.2.2004
- Pentti Värtia*, Director, Research Institute of the Finnish Economy (ETLA), Helsinki, 5.2.2004
- Pertti Veijola*, Counsellor – Forestry Affairs, Finnish Embassy, Moscow, 26.1.2004
- Pekka Ylä-Anttila*, Research Director, Research Institute of the Finnish Economy (ETLA), Helsinki, 5.2.2004
- Oleg Zamulin*, Assistant Professor, Centre for Economic and Financial Research (CEFIR), Moscow, 30.1.2004

THE SWEET WORD OF COMPETITIVENESS

It may seem irrelevant, or even worse, misleading, to discuss in a comparative framework the competitiveness of a small country like Finland and a major power like Russia. But on a closer look, one remembers that the heartland of Russia shares approximately the same geographical location, geology and climate as Finland. There is a shared state history of more than a century, and even, judging by features of popular culture, a very similar mentality. Not to mention that the laws of economics should be the same both in small and large economies.

But, obviously, there are also great dissimilarities. Helanterä and Ollus have chosen to emphasise one, the role of the state. When Russia annexed Finland in 1809, Alexander I decided not extend the whole of Russian legislation to this new part of the empire. Instead, previous Swedish legislation remained in force. The difference between the two sets of legislation was at the time not all that huge. After all, Sweden was in the eighteenth century far from the Nordic welfare state it was to become. But still, the separateness of the grand duchy was underlined. Serfdom was never established, and the absolute power of the tsar was exercised in a roundabout way.

The Finns generally proved to be peaceful and loyal subjects, and the empire learned that the lingering Swedish influence, a potential risk, could best be neutralised by encouraging the birth of domestic Finnish institutions. Three processes therefore coincided in Finland:

the rise of national consciousness with its emphasis of education, the spread of industry and the market economy, and the establishment of national economic and political institutions. As a consequence, some peculiarities arose: Finland had not only a sovereign currency but also a parliament based on general right of voting, while remaining part of an empire based on absolute power. Though the relation between St. Petersburg and Finland had its frictions, and the threat of russification was a real one, still Finland, in contrast with the Baltic states and Poland, was able to enter independence with an almost complete set of state institutions in place.

If the Russian perspective was that of neutralising the inherited Swedish influence, in the Finnish view the building of domestic institutions was a matter of defending the newly-defined nation against the overwhelming weight of Russia. State, in this view, was not an oppressive alien might, it was rather a tool of building the nation and solving the emerging problems. This contrasts completely with Russian history, where the state has typically been seen as the problem, not as a solution. This attitude has remained. It has been often noted that the background of Finnish high-technology success during the last twenty years is in a trilateral co-operation between private companies, government-owned universities and also government-owned research institutes. What has been less emphasised is the simple fact that such co-operation is only possible if the state is seen as a partner, not as the problem.

History can not be re-lived and changed. This is the practical weakness of history-based explanations. But lessons can be learned, and if there is a single most important message that emerges from the Helanterä – Ollus story, it is the crucial importance of the reforms of public administration and of education for the industrial and post-industrial future of Russia. And of the connection between the reforms, which exists, but is rarely emphasised in Russian discussions.

Another strain of the Helanterä – Ollus analysis is no less important. Finland, after all, industrialised on the basis of a natural resource: forests, the only abundant resource in the country. Similarly to Sweden and also Norway, Finland is an example of resource-

based development, a counter-example to the alleged resource curse, so much feared in Russia as well.

It is true that only one country seems to have been able to manage – even if with great trouble – its hydrocarbon riches without succumbing to oligarchy, de-industrialisation and instability. That is Norway, a country which was a Nordic industrial democracy with very advanced institutions before hitting rich. Russia, the sceptic will say, was the USSR before hitting rich. This contrast, the sceptic will continue, implies a huge burden to Russia, one that will more or less condemn the country to become something quite different from an advanced European nation like Norway.

As disturbing and potentially damning as these basic facts are, they leave much out. Why did Norway initially become a Nordic industrial democracy, before hitting rich in hydrocarbons? The answer comes in three letters: cod, the fish that used to swarm in Norwegian fjords. Before being rich in hydrocarbons, Norway was rich in fish, another natural resource. Hydrocarbons are usually point specific and therefore their exploitation is easily controlled and monopolised. This is the reason why they are a natural basis for oligarchy and autocracy. Cod was widely spread in the fjords. Controlling and monopolising its catch was practically impossible. As it is also a perishable commodity, even the most martial of the Viking kings would have thought twice before trying to accumulate the whole fish catch of the country. Cod did not make Norway wealthy, but it did facilitate the spreading of the little wealth there was widely among the population. Cod was the basis of Norwegian prudence, democracy and equality, making Norway the Norway that has been able to manage riches without succumbing too badly to the resource curse.

Therefore, the issue is not whether a country is rich in resources or not. The point is rather, whether the resource is a natural basis of oligarchy and autocracy by being point specific, or whether it is a natural basis of democracy and equality by being widely spread. Forests in Finland, or Sweden, have obviously been a widely spread resource. Even in today's urbanised Finland, one family in eight owns some forest. Export revenue is still widely distributed across the so-

ciety, as it has been for more than a century and a half. Other facets of equality are also involved. In Finnish folk costumes, women, not men, carry the keys of the farm. The husband, after all, spent much time outside of the farmhouse, working in the forests. This is the basis for the celebrated gender equality of the Nordic countries.

Russia is not a petro-state, for a variety of reasons. One of them is the simple fact that the country has a great variety of resources, among them the forests that would, if rationally managed, basically be able to provide for the whole population. If there is a simple lesson here to be drawn, then surely it must be as follows. Some of Russia's resources are point specific, other widely dispersed. In this respect, Russia has the potential to become something like a case of resource curse, but also the potential to become something like a case of resource-based development. This is why issues like forest ownership become so important.

Fundamentally, welfare is an issue of adding value. Considering the difference between the per-kilogram price of a log for heating and that of a Rapala fishing lure – basically a small piece of wood, a couple of hooks and some paint, just designed in ingenious ways and thoroughly branded – should underline that value can also be added to such seemingly trivial resources as forests. Obviously, no industrial ministry or planning commission could design a fishing lure with global name recognition and sales. But there are other things that the state can and should make. To be able to do that, it should be a partner, neither a tool in the hands of vested interests nor the master of a power hierarchy – at least if welfare is to be based on adding value, innovating and being creative. These processes themselves take place in companies, universities and research institutes, which is why it is crucial to be able to bring these institutions together. These are the things to watch, if one wants to foresee the Russia of tomorrow.

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FINLAND VIS-À-VIS CHALLENGES OF RUSSIAN TRANSFORMATION

Historians are well aware of the causes of success or failure of the given country. To assess secrets of today's economic miracles will be the mission of historians in the future.

Today Finland is on the top of the World Economic Forum's rating of competitiveness. This calls for an analysis of the causes of this outstanding success. Economists and historians, sociologists, political analysts and psychologists can long debate what the nation has done and which factors have contributed or inhibit its development. A closer look allows us to draw very interesting conclusions.

The major question always remains unanswered nonetheless. Can any other nation replicate the success? What is needed to do it? What lesson does history and economic history in particular teach us in this respect (if it can teach in principle)?

The search for answers may lie with a provocative monograph by young Finnish researchers A. Helanterä and S.-E. Ollus. Of course, Russians are keen to learn more from our closest neighbor's experiences, but in this particular book as with others we first look for an answer to the question as to what lessons Russia can learn to address its current pressing challenges.

Finland's experience is of interest to us not just because of the country's success record – there exists a whole range of factors that cannot help but stimulate our eagerness to know more.

First, during the past two decades Finland has made a post-industrial breakthrough. In a historically short period the country with an average level of economic development and the industrial structure dominated largely by heavy industry and mineral sectors has joined the club of the world leaders in development of new economic sectors. It can be argued that Finland exemplifies the catching-up post-industrial development.

Secondly, Finland launched its breakthrough strategy while being a country whose economy was dominated by the raw-material sector. This is particularly important in light of challenges Russia faces now. Nowadays, a popular assumption is that the abundance of natural resources and the focus on mineral output forms a serious obstacle to modern economic growth. However, the Finnish, as well as other nations', say Australia's, experiences partly serves as a proof of the fact that such a wealth does not necessarily constitute the nation's curse. At this point, it should be noted that the nature of the influence the raw-material (and particularly mineral) sectors exert on economic growth to a significant extent depends on specifics of resources dominating in the country. In his commentary on this book Professor Pekka Sutela provides rather convincing references in this respect.

Third, Finland's experience clearly demonstrates that a real breakthrough always appears unpredictable. Furthermore, no one can administratively or politically pick up ("appoint") structural priorities. They unfold exclusively as a result of competition and the firms' own search of the most efficient and promising ways to sustain their own development. Nowadays the world-famous Nokia exemplifies a classic development of this kind.

Fourthly, on its way to economic success Finland passed through a structural crisis that in some sense was similar to the one which battered the post-Soviet Russia. In many aspects the crisis was fueled by the Finnish economy's excessive focus on supplies to the USSR. Plus, the problem lay with both structural and institutional imbalances. Structurally, the Finnish economy was steered by orders placed by the Soviet foreign trade agencies and that could not

help exerting a certain impeding influence on other sectors of the economy. In institutional terms, ready to consume any quantity of Finnish goods, the huge Soviet market de facto limited the impact of competition mechanisms on the Finnish producers. Their products originally were more competitive vis-à-vis their Soviet analogues (except for the market for most searched-for goods, wherein the Finnish sausage had a tough rival: that is, the Hungarian salami). At that juncture, the Finns could for a while afford the luxury of ignoring competition on international markets.

No one questions the fundamental condition underlying the successful transformation in Finland, that is, the presence of mature democratic institutions. Many political analysts argue that in the post-industrial era clues to a successful adaptation to economic challenges lie with the concentration of power in someone's hands. The Finnish experience proves the opposite. There exist at least two factors that highlight the importance of political democracy for a nation to address challenges posed by the contemporary economic growth: on the one hand, transparency of political institutions' operations creates favorable conditions to carry on business and ensures lower transaction costs, while the democratic system opens room for more neatly fine-tuning of business and fuels its capacity to adapt to modern challenges.

What is particularly interesting about the Finnish way of adaptation to new economic challenges is that the nation's leadership has opted for an uncompromised liberalization as an anti-crisis strategy. More specifically, the leadership ensured a fast accession to the EU, thus opening the national market to European rivals and vice versa. Such a decision of course required a great deal of courage and commitment from the Cabinet Esko Aho.

The post-communist Russia likewise faces similar challenges. The Russian crisis resulted from the inability of a rigid Soviet system to adjust on time to post-industrial challenges.

Nowadays Russia is challenged by the need to secure accelerated growth together with a fundamental structural transformation that would match post-industrial challenges.

The above constitutes what both nations have in common, while there are of course substantial differences between them. In Russia, the structural transformation was launched when the society found itself in a full-scale crisis. The crisis manifested itself particularly in radical changes in the political, social, economic and ideological systems, and if this was not enough, the crisis was coupled by the collapse of the state machinery as a whole. In other words, in contrast to Finland, Russia has undergone a full-scale revolution, which drastically aggravates and extends the period of transformation and adaptation.

Much has changed since then: the Russian stores are ultimately full of goods hardly different from those in Finland. Russians are now more keen to buy the domestic sausage than imported (alas, even Finnish) salami.

Nowadays, the rapidly changing world demands from Russia to urgently design a strategy and tactics for socio-economic breakthrough and to identify instruments that would secure Russia an appropriate place in the global economy of the 21st century. Today, the so-called “third-generation” challenges have come to the forefront including: human development, investment in human capital, and improvement of political institutions. These “third-generation” problems form the agenda for developed countries. Hence, it is not macroeconomics and even economic institutions that have emerged, by and large, to date, which matter. Rather it is the competitive advantage of a modern highly developed nation which is associated with the human personality and factors directly related to human vital functions. These imply education, health care, housing, infrastructure, and stable democracy. In other words, the concept of priorities in the area of economic policy and the concept of points of growth are mutating substantially vs. the respective concepts prevailing in less developed countries. The priority agenda now is formed by the institutions associated with human development which impact the state of economy through man rather than single sectors and industry branches.

While recently establishing basic preconditions for the modern Russian market economy, we have referred to other nations’

transformational record, considered their successes and failures. The measures in such areas as monetary and budget policy, deregulation, and the civil and banking law blueprints, etc., were a success. Equally at the time we should have considered our own solutions, which proved to be very efficient, as it happened with the tax law.

Other nations' experiences at best allow one to avoid grave errors (not always, though) and to foster conditions necessary, but not sufficient, for sustainable development. All the success stories of socio-economic breakthroughs and a rapid catch-up with leading countries became possible when a given country has succeeded to combine the general "good-manners" economic rules with genuine remedies of its own. The latter may be unexpected and unorthodox vis-à-vis the "correct" ones, but at the end of the day they bring success.

But the last thesis should be treated with caution. Economic history witnessed most of the "original", non-orthodox decisions being consequently reduced to a banal budget and monetary populism and inflating an economy with money to propel economic growth rates. That would eventually result in economic catastrophe instead of economic miracle. Today, when the task of increasing economic growth rates became political and with Russia benefiting greatly from an extraordinary favorable situation in international markets for its exports, the risk of adopting populist decisions has become highly possible.

It should also be noted that it is impossible to run the economy steadily without efficient civil service, uncorrupt court of law and credible law enforcement system. If the government fails to enforce law, and the court of law turns an abused citizen or company adrift, then any law that regulates economic life and any economic decision the government makes is of no avail. That is why when the nation's judicial and law enforcement systems are far from those exemplified by mature democracies, in particular our closest neighbor - Finland, the expansion of the state economic influence turns an inefficient and rather dangerous enterprise.

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