

ECONOMIC CRISIS AND INDUSTRIAL POLICIES –

**Policy Options
for a Return to Growth
in Russia**

by Rudolf Traub-Merz (ed.)

ECONOMIC CRISIS AND INDUSTRIAL POLICIES –

**Policy Options
for a Return to Growth
in Russia**

by Rudolf Traub-Merz (ed.)



**FRIEDRICH
EBERT
STIFTUNG**

Moscow
2016

УДК 338(470+571)+32
ББК 65.9(2Рос)/66.2

*This book has been published with support from the Friedrich-Ebert-Stiftung,
office in the Russian Federation*

**Economic Crisis and Industrial Policies – Policy Options for a
Return to Growth in Russia** / by Rudolf Traub-Merz (ed.). – Moscow :
Politicheskaya ehnciklopediya, 2016. – 197 p. : il.

ISBN 978-5-8243-2087-9

The collective volume presented here originates from a workshop organized by the Friedrich-Ebert-Stiftung (FES) as part of the 2nd International Political and Economic Congress held in Moscow on 13 May 2015 on the topic »Promoting industrial development in times of economic crisis«. What industrial policy is necessary to release Russia's manufacturing sector from its paralysis and what role might be played in this by the state and classic development concepts, such as import substitution? No uniform concept of crisis analysis is presented here and the contributions are necessarily pluralist with regard to their explanatory approaches and recommendations. Despite the differences of opinion authors agree on one thing: just waiting for another oil boom does not constitute an economic policy. The current state of the Russian enterprise sector exhibits numerous symptoms of resource misallocation and no improvement is to be expected without radical structural changes.

УДК 338(470+571)+32
ББК 65.9(2Рос)/66.2

ISBN 978-5-8243-2087-9

© Collective volume, 2016
© Design. Editor «Politicheskaya ehnciklopediya»,
2016

CONTENTS

Introduction	4
<i>Sergey Afontsev</i> Industrial Policy and Prospects of Import Substitution in the Russian Economy	10
<i>Sergey Bodrunov</i> Reindustrialisation Based on High-tech Industries.....	27
<i>Hansjoerg Herr</i> The Role of Monetary Policies to Support Industrial Policy – the Case of Russia.....	38
<i>Rudolf Traub-Merz</i> Import Substitution Policies – Reflections on Strength and Weakness	59
<i>Yuri Polumin and Andrey Yudanov</i> Russia’s High-Growth Companies: Crisis and Growth Patterns	69
<i>Alexandra Vasilieva</i> Trapped in Informality: Small Firms in Russian Capitalism	89
<i>Natalia Zubarevich</i> Regional Profile of the Russian Economic Crisis	111
<i>David M. Kotz</i> Economic Crisis, Reindustrialization, and the Economic Role of the State...	126
<i>Vladislav Inozemtsev</i> Would a New Industrialization in Russia Be in Line with Interests of the Russian Elite?	135
<i>David Lane</i> The Shift of the Russian Economy to National Capitalism	147
<i>Rudolf Traub-Merz</i> The Automotive Sector in Russia – Between Growth and Decline	164
<i>Pedro Rossi and Marco Antonio Rocha</i> Industrialisation and the Growth Model in Brazil: A Historical Overview...	183
About the authors.....	197

INTRODUCTION

Russia's economy is in deep crisis. The combined effects of falling energy prices, economic sanctions and counter-sanctions, as well as structural weaknesses have driven most economic indicators into the red. Anyone looking for the causes has to dig deep. At the turn of 2012–2013 leading political figures were still claiming that Russian economic growth would, over the long term, continue at a higher rate than the global economy and the country's international ranking would move upwards. By the end of the year it had fallen to 1.3 per cent and the same voices were complaining about a depletion of economic growth and homemade stagnation. That was before the energy price collapse and sanctions triggered an economic slump in mid-2014.

In fact, Russia's economy has gone through constant peaks and troughs in the past 25 years. First, the transformation crisis from 1990, to which more than half of material production fell prey; spurred by energy prices that seemed to know only upward movement the country witnessed an economic boom from 2000. After the short hiatus of the global financial crisis of 2008–2009, which hit Russia hardest of all the G20 countries with a fall of almost 8 per cent of GDP, the boom years seemed to stage a comeback. Renewed growth proved short-lived, however. Although energy prices reached a high level once again (above USD 100 a barrel of crude oil) they stayed put and for several years showed no inclination to go higher. And without the constant supply of ever higher economic rents – »donated purchasing power« from abroad – the Russian economy lost its dynamism.

If one takes a bird's eye view of these different stages a dramatic scene emerges. The Russian economy needed 16 years (until 2006) before returning to its 1990 level of GDP. In 2013 – that is, at the outset of the current crisis – the economy had grown by only 25 per cent. At every comparable point in time the centrally planned economy of the Soviet Union had performed better than the »market economy-oriented« Russia could manage. Average annual growth of less than 0.5 per cent since 1990 must be considered a major performance failure overall.

Russia today has to overcome not only a temporary slump and resume growth, but to refashion its economic development. A lot has gone awry.

The transformation into a market economy did not bring into being any internationally competitive sectors that could survive or even expand in global markets. Abundant oil revenues gave rise to demand-led growth, which inevitably collapsed when rent incomes declined and subsidies had to be cut.

The fact that resource extraction-oriented economies enter into unsustainable development dynamics is wellknown. The fiscal management of the boom and bust cycle is one side of the problem. When oil and gas prices shoot up, coffers should be replenished to avoid overheating; when they languish, revenue losses should be compensated from savings. Politically, counter-cyclical stabiliser programmes are difficult to implement as large segments of the population may expect income compensation during crisis years and their »fair share«when prices go up. Of all the states whose economies are based on major resource extraction, only Norway – on the basis of a »national consensus« including employers and trade unions – appears to have settled on a formula that has been able to neutralise the negative repercussions for the economy of enormous price fluctuations.

In the longer term, the fiscal side of the boom-and-bust cycle may be seen as the more tractable part of the mess created by resource extraction. When currency appreciation sets in and the Dutch disease starts to work, the crowding out of domestic material production by imports drives economic development into a dead-end. It is not during crisis times but boom periods that resource extraction-oriented states lose their economic development profile.

The fact that economic development dynamics may be strangled by high oil and gas prices should have been in the memory of Russia's economic-policy planners. Already in the 1970s, while still the Soviet Union, the country was confronted by massive inflows of energy rents, which afforded it a kind of time-out from the exertions of industrialisation. The Soviet Union was able to use the purchasing power gifted to the oil-producing nations after 1972 to raise living standards and – for the time being – skip structural reforms. While the economy stagnated the country fell further behind the West technologically in many sectors.

It's true that the effects of Dutch disease were cushioned by Russian economic policy after 2000. The state protected parts of the enterprise sector with capital injections – sometimes by renationalisation – public contracts and special conditions in accessing foreign capital markets. And the government, in the person of the finance minister, wielded the weapon of fiscal policy, albeit without much conviction. The newly established Sovereign Fund siphoned off some of the purchasing power aris-

ing from the raw materials sector, but the central bank did not neutralise the price upsurge by means of nominal devaluation and the investment rate remained low. Monetary policy boosted subsidies for large companies. Given the disparities between domestic and international inflation and interest rates, which for years stood at 10 per cent or higher, as well as (relatively) stable currency exchange rates, foreign borrowing turned into a hunt for interest-rate yield. While the state paid off its foreign debt almost entirely the corporate sector's debt liabilities reached 650 billion USD by 2014. Foreign direct investment turned out to be largely repatriated flight capital, which was used not so much to invest in the modernisation of production as to finance mergers and acquisitions.

As a result Russia's corporate sector underwent a process of concentration, small and medium-sized enterprises lagged behind their peers in central and eastern European reform countries and the productivity gap with other countries did not narrow during the boom period. Many of Russia's large companies found themselves in an exclusive zone in which demand was directed towards them by means of state intervention and did not depend on their own efforts.

The answer to the question of what caused the current crisis and what strategies could be used to combat it depends strongly on what kind of economy one wants. Someone who doesn't see any »fundamental problems« in technological backwardness and the requisite subsidies may imagine it feasible to return to positive growth rates with yet another upsurge in energy prices. Someone who regards the dependence on economic rents as dangerous, however, will be more concerned about restructuring the economy than overall growth, aiming in particular at boosting productivity in the manufacturing sector.

Reindustrialisation has now become a buzzword in Russia and import substitution an oft proclaimed strategy. It is notable that the Russian debate has not fully taken up East Asian experiences with transformation policies, even though the development successes there are admired and ungrudgingly acknowledged. Development policy concepts are viewed as strategies for infant economies seeking to build up industry for the first time. In Russia, however, this happened decades ago during the period of the Soviet Union and the idea that the country has to go to the back of the queue again and commence a second catch-up process is anathema. One often hears it said in Russia that the country should be prominent in the international rankings and a rapid return to the top is the guiding aim. But is that merely wishful thinking or economic reality?

It would be wrong to say that industrial policy in Russia today is being rediscovered. But if one asked what industrial policy was actually pursued in the past, where and how that is laid out in official documents and how the public, political or academic discourse dealt with achieving and missing targets one rapidly finds oneself on thin ice. Mapping economic policy actions onto what is stated in the relevant documents is extremely difficult. Time and again economic plans were drawn up, sometimes with figures approaching Gosplan accuracy. But these plans either remained merely rhetorical or were, if implementation was initiated, not comprehensible for long as they were soon overwritten with new guidelines. If industrial policy is evaluated in terms of achieving continuous growth or a structurally balanced manufacturing sector with strong export potential, hitherto it has failed; if it is evaluated in terms of self-set goals, one might say that it could hardly fail because it was never really clear what they were.

It is notable that the current Russian debate on industrial policy and import substitution outside a small circle of economists experienced a political upsurge at the very time sanctions and counter-sanctions came into force. The trigger seems to have been external compulsion rather than a domestic desire to turn things around. In this political debate official views are articulated often in a curious back and forth between the notion that individual enterprises, as in previous times, could be directly ordered to engage in import substitution; that product cycles can be »fully domesticated« and whole branches taken back into autarky; and crisis management may be successful if trade and financial market activities are relocated in the direction of Asia.

To be sure, Russia already does and can continue in the near future to utilise its Sovereign Fund to cushion the current crisis and to bridge the gap until energy prices (hopefully) begin to rise once more. Energy price rises cannot be excluded. Just as a few months before the recent collapse scarcely anyone considered such a dramatic price plunge to be on the cards, similarly there is little reason to suppose that over the long term the oil price will remain in the doldrums.

But even if energy revenues were to rise again, Russia will remain caught in a fundamental contradiction that calls into question the belief in its political stature, perhaps even its identity. If a country wishes to ensure its status as a political great power, that can scarcely be achieved on the basis of an economy that at best is that of a regional power. China's imperial period exemplified this time and again. Imperial Beijing did not tax client states for the purpose of exploitation, but showered them with generous gifts when they declared their preparedness to accept

political subordination. Besides military superiority, great powers have to demonstrate economic power; otherwise clientistic systems become fragile.

China is a special case in other respects as well. After 1980 it kept its foreign policy agenda on the backburner until its economic clout was in a sustainable upswing. Russia finds itself in a different cycle. Its overweening foreign policy aspirations are peaking just at a time when its economy is on the slide. If it wants to retain the foreign policy status it has managed to regain over the medium term the economy not only has to return to a growth path, but also undergo technological modernisation. World history does not know a significant power that relied solely on sales of raw materials; only those that forged ahead with economic and technological innovations achieved international prominence. Russia's descent in the patent rankings is an indication of its backwardness in science and research. Ultimately, Russia cannot neglect structural reforms to its economy and economy-related institutions if it wants to avoid relegation to second division status in terms of foreign policy.

The collective volume presented here originates from a workshop held by the Friedrich-Ebert-Stiftung (FES) as part of the 2nd International Political and Economic Congress held in Moscow on 13 May 2015 on the topic »Promoting industrial development in times of economic crisis«. The discussion focused on what industrial policy is necessary to release Russia's manufacturing sector from its paralysis and what role might be played in this by the state and classic development concepts, such as import substitution? The wide interest on the topic motivated the editor to invite additional authors and to publish the debate on the promotion of industrial development in Russia in this collective volume. No uniform concept of crisis analysis is presented here and the contributions are necessarily pluralist with regard to their explanatory approaches and recommendations. While one group of authors stipulates the state as development agency, others deny it this competence. If the state takes the lead should it promote specific branches, product cycles cutting across sectors, pick »national champions«or merely regulate framework conditions? Linked to this discussion is the debate on whether industrial policy should place great importance on leading-edge technology via state research and large companies, or whether stronger economic performance would arise from improving the business conditions of small and medium-sized enterprises. Opinions are also divided on what to do with raw material rents. Should such rents be neutralised or used to finance state investment? Monetary policy must support an industrial policy. Should it pin its hopes on a low exchange rate for the rouble to open up opportunities

for an export offensive or rather drive up the currency to stimulate the import of high technology goods and thus trigger a modernisation drive?

Despite the differences of opinion authors agree on one thing: just waiting for another oil boom does not constitute an economic policy. The current state of the Russian enterprise sector exhibits numerous symptoms of resource misallocation and no improvement is to be expected without radical structural changes.

Rudolf Traub-Merz

INDUSTRIAL POLICY AND PROSPECTS OF IMPORT SUBSTITUTION IN THE RUSSIAN ECONOMY

Sergey Afontsev

1. Industrial Policy Models

Among researchers and experts, industrial policy is probably the most debated field of economic policy. Although there are numerous publications on different issues of industrial policy,¹ there is still no consensus about its nature. Unlike trade or monetary policy, it still has no established status in mainstream economics. On one hand, this is because industrial policy lacks a good theoretical foundation in the best case, its recommendations rely on certain principles of some (often randomly selected) theoretical concepts, in the worst case, on politicians' and experts' views regarding the goals to be achieved and the instruments to be used. On the other hand, industrial policy issues are traditionally part of discussions about whether and to what extent state interference in the economy is appropriate. Here, one can find all kinds of views in a broad range of opinions from the ultra-liberal »The best industrial policy is no industrial policy at all«² to the search for the best industrial policy examples in the history of countries with planned or centralised economies (from the post-war France and South Korea in the 1970–80s to the USSR and modern Belarus). Another problem is that there is no single interpretation of the term »industrial policy«: there are so many different industrial policy models that even a common understanding of basic notions is often hard to achieve.

¹ The following surveys can be mentioned: Salazar-Xirinachs et al. 2014; Harrison and Rodríguez-Clare 2010; Bianchi and Labory 2008; Pack and Saggi 2006.

² This expression became popular in discussions on industrial policy issues after it was coined by T. Stryjczyk, the first minister of industry in post-communist Poland (Nielsen 1996: 69).

However, before we analyse various industrial policy models, it is worth discussing some general questions of terminology. Today, by *industrial policy* we understand a set of regulatory measures at sectoral and corporate level to promote innovation, structural change and economic growth. Although the term »industrial policy« is often associated with regulation of economic activity in manufacturing industries only, it means much more than that and is equivalent to the term »sectoral policy«. It is true that, historically, this field of economic policy was designed to foster industrial development, but with the passage of time this initial meaning became less important, and its modern interpretation relates to the regulation of business processes in both industry and the service sectors (Warwick and Nolan 2014; Meyer-Stamer 2009).

Another important point is that industrial policy is difficult to place in the hierarchy of state economic policies. Not infrequent are attempts by experts to speculate whether industrial policy is more (or less) important than, say, trade policy or fiscal policy. These speculations, however, are senseless by definition, because industrial policy is defined not by the *object* of regulation (like investment, budget, foreign trade and the like) but by the *level* of regulation (processes at the sectoral and corporate levels). This is why industrial policy can rely on different regulatory instruments (e.g., instruments of fiscal, monetary, financial, customs and tariff policy). This does not mean that the corresponding *policies* are in any sense subordinated to the priorities of industrial policy, but that there is a possibility of using a broad range of *instruments* to reach these priorities. In different industrial policy models, the problem of pulling particular instruments together is solved in different ways, which makes finding a common language among supporters of the corresponding models even more difficult.

There are three basic industrial policy models characterised by different goals and regulatory instruments.

- (i) »**Traditional**« **industrial policy**, which can be described as a »policy of sectoral priorities«, has been the predominant model during the first three post-war decades. In some leading developed countries (such as Germany and the United Kingdom), a retreat from this model started at the end of 1970s, while in most developed countries it was abandoned after the debt crisis of the 1980s, and in post-socialist countries it fell out of fashion with market reforms of the late 1980s – early 1990s (Altenburg and Lütkenhors 2015; Altenburg 2011; Cimoli et al. 2009).
- (ii) »**New**« **industrial policy** was proclaimed as a shift from particular sectoral priorities to measures promoting competitiveness of national companies in a broad range of industry sectors, and it was especially

popular in the mid-1990s. In the mid-2000s, however, it faced serious intellectual and political challenges. The goal of »increasing competitiveness« was not targeted enough to provide efficient selection criteria for projects that are worth supporting by industrial policy instruments. Under these conditions, it appeared necessary to find out new (and more focused) industrial policy priorities.

- (iii) ***Industrial policy of »new priorities«***³ is, like new industrial policy, focused on improving competitiveness, but is complemented by specific policy targets expected to maximise economic and social gains from improved competitiveness.

Let us have a closer look at these industrial policy models.

2. Old and New Industrial Policy

By the mid-1990s, approaches to industrial policy have changed fundamentally. Instead of the traditional, »hard« industrial policy aimed at the creation or development of prioritised economic sectors, new »soft« industrial policy gained general support, which was focused on raising competitiveness of national companies (Aghion et al. 2011; Ul Haque 2007; Wren 2001). The instruments of industrial policy had changed, too.

Traditional industrial policy was characterised by direct state interference in economic processes, including:

- defining prioritised sectors of the economy on the basis of arguments that generally did not take into account any competitiveness factors;
- intervention in the market structure to select »national champions«, typically companies with major state shareholding;
- reliance on budgetary financing, tax incentives, and subsidised credits for companies in the prioritised sectors;
- well-established mechanisms of indirect financing for »national champions« by manipulating exchange rates, regulation of raw material and energy prices, and natural monopoly tariffs;
- protectionist trade policy aimed to create favourable climate for national producers and attraction of foreign direct investment.

The traditional industrial policy model became less popular mainly because of the failure of import substitution policy, which was popular in

³ There is no common name for this approach yet. We use the term *industrial policy of new priorities* as the most adequate, as it reflects the main features of this approach, most importantly the search for the new criteria and instruments for supporting economic development.

developing countries (first of all in Latin America) in the 1950s–1970s. This policy led to inefficient production facilities in manufacturing that needed permanent state support and relied on heavy public spending that promoted inflation and public debt accumulation. With the debt crisis of the early 1980s, import substitution policy based on traditional industrial policy reasoning has generally fallen out of fashion. The decline of social democratic economic policy models in western Europe (like the »French« model or »Swedish« model) in the 1980s and at the beginning of the 1990s, as well as the general trend towards less state intervention in the economy during the 1990s, finally made the traditional industrial policy model unpopular.

It was replaced by the *new industrial policy model*, which had the following goals:

- increasing competitiveness of national producers operating on national and international markets;
- promotion of high-tech industries and intellectual services (IT systems, telecoms, financial services, education);
- boosting efficiency of national companies by supporting their participation in global value chains and/or creation of domestic supply chains from raw materials to end products;
- incentives for innovation and increased investment in new products and technologies.

Thus, »new« industrial policy can in fact be understood as support for increased competitiveness, as opposed to the traditional industrial policy, which focused on support for particular prioritised sectors (Tarr 2006; Devine et al. 1996; Lazzarini 2015) According to the logic of the »new« industrial policy, its priorities should be formulated in a way that does not exclude private companies but rather creates conditions for them to fully develop their competitive potential. This is also an important difference from the traditional industrial policy model, which used a wide range of non-market methods (up to nationalisation of whole economic sectors and implementation of public investment projects in these sectors) as a legitimate instrument to support state-owned »national champions«.

The most influential conceptual platforms for policy recommendations in line with the »new« industrial policy were the ideas of *self-discovery* (R. Hausmann and D. Rodrik) and *cluster development*.

According to the »self-discovery« concept, economic growth rates depend on correct identification of comparative advantages, which make it possible to achieve high standards of competitiveness in specific markets, and on the removal of barriers that impede exploitation of the respective advantages. Efficient institutions, access to modern technologies and eco-

conomic actors' awareness of potential economic opportunities were regarded as the main preconditions for successful »self-discovery« of a country, in the sense of finding its own niche in the world economy on the basis of the optimal economic specialisation. In this setting, the principal function of industrial policy is to create a positive business climate, generate an efficient system of economic and legal institutions (especially in the field of property rights protection) and develop the necessary infrastructure. But such a »liberal« version of industrial policy never became really influential. Even when the »new« industrial policy reached the peak of its popularity in the mid 1990s, most experts and stakeholders credited industrial policy with a more active role, not only that of creating a positive business climate, but also that of creating *development incentives* for those sectors in which the relevant country was expected to have potential comparative advantages (Dynkin et al. 2004).

In this regard, a more realistic conceptual approach to a »new« industrial policy was the cluster one. The starting point is the idea of an industrial cluster, which is defined as a group of geographically neighbouring interconnected companies and related entities (acting in a certain field, characterised by a common activity, and complementing each other), which functions as a system producing more than just the sum its components do (Porter 2005: 207, 275). In publications developing this approach, one can often find clarifications and additional specifications of the term »cluster«, but all of them underline the fact that geographical neighbourhood and close cooperation between companies constitute an important source of competitive advantages that is not available to companies working autonomously outside the cluster (Nathan and Overman 2013; Karlsson 2008; Andersson et al. 2004).

Analysis of the origins of these competitive advantages, in turn, is based on the analysis of two groups of *agglomeration effects* (Beaudry and Schiffauerova 2009). *Localisation effects* come from the interaction between *companies in interconnected sectors*, while the so-called *urbanisation effects*, or general effects of spatial concentration, refer to *interaction among all companies* in the specific area.

Under these conditions, the goals of industrial policy are formulated in terms of

- (i) correct identification of agglomeration effects for specific areas and sectors, and
- (ii) correct choice of instruments to support cluster development, depending on (a) the nature of the identified agglomeration effects and (b) the lifecycle stage of a given cluster.

The following cluster categories have been identified in accordance with the lifecycle stages:

- *functioning clusters* actually use agglomeration effects to achieve higher economic results than could have been achieved by individual companies constituting this cluster;
- *latent clusters* have possibilities to capitalise on agglomeration effects, but they are not fully utilised;
- *potential clusters* have the possibility of exploiting agglomeration effects and becoming a fully functioning cluster, but there are no favourable conditions to reach such a result.

International experience of cluster development suggests that successful industrial policy can *stimulate transformation of latent clusters into functioning ones* as well as help to *identify potential clusters*, for which agglomeration effects can be activated and economic and institutional barriers should be lifted.⁴

Although the chances for the cluster approach to increase competitiveness are regarded as generally positive even by experts who are not very enthusiastic about industrial policy as such (Chatterji et al. 2013; Ketels et al. 2012; EC 2008), the agenda of the »new« industrial policy obviously is not limited just to cluster development. On one hand, better business climate and supporting agglomeration effects are often not enough to raise competitiveness. On the other hand, alternative strategies for boosting competitiveness may lead to different economic and social effects. All these circumstances have caused a search for new industrial policy priorities as early as the late 1990s.

3. »New Priorities« in Industrial Policy

Before analysing the »new priorities« in industrial policy, two circumstances should be mentioned. First, this kind of policy should actually be regarded as a further development of »new« industrial policy, where the goal of increasing the competitiveness is further detailed. Such an evolution was a result of general dissatisfaction with the unclear priorities of the »new« industrial policy. Indeed, the principle »everything that increases competitiveness is worth supporting« turned out to be impractical. As such, it allowed neither to develop clear definitions for »projects that increase competitiveness« nor to compare alternative projects in different sectors of the economy. Second, the priorities set within this approach are »new« in the sense that they have nothing to do with sectoral priori-

⁴ The literature suggests that functioning clusters also run through several development stages according to the logic of the agglomeration effects. For more on this issue, see Afontsev et al. 2011.

ties of the traditional industrial policy model. With an overall consensus that industrial policy should indeed focus on specific competitiveness priorities, those who prefer to return to sectoral priorities and protectionist measures are clearly in a minority today (Reinert 1999; 2010).

Among the new priorities, two gained particular importance in recent decades. These are:

- creation of productive new jobs, and
- promoting technological development that leads to the discovery of new markets.

In fact, both these priorities are not uncommon for economic policy, but the industrial policy of new priorities has managed to transform them into criteria measuring competitiveness gains by national companies (higher productivity, larger new market share). This development was mainly a reaction to the challenges specific to the new *growth model in the global economy* (Afontsev 2014). These challenges, which were already in place by the mid-2000s and quickly escalated after the global crisis, have to do with two major groups of factors:

- (i) the globally changing demographic situation, defined by population ageing in developed countries and decreasing influx of cheap labour to labour markets of developing countries, and
- (ii) increased competition for raw materials, which stimulates investment in the development of new types of resources, resource-saving, renewable and alternative energy technologies.

These factors are changing both structural and dynamic characteristics of the world economy. In particular, the coming decades will see a *drastic decrease in the role of cheap labour as a source of competitive advantage*. It was cheap labour that was responsible for the spectacular economic success of East and South-East Asian countries, which became the fastest growing economies in the second half of the twentieth century and in the first decade of the twenty-first century. Gradual increases in wages and completion of the demographic transition in these countries will undermine their advantages, and it would be fairly difficult for other developing countries to repeat their success story because of the general shift towards capital-intensive technologies (substitution of capital for labour) and institutional disadvantages of potential »newcomers« (especially African countries and the poorest countries of Asia).

The shift towards capital-intensive technologies and increased role of human capital accumulation in developed countries, in turn, is due to population ageing. Attempts to cope with the labour deficit by means of immigration is a palliative solution that does not make much economic sense

(more migrants from developing countries will not compensate for the shortage of skilled labour) and may lead to serious social and political conflicts because of increasing social, religious and racial tensions in recipient societies. As for the use of *raw materials*, less resource-intensive technologies and substitution of expensive raw materials (and their sources) by less expensive ones is likely to allow the global economy to grow without reaching the physical limit of resource availability.

New industrial policy priorities fit perfectly the shift towards the new growth model in the global economy (Dhéret and Morosi 2014; Warwick 2013; Nübler 2011). On the one hand, the emphasis on productive new jobs reflects a greater role of human capital in both developed and leading developing economies. On the other hand, support for new technologies, which create and develop new markets, helps promote resource-saving and substitution of capital for labour, while at the same time it encourages demand for skilled labour.

One revealing example of these trends is the use of industrial policy measures to support green technologies aimed at resource-saving, lower air pollution and greenhouse gas emissions, as well as minimizing the overall human impact on the environment (Lütkenhorst et al. 2014; Aiginger 2013; Hahnel 2010; Cato 2009). Most importantly, reasons to support green technologies in different regions of the world reflect specific factor endowments and market situation in the corresponding countries. In developed countries, it is first of all creation of new »green« jobs that matter, while in leading developing countries the focus is on resource efficiency, and in »less successful« developing countries the aim is to increase the incomes of the poorest workers (Porfiryev 2013: 8). Thus, the implementation of the new priorities of industrial policy is directly connected to the challenges each group of countries face while adjusting to the new global economic growth model.

With the new reality created by the global financial crisis, the priorities of new productive jobs and technological development not only were not postponed, but became even more relevant. They formed part and parcel of the emergency anti-crisis policy programs in 2008–2009 (Ivanova and Ivanov 2011; Afontsev et al. 2009; Danilin 2009), while nowadays they play a significant role in growth-supporting economic policy strategies (Pellegrin et al. 2015).

Due to particular characteristics of its economic and, especially, political system, Russia (in contrast to the majority of developed and leading developing economies) still relies heavily on the traditional industrial policy approach. In 2010–2013, some steps towards industrial policy of the new priorities were made, as was reflected in suggestions to support

the creation of productive jobs and innovative industries.⁵ However, in 2014–2015 the priorities of industrial policy turned »back to the past« very rapidly: For the government, productivity and competitiveness became far less important than import substitution.

4. What Is Needed for Successful Import Substitution?

Economic sanctions against Russia and retaliatory measures enacted by the Russian government in the context of the ongoing crisis in Ukraine, as well as the drastic depreciation of the rouble exercised strong pressure on Russian imports. Accordingly, hopes arose that market niches left by foreign goods can be »reconquered« by Russian companies. Supporting import substitution by means of industrial policy plays an important role in both the rhetoric of the Russian government and its practical efforts to cope with the economic crisis. According to the plans of the Russian Ministry of Industry and Trade,⁶ a radical reduction in the share of imported goods (by more than 50 percentage points in some cases) for more than 2,000 types of products should be achieved by 2020. What are the chances that import substitution can contribute to the revival of the Russian economy?

There is vast international experience of successful and failed import substitution policies, as well as many cases in which import substitution happened due to market conditions without significant influence from policy measures. The analysis of this experience (Perkins 2013; Mukherjee 2012; Silva 2007; Yanikkaya 2003; Burton 1998) helps to identify key preconditions that allow import substitution processes not only to put imported products out of the market but also to make a positive contribution to economic growth.

Traditionally, the fastest and the most impressive import substitution results can be seen in cases when *a substantial decrease in imports* coincides with availability of *underutilized production capacities and underemployed labour*. If these conditions are met, significant output growth can be achieved one or two years after the original drop in imports. In this context, the *dynamics of real income* is of particular importance. If real income decreases, successful import substitution is questioned because of a lack of domestic demand. By contrast, if real income is rising, national producers have additional incentives to increase production to supply the growing domestic market. A favourable combination of these factors after

⁵ Russia's strategy – 25 million new modern jobs, Delovaya Rossiya, 2011.

⁶ Russian Ministry of Industry and Trade, 31.03.2015 and 02.04.2015.

the rouble devaluation in 1998 was the main reason for the extremely high (8.9 per cent and 8.7 per cent, respectively) industrial production growth rates in Russia in 1999–2000, as domestic companies managed to meet rising domestic demand using existing underutilized production facilities and underemployed labour (Kadochnikov 2006).

On the other hand, for positive effects of import substitution not to end within a short time and to produce sustainable results for the next three to five years, national companies should have opportunities to invest in new production facilities and technical modernisation. For this to happen, *access to capital and technology sources* is needed. Additional advantages in raising sales on domestic markets are enjoyed by companies with access to *large foreign markets*. On one hand, such companies can rely on economies of scale (the larger the output, the lower the production unit costs). On the other hand, exporting companies are generally more competitive (and also more advanced technologically) (Golikova et al. 2011; Golikova et al. 2012) and thus can successfully supply the domestic market after the importers have left it.

Access to government contracts has a similar effect regarding economies of scale, but, in contrast to competition for export markets, competition for government contracts does not always identify the most efficient supplier. Thus the status of a government supplier does not guarantee that the company can successfully increase sales in market niches where demand is generated not by the state but by private economic actors.

The *price factor* deserves particular attention. An increase in relative prices of imports can support import substitution, but it can also undermine its potential if prices for raw materials and components used to produce domestic goods also rise. Negative effects of price increases are even more significant in the medium term, when companies should buy equipment for production development. If imported equipment and other investment goods become more expensive, the chances for successful import substitution in sectors that rely on the corresponding investment goods are not too promising.

5. Sectoral Prospects of Import Substitution

How do the factors mentioned above manifest themselves in the Russian economy? First of all, let us look at import dynamics. In 2014, imports decreased by 9.2 per cent. In 2015, they plummeted. According to the Federal Customs Service, total Russian imports fell by 36.4 per cent in 2015; imports from the United States and Japan were down by some 38 per cent and those from the EU countries by almost 41 per cent.

Importantly, imports fell significantly even in trade with those countries with which Russian Federation has managed to maintain undisrupted economic relations despite the ongoing conflict in eastern Ukraine. For example, imports from the BRICS countries dropped by 30.7 per cent, while imports from the Republic of Korea declined even more than those from Ukraine (by 49.4 per cent as compared with 47.2 per cent).

These trends show that the real reasons for import decline in 2015 were not so much connected with economic sanctions against Russia and the respective retaliatory measures as with the drastic depreciation of the rouble and the real income decline in the Russian economy, which was responsible for lower demand for imported goods. Even accelerated integration processes within the Eurasian Economic Union (EEU) could not resist these factors: Russian imports from the EEU states fell by 31.9 per cent in 2015. Given low complementarity among the EEU economies and high non-tariff barriers in mutual trade (Pelipas et al. 2014: 19), it is very unlikely that these countries can supply Russia with goods it used to import from the rest of the world.

Such a significant decline in imports seems to create favourable opportunities for import substitution, but the short-term prospects are rather contradictory. On the one hand, crisis developments in the Russian economy led to the decline in productive capacity and labour force utilisation, which potentially could be used for import substitution. According to the Russian Economic Barometer survey, utilisation of production capacities in Russian medium-size industrial enterprises fell from 80–84 per cent in August–September 2014 to 76 per cent in November 2015, while the labour force utilisation decreased from 90–92 per cent to 88 per cent during the same period.⁷ On the other hand, the drop in real income and investment is responsible for a strong negative shock on the demand side. This situation contrasts with the experience of 1999–2000, when both real income and investment showed impressive growth.

In the medium term, import substitution prospects look even less favourable. Under sanctions against the Russian economy, domestic companies are basically cut off from Western capital markets and face serious access barriers in both export and technology markets. Even companies not directly affected by sanctions (i.e., those not included in sanction lists and operating outside the financial, oil and gas or defence industries targeted by US and EU sanctions) have to deal with these negative factors.

⁷ Russian Economic Barometer, *Quarterly Bulletin*, 4 (58): 36–37. It should be noted that even these figures are rather high. Before the crisis of 2008 they were not much bigger: 77–79 per cent for the production capacity and 90–92 per cent for the labour force.

Possibilities of receiving support from the state are also limited (save for the defence industry), given the falling budget revenues.

Importantly, active import substitution in sectors producing industrial goods can restrain import substitution in sectors consuming these products, because price/quality characteristics of domestic goods can be worse than those previously imported. The risk of such a development in the Russian economy is fairly high. According to a survey among industrial companies carried out by the Yegor Gaidar Institute for Economic Policy in September 2014,⁸ a significant number of companies expected that import substitution would lead to increased prices for products needed for their own production. The average share of such enterprises was 30 per cent, but in some sectors it was significantly higher, e.g., 57 per cent in the food industry, 40 per cent in light industry, 35 per cent in mechanical engineering. Given the fact that 20 per cent of survey participants expected a worse quality of products from Russian suppliers, the prospects for import substitution can be significantly undermined by production costs.

The analysis of import substitution possibilities given all of the facts mentioned above shows that the best conditions for import substitution projects are present in metals and agrofood sector (agriculture and food industry). In metals, Ukrainian suppliers' withdrawal from the market and import restrictions for products used in oil and gas production (including pipes, fittings, power cables, and drilling platform modules) create opportunities for using some modern production facilities (that were originally built to produce goods for exports) to supply the domestic market. In the food industry and agriculture (first of all, in pig and poultry farming), anticipated increases in prices on the domestic market are well supplemented by the rapid investment payback and public support programmes, including at the regional level. However, a fly in the ointment has to be mentioned, namely, the quality of domestic goods. The results of numerous food market surveys in 2015 at the federal and regional levels showed extremely high (80 per cent, sometimes even more) share of products that do not meet quality standards.⁹ This means that the quantitative success of import substitution in agriculture and food industry may have been achieved at the expense of quality – and, ultimately, at the expense

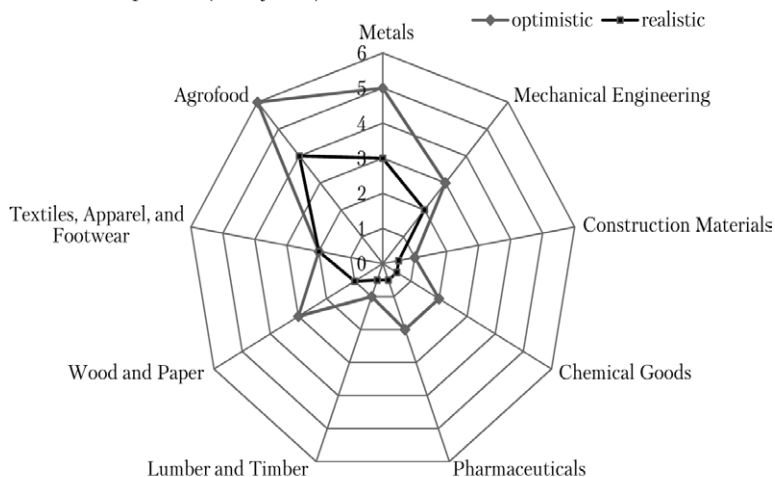
⁸ Vedomosti, October, 1 2014.

⁹ See, e.g.: Major part of Russian cheese is counterfeit, *Commersant*, 01.10.2015; Expert: Sausages in the shops of Novosibirsk turned out to be counterfeit, *Rosbusinessconsulting-Novosibirsk*, 21.10.2015; Experts found 100% counterfeit in Siberian sausages, *NGS. News*, 04.09.2015.

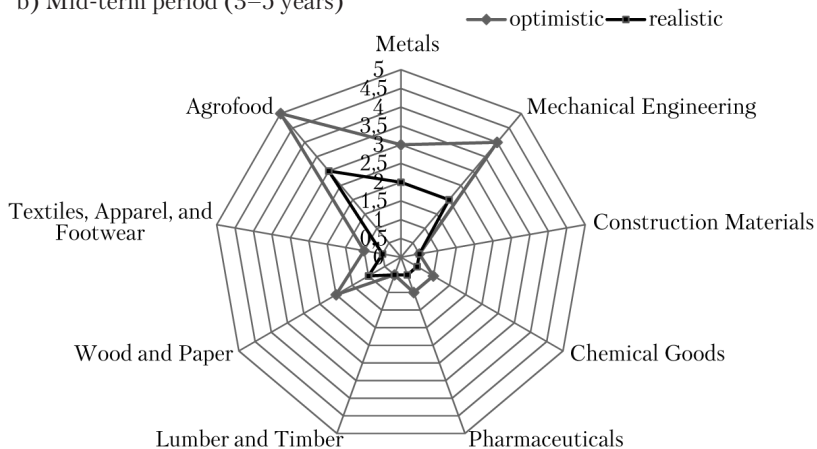
of Russian consumers, whose well-being had already suffered due to the decline in real income.

Figure 1. Expected average annual growth due to import substitution, % (basic and optimistic scenarios)

a) Short-term period (1–2 years)



b) Mid-term period (3–5 years)



Source: Calculations by the Institute of the World Economy and International Relations of the Russian Academy of Sciences.

Mechanical engineering can gain from domestic demand and government contracts. At the same time, it faces restricted access to Western

technologies and international cooperation, which significantly undermines its chances for efficient import substitution. In effect, the prospects of a production increase through import substitution in mechanical engineering are more modest than in metals, agriculture, and food industry. In other sectors of manufacturing chances for import substitution are even smaller. In the chemical, pharmaceutical, light and paper industries, growth prospects due to import substitution are minimal, and they are almost absent in the timber industry and construction materials. More expensive imports due to the rouble depreciation can provide higher demand for Russian products, but the overall decrease in demand due to the economic recession jeopardise any positive effect on production volumes. Figure 1 gives an overview of projected estimates of the potential contribution of import substitution to the output growth.¹⁰

Generally, it can be concluded that *hopes for a systemic industrial growth induced by import substitution are groundless*. This corresponds perfectly to international experience in the field of import substitution, which never showed important positive results in crisis times. Given these circumstances, a shift of Russian industrial policy back to the »traditional« model does not look very promising, to put it mildly. Real chances for growth are associated not so much with the import substitution strategy (even in its »soft« version of »import substitution without isolation«) (Yevtushenkov 2015) as with a normalisation of trade and investment relations with key foreign partners, stabilisation of the national currency, structural and institutional reforms to get rid of the excessive dependence on raw materials, as well as the long-awaited shift of industrial policy priorities towards productivity improvements of Russian companies.

Bibliography

Afontsev S. (2014) World Economy: A Quest for the New Growth Model, *World Economy and International Relations*, 2: 3–12.

Afontsev S.A., Ivanova N.I. and Korolev I.S. (2009) (ed.), International experience of anti-crisis policy: lessons for Russia (IWEIR RAS).

Afontsev S.A., Kadochnikov S.M., Mariyev O.S. and Fedyunina A.A. (2011) Cluster policy as competitiveness improvement instrument in Sverdlovsk region, Analytical Reports of Ural State University, April.

Aghion P., Boulanger J. and Cohen E. (2011) Rethinking Industrial Policy, Bruegel Policy Brief No. 2011/04, June.

¹⁰ These estimates refer to the net import substitution effect. Real growth rates can be higher or lower, because production dynamics depends not only on regaining market niches that have been supplied by imports but also on sales on traditional domestic markets as well as on export developments.

Aiginger K. (2013) The »Greening« of Industrial Policy, Headwinds and a Possible Symbiosis, WWWforEurope Policy Paper No. 3, April.

Altenburg T. (2011) Industrial Policy in Developing Countries: Overview and Lessons from Seven Country Cases, German Development Institute Discussion Paper No. 4.

Altenburg T. and Lütkenhorns W. (2015) *Industrial Policy in Developing Countries: Failing Markets, Weak States*, Cheltenham: Edward Elgar.

Andersson T., Schwaag-Serger S., Sörvik J. and Wise Hansson E. (2004) *The Cluster Policies Whitebook*, Malmö: IKED.

Beaudry C. and Schiffauerova A. (2009) Who's Right, Marshall or Jacobs? The Localization versus Urbanization Debate, *Research Policy*, 38 (2): 318–337.

Bianchi P. and Labory S. (2008) *International Handbook on Industrial Policy*, Northampton: Edward Elgar.

Burton H.J. (1998) A Reconsideration of Import Substitution, *Journal of Economic Literature*, 36 (2): 903–936.

Cato M.S. (2009) *Green Economics: An Introduction to Theory, Policy and Practice*, London: Earthscan.

Chatterji A., Glaeser E. and Kerr W. (2013) Clusters of Entrepreneurship and Innovation, NBER Working Paper No. 19013, May.

Cimoli M., Dosi G. and Stiglitz J.E. (2009) (eds) *Industrial Policy and Development: The Political Economy of Capabilities Accumulation*, (NY: Oxford University Press.

Danilin I.V. (2009) *Transformation of the US state research and technical policy: from G. W. Bush to B. Obama*, Idea-Progress.

Devine P., Katsoulacos Ya. and Sugden R. (1996) (eds.) *Competitiveness, Subsidiarity and Industrial Policy*, NY: Routledge.

Dhéret C. and Morosi M. (2014) Towards a New Industrial Policy for Europe, European Policy Centre Issue Paper No. 78, November.

Dynkin A.A., Kurenkov J.V., Petrov V.K. et al. (2004) Industrial policy: Foreign experience, in *Modern industrial policy of Russia. World experience*. Issue 3. Russian Union of Industry and Entrepreneurs, pp. 153–305.

EC (2008) *The Concept of Clusters and Cluster Policies and Their Role for Competitiveness and Innovation: Main Statistical Results and Lessons Learned*, Luxembourg: Office for Official Publications of the European Communities.

Golikova V.V., Gonchar K.R. and Kuznetsov B.V. (2011) Empirical evidence of import's learning effects, Preprint by the HSE WP1/2011/02, HSE Publishing House.

Golikova V.V., Gonchar K.P. and Kuznetsov B.V. (2012) How export activities influence technology and management innovations of Russian companies, in *Russian Management Magazine*, 10 (1): pp. 3–28.

Hahnel R. (2010) *Green Economics: Confronting the Ecological Crisis*, New York: M.E. Sharpe.

Harrison A. and Rodríguez-Clare A. (2010) Trade, Foreign Investment, and Industrial Policy for Developing Countries. In: Rodrik D. and Rosenzweig M. (eds), *Handbook of Development Economics*. Vol. 5, Amsterdam: North-Holland, pp. 4039–4214.

- Ivanova N.I. and Ivanov V.V. (2011) (ed.), *Innovation policy. Russia and the world, 2002–2010*, Nauka.
- Kadochnikov P.A. (2006) *Import substitution in Russia after the crisis of 1998*, Gaidar Institute for Economic Policy.
- Karlsson C. (2008) (ed.) *Handbook of Research on Cluster Theory*, Cheltenham: Edward Elgar.
- Ketels C., Lindqvist G. and Sölvell Ö. (2012) *Strengthening Clusters and Competitiveness in Europe: The Role of Cluster Organisations*, Stockholm School of Economics, Cluster Observatory, October.
- Lazzarini S.G. (2015) Strategizing by the Government: Can Industrial Policy Create Firm-Level Competitive Advantage?, *Strategic Management Journal*, 36 (1): 97–112.
- Lütkenhorst W., Altenburg T., Pegels A. and Vidican G. (2014) *Green Industrial Policy: Managing Transformation under Uncertainty*, Deutsches Institut für Entwicklungspolitik Discussion Paper No. 28.
- Meyer-Stamer J. (2009) *Moderne Industriepolitik oder postmoderne Industriepolitiken?* Berlin: Friedrich Ebert Stiftung.
- Nathan M. and Overman H. (2013) Agglomeration, Clusters, and Industrial Policy, *Oxford Review of Economic Policy*, 29 (2): 383–404.
- Mukherjee S. (2012) Revisiting the Debate over Import-Substituting versus Export-Led Industrialization, *Trade and Development Review*, 5 (1): 64–76;
- Nielsen K. (1996) Industrial Policy or Structural Adjustment? In: Campbell J.L. and Pedersen O.K. (eds), *Legacies of Change. Transformation of Postcommunist European Economies*, Hawthorne: Aldine de Gruyter.
- Nübler I. (2011) *Industrial Policies and Capabilities for Catching Up: Frameworks and Paradigms*, International Labour Organization, Employment Working Paper No. 77, July.
- Pack H. and Saggi K. (2006) *The Case For Industrial Policy: A Critical Survey*, The World Bank Working Paper Series No. WPS3839, February.
- Pelipas I.V., Tochitskaya I.E., Shimanovich G.I. and Anisimov A.M. (2014), Estimate of non-tariff barriers' influence on mutual trade in the common free market zone based on demand of exporting companies, *Eurasian Economic Integration*, 4 (25).
- Pellegrin J., Giorgetti M.L., Jensen C. and Bolognini A. (2015) *EU Industrial Policy: Assessment of Recent Developments and Recommendations for Future Policies*. Report for the European Parliament's Committee on Industry Research and Energy, February.
- Perkins D.H. (2013) *East Asian Development: Foundations and Strategies*, Cambridge, MA: Harvard University Press.
- Porfiriyev B. (2013) *Green economy: reality, perspectives and growth limits*, Working papers of Carnegie Center, March, p. 8.
- Porter M.E. (2005) *Competitiveness*, Williams Publishing House.
- Reinert E.S. (2010) *How rich countries became rich and why poor countries stay poor*, Publishing House of the Higher School of Economics.
- Reinert E.S. (1999) *The Role of the State in Economic Growth*, *Journal of Economic Studies*, 26 (4/5): 268–326.

Salazar-Xirinachs J.M., Nübler I. and Kozul-Wright R. (2014) *Transforming Economies: Making Industrial Policy Work for Growth, Jobs and Development*, Geneva: ILO.

Silva E. (2007) The Import-Substitution Model: Chile in Comparative Perspective, *Latin American Perspectives*, 34 (3): 67–90;

Tarr D.G. (2006) Industrial policy promoting competitiveness in the global economy, in Tarr D.G. (ed.), *Trade policy and the role of WTO entry for further development of Russia and CIS: a manual*, World Bank Institute, pp. 161–161.

Ul Haque I. (2007) Rethinking Industrial Policy, UNCTAD Discussion Papers, No. 183, April.

Warwick K. (2013) Beyond Industrial Policy: Emerging Issues and New Trends, OECD Science, Technology and Industry Policy Papers, No. 2.

Warwick K. and Nolan A. (2014) Evaluation of Industrial Policy: Methodological Issues and Policy Lessons, OECD Science, Technology and Industry Policy Papers, No. 16.

Wren C. (2001) The Industrial Policy of Competitiveness: A Review of Recent Developments in the UK, *Regional Studies*, 35 (9): 847–860.

Yanikkaya H. (2003) Trade Openness and Economic Growth: A Cross-Country Empirical Investigation, *Journal of Development Economics*, 72 (1): 57–89.

Yevtushenkov V. (2015) Import substitution without self-isolation, *Russia in Global Affairs*, 1: 197–205.

REINDUSTRIALISATION BASED ON HIGH-TECH INDUSTRIES

Sergey Bodrunov

1. Introduction

Since the 1990s, Russia has pursued a liberal-monetary economic policy, which has resulted in a sharp decline of industrial output, lower economic stability and an increased dependency on foreign capital, technology and both consumer and non-consumer goods. Russia is now critically dependent on imports, even in strategically significant sectors. It is, therefore, fair to say that there are a number of threats to the country's sustained development, due to insufficient development of domestic industrial production (Bodrunov 2011).

Without going into a detailed analysis of the available statistics, one should note that a sharp decline in domestic production has resulted in a rising share of imports. For example, in the machine-tool industry and light industry imports now exceed 90 per cent, while in the heavy machine building, radio-electronics and medical equipment sectors they exceed 80 per cent. The situation is, unfortunately, similar, if not more serious, in other basic sectors of the Russian economy, such as the food industry, extractive industries, energy and communications. In 2000, for instance, Russia, imported USD 10 billion worth of machines, equipment and means of transportation; 14 years later, the price tag was USD 150 billion – a 15-fold increase. These and other data prove that today Russia is critically dependent on imports.

The current critical state of the Russian economy is the result of long-term processes of de-industrialisation (Bodrunov, Grinberg, Sorokin 2013; Popov 2012). This objectively enhances the role of industrial policy in the present-day economic system, making it a major tool for resolving piled up problems and contradictions in both economic and social development, because industrial development is associated with employment growth and structural improvements, the development of living standards and improvements in human capital. The geopolitical and geo-econom-

ic challenges that the Russian economy has been facing in recent years have exacerbated the contradictions that had developed from preceding decades of economic evolution. These contradictions have, in our view, reached the level of a threat to national security. As a result, a new model of economic growth is to be sought, based on a fuller use of the country's own capabilities and resources.

Why do the government's previous prognoses and its principles of economic regulation need to be revised? Russia has long had an economic policy with, apparently, correct strategic goals of creating a modern social market economy. One cannot but agree with the aims, tasks and priorities contained in the multiple government programmes and other documents. However, the policy approach taken to achieve the development goals, particularly, the combination of policies of »market fundamentalism« with the practice of maintaining shadow market institutions and hands-on state management, have caused economic stagnation, with all the negative consequences that entails. Over two decades of implementation of the liberal-monetary development model have brought about the collapse of industrial production, a lower level of economic stability and a dramatic increase in the level of dependence on imports, which is strongest in high-tech sectors.

The crisis in the high-tech sectors is evidenced, most particularly, by the dynamics of the structure of Russia's exports. Thus, according to World Bank data,¹ between 2003 and 2013, the share of high-tech goods in Russia's industrial exports more than halved, falling from 18.3 per cent to 8.4 per cent, and this slump was the steepest among all developed and emerging economies. Russia's present-day export model is oriented to exports of low value-added products (raw materials and energy products). For instance, according to Rosstat, as of early 2014, the top eight oil and gas-producing companies accounted for over 60 per cent of the value of the entire Russia's exports, and the share of exports from the non-commodity sector was down to one-quarter.

The country evidently needs a more vigorous industrial policy, particularly for its high-tech production-oriented areas. In the author's opinion, industrial policy should be viewed in the context of Russia's development. The country's economy has witnessed several stages of industrialisation between the mid-nineteenth and the early twenty-first century: intense industrialisation at the end of the nineteenth century to the beginning of the twentieth century due to the reforms of S. Witte and A. Stolypin; in-

¹ Available on its website (<http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS>).

dustrial rebuilding after the revolution and civil war of the 1920s; Stalin's industrialisation of the 1930s; recovery of national economy and industrial renaissance during the post-war times.

The current interest in reindustrialisation is not accidental; it is driven not only by immediate political concerns, but also by fundamental factors. Today, an active industrial policy should replace the passive models implemented during the radical market reforms at the turn of the century. What model of industrial policy should be chosen? The first answer that suggests itself is to tap the experience of developed economies. Many of them, after the acute phase of the global recession crisis (2008), have stepped up their reindustrialisation efforts. Possibly, one should just study and then borrow from abroad and transplant effective institutions to Russian soil. The author takes a cautious attitude to this approach. As shown by Polterovich (2007), implantation of institutions is not always successful. A vivid testimony to this is the above-discussed legacy of the radical reforms in Russia of the 1990s, which was based on a borrowed, foreign institutional framework, rooted in the concept of economic liberalism and which never became operable in Russia.

2. A Unique Reindustrialisation Strategy for Russia: Accelerated Technological Development

In choosing ways to improve industrial policy, one should bear in mind that a unique economic system has emerged in Russia (Kleyner 2008). Without taking into account its features, no productive economic and industrial policies are possible. Industrial policy should be based on a systemic approach. A systemic view of the economy requires a study of its elements, their inner links and an examination of the system's nature. It is even more important to look at the economic system not as an isolated and self-contained entity, but as an integrated part of a larger super-system. A similar approach was employed by the Hungarian economist János Kornai, who also believes that the object of an economist's study is »an integral system interacting with other systems, including larger systems containing the former system. Each economic system is viewed as a sphere of interaction of economy, politics, ideology, psychology, culture and other areas, therefore, an analysis from the perspective of one specific discipline will be incomplete and superficial« (Kornai 2002: 11).

Thus, to comprehend Russia's economic system, it is necessary to examine, on one hand, the material and technical prerequisites that determine its existence and functioning, and on the other, the socio-cultural

environment in which the economic system is formed. The latter, as both the theory and practice of economic reforms in Russia have shown, include ideological, social-psychological, political, ethno-cultural and other components, often defined in terms of the country's distinctiveness. »The distinctiveness of Russia's economy is determined, on the one hand, by its external-historical conditions, and on the other by the inner features of the socio-economic system« (Radayev, Buzgalin 1995: 48).

Our views on development, focusing on giving a renewed boost to industrial production, may seem to diverge from widespread concepts of post-industrial society and run counter to mainstream theoretical economic ideas. A critical examination will reveal that »post-industrialism« is by no means a universal feature of the world economy, and it is even less so as far as Russia's economy is concerned. This has, finally, been recognised by the proponents of this approach. Thus, V. Inozemtsev (2010) , a well known Russian researcher of post-industrialism, analysing the international trade in goods and services, says:

The contemporary world still remains an industrial world. In 2009, raw materials accounted for 16.1% of the global turnover, services – for 18.9%. Industrial goods [on the other hand] accounted for 65%. Fifteen out of the 20 largest US exporters were industrial giants, and only five were technology corporations. Technology is nothing unless it can be applied in industry, and, embodied in finished products, conquers world markets. Today, technologies are changing the face of exports of various countries not by themselves, but as a means of efficient and mass production of industrial goods.

It is to be noted that the creation and diffusion of new technologies into industrial production are closely interrelated in this passage. The author subscribes to this view. The success of reindustrialisation (or new industrialisation) is closely linked to accelerated technological development. Without state-of-the-art technologies, brought to the stage of practical application, embodied in equipment and machine tools, a qualitative leap in development, particularly, innovation development, and a faster economic growth are not feasible. The problems we are facing today in Russia are very much expected and driven by earlier state-level decisions derived from a set of liberal economic views that do not suit Russian realities.

3. Market Transformation and Deindustrialisation

First, processes of deindustrialisation, including high-tech sectors, are closely linked to the specific features of Russia's market transforma-

tion. Many imbalances were created during the privatisation drive and the macroeconomic policy chosen brought about relatively more favourable conditions for the fuel-commodity sector, the financial sector, trade-intermediary activity and a few other areas of the service sector. Manufacturing industry, on the other hand, which in the USSR had received higher attention but nevertheless had been largely behind world market standards, faced an investment crunch and lack of resources for modernisation to enhance its competitiveness. This problem was never resolved because it was not among priorities of the policies pursued. *The problem did not lie so much in the failure to upgrade technologies through foreign investment, as in the non-use and eventual degradation of internal sources of technological renovation.* Government R&D expenditure was drastically reduced. Business did not invest in R&D; over 80 per cent of scientific and research centres (which previously existed inside different organisations) and experimental and construction organisations were liquidated. The key factor driving this was the policy of »market fundamentalism« imposed on the advice of outside experts.

Second, when one considers the issues involved in overcoming deindustrialisation, it is customary to invoke the need to create a competitive environment in the Russian economy. And most often, a competitive environment is understood in terms of economics textbooks, in which one of the key features of an ideal competitive environment (that is, one that does not exist in reality, but is devised to illustrate theoretical arguments), is a large number of small firms. This is what guided Russian »privatisation managers« in their desire to split up large enterprises. Competition is, without doubt, needed for a market economy, but one should bear in mind that the structure, economic organisation and composition of assets of former Soviet enterprises differed significantly from Western companies, and all the more so, given the disruption of economic ties. The attempts to split integrated production complexes resulted not in more competition, but in the »drowning« of fragments of large enterprises that were totally unprepared to »swim« in such a milieu. From the author's perspective, it is important to note that as a result of such structural reforms, corporate research was severed from industrial enterprises. *Research, development, design and engineering units, having lost their links with production, were made bankrupt en masse and their core business was changed. This led to a sharp decline in the technological level of production.* Splitting large enterprises constituting single technological complexes did not create a competitive environment, but only disorganised the industry and promoted deindustrialisation.

Third, »Dutch disease« is, in the author's view, another driving factor of deindustrialisation. The inflow of funds into Russia in the 2000s, due to rising oil prices, did not mend the catastrophic situation that emerged in industry as a result of the reforms of the 1990s. Excess liquidity was not used to increase the supply of competitive goods and services for the economic modernisation and renewal of fixed capital, but was either sterilised in various funds or served to stimulate internal demand, which due to constant weakening of the market positions of local industrial enterprises, was met, primarily, through imports, and only to a small extent stimulated growth of domestic production.

Fourth, Russian industrial enterprises were lagging behind in the use of modern management and production organisation methods. What are the causes of this? A key factor is a low profitability rate in manufacturing industry, lower, for example, than in the financial sector or the service sector. This impedes investment in innovation projects both in high-tech – including industrial high tech – and in management. The causes of such low profitability are to be found, mainly, in *government lending and tax policy*, and not at the enterprise level. The problem of access to »long« and »cheap« money in Russia remains unresolved. Real interest rates are much higher than profitability in almost all manufacturing industries, which strangles them and drives deindustrialisation.

Fifth, views on the *role of state-run enterprises* in the economy need to be revised. In keeping with traditional liberal precepts, expanding the public sector of the economy is a negative thing. However, there is no convincing evidence proving that state-run enterprises are far less efficient than private companies. However, this argument is taken as an axiom. It cannot be accepted. Increased state participation in enterprise ownership is not a problem per se. The main problem in Russia is that, unfortunately, the creation of large government concerns and government support for large enterprises, though it covered, partly, high-tech industries (mainly in the defence sector) as well, has not produced mechanisms to incentivise technological renewal in manufacturing industry. The problem is not only due to a weakly developed competitive environment, but mainly to a lack of a clear government strategy vis-à-vis industrial policy in terms of both setting goals for the latter and identifying means to achieve them.

4. Reindustrializing through high-tech sectors

Today, it is possible to tap the Soviet industrialisation experience for reindustrializing high-tech sectors. As a matter of fact, there were similar tasks tackled in a previous period. The 1917 revolution and the Civil War

(1918–1920) destroyed the industry. There was, therefore, a need, on the one hand, to simply restore enterprises and build new ones to increase industrial output. On the other hand, and more importantly for the current analysis, new technologies were put in place, conditions being created for their development and dissemination. The Soviet industrialisation drive was launched with the adoption of the GOELRO plan. The key idea of the plan was to put priority to the development of power generation linked with sectoral and regional development programmes. Managing these links was a very significant aspect of the plan with two lessons to be drawn for the contemporary reindustrialisation policy:

First, the basics of the cluster approach and cluster policy in economic development were, in an “embryo” form, included in the GOELRO plan: the plan provided, in essence, for an integrated territorial development via the creation of technologically interlinked production facilities which closely coordinated their operation. This idea underlies modern cluster policy which is implemented in innovation type “breeding grounds” of reindustrialisation – *special technical innovative economic zones*. This experience appears to be relevant today. Even more so, industrial clusters created during the initial five-year periods are successfully operating today;

Second, it is not accidental that the GOELRO plan was closely linked to an electrification drive. A developed power supply system continues to be an essential infrastructural prerequisite for industrial development. For sure, the kind of infrastructure required for successful industrial performance is so much broader in composition today. Contemporary industrial enterprises need engineering support, developed transportation lines, communications systems, housing and utilities infrastructure for the employees, etc. Nevertheless, the idea of the essential role of *infrastructural support in stimulating industrial growth* is still relevant today for economic policy, a key role being played by technological infrastructure.

An important feature of today’s situation, defining the current status of the Russian industry, is a high external technological dependency of local enterprises. Technological high-tech import orientation is the Achilles’ heel of the Soviet economy as well. Suffice it to mention such car plants as AvtoVAZ, GAZ, etc. Russia’s economy, having lost most of the positions it had in high-tech industries in Soviet times, is now even more dependent than it used to be. If one is to follow mainstream approaches, reindustrialisation requires enhanced trans-border technological transfers. But the existing anti-Russian economic sanctions either constrain or preclude them. So, without enhancing innovation processes inside the country, based on *close integration of education, research and produc-*

tion, Russia will remain strongly dependent technologically, whereas local producers will be unable to regain competitive positions either on the world or even domestic markets. This needs to become a dominant feature of the industrial policy.

5. Importsubstitution

Thus, a revival of the Russian industry should go hand in hand with resolving problems of import substitution. Not that the government economic policy has completely ignored the problem of low competitiveness of the local industry and the growing pressure from imports on the domestic market. Import substitution was initiated well before the economic situation became as acute as it is today. A case in point is, without doubt, the car industry where quite strict requirements were made as to localisation of production in Russia by the global car corporations (Ford, Toyota, Volkswagen, etc.).

The government was initially trying to protect the local car industry with high customs duties on imported cars. Protectionist measures were ineffective, though, failing to create incentives for production modernisation. It is to be noted that this is just one aspect of a more general problem: since the very onset of reforms, there have been very low incentives for modernisation, and a quite low innovation demand in the Russian economy, including sectors which have not been given protectionist support and which have not lacked a competitive environment. On the contrary, a number of sectors experienced strong competitive pressure, but this failed to provide impetus for their modernisation, and, instead, brought about their destruction under competitive pressure.

The exchange rate policy is another important tool to promote import substitution. But the situation here is two-fold. On the one hand, the “weak” rouble does, indeed, limit imports, it favours exports and helps localise production (Plotnikov, Vertakova 2014). It is to be noted, though, that a weak national currency creates a certain edge only for fairly strong economies (Malykh 2014). Russia is not the case: Russia’s main task is not a slight shift in the balance between domestic production and imports in favour of the former, but a large-scale and deep-going economic modernisation. Such ***modernisation, initially at least, is unfeasible without massive imports of machinery and equipment***. Today, Russia’s machine-building is only meeting 9% of its domestic market needs. According to Rosstat, as of late 2013, in various industrial sectors, the extent of wear of fixed assets ranged from 40 to 60%. 14.6% of commercial entities in RF had fully worn out fixed assets (13.3% – in manufacturing enterprises, where this parameter has been stable since 2007). Thus,

what is needed is massive importation of machinery, including high-tech, which is just not produced in Russia. And this requires a “strong” rouble.

New, “high” technologies are part of another aspect of a worth-while industrial policy. In the era of innovation economy based on production and use of new knowledge, one should ***not copy industrial policies which were widely and successfully used in various countries in the 1950–70s*** (Popov 2014). Besides a focus on high-tech growth, forecasting methods need to be developed for making a policy of selective support of future growth centers. The task is not only to retool the industry using high-tech, but to meet the challenges of the industry of the future, such as unmanned manufacturing, personalised manufacturing, etc.

Of critical value in this new environment is not only research and development, but fast transfer of new technologies, and their rollout. This can be helped by new forms of organizing production. They involve technology hubs acting as nodes enabling both multiplication of innovation and knowledge and technology transfer. Generation of new technologies and creation of advanced technology platforms should rely on two types of clusters: the first one involves and unites science and education; the second one science, education and industry. These clusters can also work on an ex-territorial, network basis.

It has to be admitted that Russia is now characterised by a quite low innovation activity of enterprises while having a significant research and engineering potential. Enterprises’ innovation activity remains quite low, not having changed during the past two decades. Organisations making technological, organisational and, marketing innovations account for less than 10%. The cause of this is a lack of effective mechanisms of transformation of this potential into tangible results demanded by the economy, specifically, by the industry. Institutions of the national innovation system need, therefore, to be developed, with participation of the state, among others. The reason is that high-tech production is becoming “a continuous innovation”; analysis, search, transfer and, adoption of technologies are becoming integral elements of such production system and, part of the manufacturing process. Technology transfer, as an element of B2B relations between research and production entities within industrial activity, is simply becoming a necessary routine of the manufacturing process (Osipenko 2014).

Conclusion

It is to be noted, in conclusion, that reindustrialisation based on high-tech sectors of Russia's industry requires a special industrial policy. In elaborating its key directions and priorities, in choosing policy tools, one should consider specific features of high-tech manufacturing, as well as the local and foreign experience of stimulating innovative-engineering and industrial development. What needs to be changed is not only how instruments of current policy are applied, but its ideological basis – the liberal-economic paradigm. Giving a new effort to reindustrialisation based on Russia's high-tech industries objectively requires today an enhanced government participation in economic activity.

References

- Bodrunov S. (2011) A New Incarnation of the Idea of Russia's Modernization. *Economicheskoye Strategii*, Vol. 13, № 3 (89), pp. 24–31 (in Russian).
- Bodrunov S., Grinberg R., Sorokin D. (2013) Reindustrialization of the Russian Economy: Imperatives, Potential, Risks. *Economicheskoye Vozrozhdenye Rossii*, № 1 (35), pp. 19–49 (in Russian).
- Inozemtsev V. (2010) Modernizatsiya.ru: Made in Russia. *Vedomosti*, 12.07.2010 (in Russian).
- Kleyner G. (2008) Strategic Planning: Bases of Systems Approach. In *Modernization of the Economy and Social Development*. In 3 books. Book 2. Moscow: HSE-SU Publishers (in Russian). <http://www.kleiner.ru/skrepk/strateg-plan-2008.pdf>
- Kornai Ya. (2002) System Paradigm. *Voprosy ekonomiki*, № 4, pp. 10–12 (in Russian).
- Malykh Ye. (2014) Specific Features of the Effect of Rouble Devaluation of the Russian Stock Market. *Bulletin of St. Petersburg State Economic University*, № 4, pp. 23–28 (in Russian).
- Osipenko A. (2014) Technology transfer in the system of support for innovation development of the industry. *Ekonomicheskoye vozrozhdeniye Rossii*, № 1 (39), pp. 83–88 (in Russian).
- Plotnikov V., Vertakova Yu. (2014) Russian Industry: Current State and Development Prospects. *Ekonomika I Upravleniye*, № 5 (103), pp. 39–44 (in Russian).
- Polterovich V. (2007) *Elements of a Theory of Reforms*. Moscow: Ekonomika Publishers, 2007, 446 pp.
- Popov A. (2012) Creating a New Development Model: Modernization and Conditions of Transition to Innovation Economy. *Bulletin of St. Petersburg State Economic University*, № 4, pp.18–26 (in Russian).

Popov A. (2014) Neo-industrialization of Russian economy as a condition for sustainable development. Bulletin of St.Petersburg State Economic University, № 3, pp. 7–12 (in Russian).

Radayev V., Buzgalin A. (1995) The Economy of the Transition Period. Moscow (in Russian).

THE ROLE OF MONETARY POLICIES TO SUPPORT INDUSTRIAL POLICY – THE CASE OF RUSSIA

Hansjoerg Herr

1. Introduction

When the industrialisation, de-industrialisation or development of a country are talked about monetary policy is usually not at the centre of the debate. On the contrary, in neoclassical – mainstream – economic thinking money is treated as »neutral« and the duty of monetary policy is considered to be to ensure a low and stable inflation rate and nothing else. However, monetary policy is a very important ingredient of any national economic development strategy – whether it be a developed or a developing country – including industrial development. Monetary policy is understood here in a comprehensive way, not merely as interest rate policy, but rather as central bank policy, encompassing a wide range of instruments. These include, in addition to *interest rate policy*, *exchange rate policy*, international *capital controls* and policies to *prevent financial market instabilities* and influence *credit allocation*. Of course, monetary policy is only one element of an overall development regime.¹

Development is a topic for all countries, not only for developing ones. Industrialised countries, too, are confronted with the permanent challenge of competing with other countries to maintain their international position or to catch up with leading countries. Russia fits perfectly into this debate on development in general.

The transformation in Russia from a planned to a capitalist economy was accompanied by economic and political turbulence and a deep economic crisis. During the long crisis period of the 1990s Russia lost part of its industrial base. The financial crisis in Russia in 1998 marks a certain culmination of the very bumpy road to a capitalist society. Development

¹ I would like to thank Rudolf Traub-Merz for his valuable comments and debates.

in Russia became more stable in the 2000s. However, much of the economic dynamic in this phase was based on the oil sector. Since 2000 Russia has been *not particularly successful in developing civilian high tech industries* that could compete in the premier league of the world market. Elements of Dutch disease are obvious in Russia. Of course, Russia is not a developing country suffering from full-fledged Dutch disease, such as Nigeria or Angola. But without a different development regime it will not be able to remain a leading economic power, playing an important role in the world economy. In this chapter we shall discuss what monetary policy could contribute to a more prosperous development model that exploits all Russia's potential.

In Section 2 the role of monetary policy and the exchange rate as tools for *global* protection of domestic industry are discussed. It will be made clear that such global protection is of key importance for development, but not sufficient. Additionally, selective protectionism and support for certain industries is needed to increase the productive powers of a nation. This is the topic of Section 3. Section 4 analyses the development in Russia from the early 2000s onwards. The final section draws conclusions and offers recommendations.

2. The Role of the Exchange Rate as a General Protection

Imagine two regions in a currency union with different productivity levels. The economically less developed region, it is assumed, has lower productivity in *all* industries compared with productivity in the economically more developed region. If we assume free mobility of labour and capital – which is usually realised in a currency union – and the same wage level in all regions it is obvious that the less developed region will have no chance to produce anything; everything is produced in the more developed region, which is more competitive in all industries. This shows that in a monetary union production is concentrated in regions with higher productivity. Monetary unions with large differences in productivity levels do not develop in a coherent way, at least not without comprehensive government intervention.²

Let us now assume that the two regions separate and introduce their own national currency, have no international trade, restrict labour and

² In nation states transfers of resources can compensate some of the productivity differences. Also wage levels will usually not be at the same level in all regions. However, in a monetary union, which implies free movements of labour and capital, there is tendency towards wage harmonisation.

capital movements and each produce, following David Ricardo's (1817: chapter 7) famous model, two goods, wine and cloth.³ Now the economically less developed country (let us say England, again following a friendly Ricardo who reversed the empirical facts) and the economically more developed country (let us say Portugal) both produce wine and cloth for their own consumption. Does international trade make sense under this condition? Ricardo showed that trade under this condition is possible and beneficial for both countries when the countries specialise according to comparative advantages. If the disadvantage of producing cloth in England is smaller than in wine production England will specialise in cloth production and Portugal in wine production. Given free trade and restrictions on international capital and labour movements a real exchange rate will be established that keeps the current account between the two countries balanced. As a matter of course, in the absence of capital flows the current accounts must always be balanced.

This means that the real exchange rate adjusts in such a way that England will produce cloth and exchanges it for wine despite the fact that England is less productive in cloth production than Portugal. If there is an exchange rate between Portugal and England that makes no English product internationally competitive the pound sterling will start to decrease in value because English people want to buy Portuguese products. During the depreciation process for England (appreciation for Portugal) a point will come when English cloth becomes internationally competitive. Portuguese households now buy English cloth and English people have the foreign currency to buy Portuguese wine. We learn from this great and important story from Ricardo that the real exchange rate protects countries with a lower productivity level from being flooded with foreign goods. As soon as an exchange rate exists and capital and labour are not internationally mobile the fate of a less productive region in a currency union can be avoided.

Ricardo's model assumes a functioning exchange rate mechanism, but this depends on a number of conditions.

First, real depreciation does not always improve the current account. The so-called Marshall-Lerner condition has to be fulfilled. This condition states that the absolute value of the import elasticity plus the export elasticity of a real exchange rate movement must be bigger than one to

³ Ricardo based international trade on different productivity levels in industries in different countries. Other explanations assume different national endowments of capital and labour or international product differentiation. A production process can be divided into different tasks and the tasks or intermediate goods can be exchanged internationally. All these explanations can be subordinated under comparative advantage.

lead to a »normal« reaction. If, to give an example, a real depreciation does not reduce the quantity of imported goods *and* at the same time the export quantities do not increase the Marshall-Lerner condition is not fulfilled. In some developing countries the Marshall-Lerner condition does not hold. In developed countries it does.

Second, a high level of foreign debt denominated in foreign currency makes depreciation difficult. The problem is that depreciation increases the real debt burden of debtors in foreign currency. The consequences are liquidity and solvency problems for such debtors. The effect is comparable with a deflation in a situation of high debt in domestic currency. Exchange rate movements typically are much faster and bigger than price level changes so real debt effects of exchange rate movements in a situation of high foreign debt are usually disastrous. In addition, for foreign debt the domestic central bank cannot take over the function of lender of last resort. Dollarisation (or euroisation), which means domestic debt in foreign currency, aggravates the problems. High debt in foreign currency leads to fear among policy managers of using a floating exchange rate regime and, consequently, sufficient depreciations to defend the international competitiveness of a country are prevented because of the danger of financial crises (Calvo and Reinhart 2002). If a major depreciation happens nevertheless, a crisis of the domestic financial system cannot be avoided. Graciela Kaminsky and Carmen Reinhart (1999) called the combination of an exchange rate crisis and a domestic financial crisis twin-crises and found that these types of crisis are especially long and deep. Countries that allow high foreign debt to built up in foreign currency and international institutions that do not warn countries against doing this are acting irresponsibly. This is because high foreign debt robs countries of the very important macroeconomic instrument of exchange rate adjustment.

Third, a nominal depreciation may not lead to a real depreciation of a currency. Countries that suffer from a high inflation path-through of nominal depreciations can be caught in a situation in which nominal depreciations lead to such an enormous domestic inflationary path-through that the real exchange rate does not change. A high inflationary path is likely when the negative effect of a falling real income which accompanies a real depreciation is not accepted. If, for example, a cut in real wages from depreciation immediately leads to nominal wage increases as compensation, a depreciation–inflation–wage–price spiral is triggered that leaves the real exchange rate unchanged. The general conclusion is that the higher the import quota and the bigger the real depreciation the bigger the negative real income effect of depreciations will be and the more difficult it becomes for the population to accept the cut in real income.

Finally, a real depreciation can lead to political destabilisation, for example when a major part of the consumption basket is imported. If in-

come inequality is high and a high proportion of basic foods are imported, real depreciation can push low earning segments of society into (deeper) poverty, which may be unacceptable for influential groups and/or the government.

Real depreciations have a number of positive effects for medium- and long-term development: (i) they increase the profitability of companies in the export sector across the board; (ii) they can be applied as policy tools in a substantial and rapid manner; (iii) they stimulate export activities which have to compete on the world market, which provides the best benchmark for efficient companies: and (iv) they impact on export activities like a subsidy that is completely market friendly and does not need a bureaucrat to select which company should be subsidised. Dani Rodrik, using these arguments, summarises: »For all these reasons, a credible, sustained real exchange rate depreciation may constitute the most efficient industrial policy there is« (Rodrik 2005: 2002). Implementing the level of the real exchange rate that makes the domestic industry internationally competitive is a permanent positive industrial policy.

Aggregate demand comprises investment plus consumption plus government demand plus exports minus imports. Countries with current account deficit suffer in most cases from a lack of aggregate demand. Put differently: as long as a country's capacities are not fully utilised an increase in exports stimulates domestic demand, output and employment. Countries with a lack of domestic demand can follow an export-led growth strategy. Many of the most successful developing countries followed such a strategy during some phases of their development trajectory (Herr 2010). Also some developed countries, for example Germany, follow an export-led strategy. Of course, from a global perspective it is simply impossible for all countries in the world to run current account surpluses at the same time. And countries should increase domestic demand to stimulate growth rather than follow a mercantilist strategy. If there is to be stable development of the world economy current account imbalances should be limited. As long as no mechanism exists on a global level to limit mercantilist strategies countries not following such a strategy should prevent current account deficits.

Living with a current account deficit which is financed with foreign debt denominated in foreign currency is particularly risky. In such a case the country accumulates foreign debt in foreign currency.⁴ Unpredictable developments at home or in the world economy can lead to a sudden

⁴ Only countries that issue internationally important currencies can get foreign debt denominated in domestic currency. The United States with the US dollar is the clearest example. Also, current account deficits can be financed by capital flows that do not create

halt of capital inflows and sudden capital outflows. The country is then trapped in a twin-crisis which combines a sharp depreciation of the domestic currency and a domestic financial crisis and can lead to a period of long-term low growth. On the other hand, a balanced current account or even a current account surplus does not automatically lead to low foreign debt. If, for example, high gross capital inflows are combined with high capital outflows gross foreign debt can be high even though the country never had a current account deficit and has no net foreign debt. In such a case gross capital inflows, for example, finance capital flight. Even a net creditor position does not help a country much in a currency crisis when, let us say, the rich are allowed to keep their wealth largely abroad. Russia in some periods fits this description.

Monetary policy in the comprehensive understanding adopted here plays a key role in getting the exchange rate at a level that makes domestic industry competitive. The target of exchange rate policy should be to keep the international trade account – including the international service account – balanced. This also implies that the current account should be balanced overall. Such a policy is not mercantilist as it is not pushing for current account surpluses. For countries with a large share of natural resources exports in total exports, however, such a rule has to be modified. To avoid the crowding out of the domestic industrial sector a guideline should be introduced that the trade and service balance excluding natural resource exports should be balanced. Below we will discuss the Russian case in this perspective.

An exchange rate policy that protects the domestic economy cannot leave capital flows and exchange rate movements to market forces. This becomes clear when the balance of payments is analysed.⁵ If a country is faced with net capital inflows and the central bank does not intervene it will, by definition, realise current account deficits.⁶ To avoid such a

debt, such as foreign direct investment and equity portfolio investment. However, the latter two types of capital flows are usually not sufficient to finance big current account deficits.

⁵ The balance of payments can be divided into three sub-balances: the current account, the account of private and public capital flows (without the central bank) and central bank interventions in the foreign exchange market (which also are a type of capital flow). The balance of payments is by definition always balanced (statistically this is guaranteed by so-called »errors and omissions«). If a central bank does not intervene in the foreign exchange market net private and public capital imports must be equal to a deficit in the current account; net private and public capital exports must be equal to current account surpluses.

⁶ Let us make this point more clearly. We assume a balanced current account and net capital flows and central bank interventions of zero. If we now look at domestic firms or other economic units which want to take out a loan in a foreign country and use it to buy foreign goods for import, a net capital import and a net capital inflow are created. Another example would be a foreign investor who wants to buy bonds or shares in the country we are looking at. In this case the foreign investor goes to the foreign exchange market to seek

scenario a country has two options. First, it can control and limit capital inflows. Second, its central bank can intervene in the foreign exchange market and thus compensate capital inflows. In this policy area China can serve as an example. Since the beginning of its transition China has limited capital inflows. Foreign portfolio investment and foreign bank credits have been strictly controlled. In substance, only foreign direct investment (FDI) has been welcomed. However, after the sharp depreciation of the yuan in 1994 China sometimes realised high current account surpluses despite net FDI inflows. This was possible only because the People's Bank of China intervened massively in the foreign exchange market and bought hard currency to keep the yuan undervalued. By its foreign exchange market interventions the People's Bank created such huge capital exports (by buying heavily, for example, into US government bonds) that net capital inflows to China were overcompensated *and* net capital exports were created which were needed to realise current account surpluses. The People's Bank of China's sterilisation policy – involving mainly the issue of bonds in yuan and increasing banks' minimum reserve requirements – made it possible to control the liquidity effects created by the interventions. China also controlled capital exports, which were conducted mainly by the People's Bank of China (Herr 2008). Of course, a country such as Russia cannot copy China, but the overall strategy of controlling capital imports and capital exports and keeping dangerous types of capital inflows, such as speculative portfolio investment, short-term foreign credits or credits to private households, out and allowing good types of capital flow – such as some types of FDI – to come in, should become a model for all countries.

Capital controls and central bank interventions not only allow an exchange rate development that is beneficial for a country; they also make it possible to prevent high foreign debt denominated in foreign currency. For most countries, including Russia, foreign debt is not dominated in domestic currency, but in foreign currency with all the problems discussed above. To protect a country from high foreign debt in foreign currency and avoid dangerous currency and maturity mismatch is a second important benefit of capital controls.

Last but not least, capital controls can give a country the space to follow a domestically oriented monetary policy. Without such controls a central bank in a country that does not issue an important international currency has to follow worldwide interest rate developments. Flexible

the currency they want to invest in. This increases the external value of the currency. The appreciation goes on until domestic agents in the appreciating currency start to buy what are now for them cheaper foreign goods. Then the investor can get the money to buy bonds and shares and the capital import has led to a current account deficit.

exchange rates do not give much more room than fixed exchange rates because countries, for example, with high foreign debt cannot depreciate without disastrous domestic effects.

3. Free Trade and Underdevelopment

Mainstream economic thinking insists that free trade increases the welfare of nations and is good for national and global economic development. There is no doubt that international trade *can* increase the welfare of nations. However, it is highly questionable that *completely free* trade is beneficial for all countries.

It is worth attending to Joan Robinson (1979: 103):

The most misleading feature of the classical case for free trade ... is that it is purely static. It is set out in terms of a comparison of productivity of given resources (fully employed) with or without trade. Ricardo took the example of trade between England and Portugal. (...) It implies that Portugal will gain from specialising in wine and importing cloth. In reality, the imposition of free trade on Portugal killed off a promising textile industry and left her with a slow-growing export market for wine, while for England, exports of cotton cloth led to accumulation, mechanisation and the whole spiralling growth of the industrial revolution.

Following her argument the dynamic effects of international trade are of key importance. If a country is pushed by international trade into an international distribution of labour which *concentrates on low-tech and labour-incentive-low-skilled production* and services it will, like wine producing Portugal, have little chance to develop. The country *concentrating on high-tech-high-skilled production* and services will gain from learning-by-doing, benefitting from positive synergies, having more incentive for research and so on. It will benefit from the positive external effects of markets, as Alfred Marshall (1890) put it, and the concentration of industrial high-tech production and services (Krugman 1991). Ha-Joon Chang (2002), basing his argument on Friedrich List's notion that free trade would kick away the ladder for development of industrial latecomer Germany in the nineteenth century, shows that virtually all developed countries used industrial policy to protect infant industries in their development phase.⁷

⁷ Friedrich List was influenced by Alexander Hamilton, who advocated protectionist tariffs and other measures to allow US industry to develop without too much foreign

This does not mean that countries in their first development phase should not concentrate on low-tech and labour intensive production. They can do so when they enter mass production and exploit economies of scale. Such mass production will trigger productivity increases through specialisation and learning effects. They also can support domestic forward and backward linkages of mass production. Nicolas Kaldor (1978: Chapter 4) stressed this point, which became known as Verdoorn's (1949) Law. However, the positive effects of mass production have to be supported by industrial policy to enter new and more value-adding industries. Industrial policy is needed at all stages of development because new industries always have to be created and the private sector is not able to develop them alone.

According to mainstream thinking, in the tradition of David Ricardo, international trade and the resulting international distribution of labour should lead to the specialisation of countries; Portugal produces wine and England produces cloth. However, this recommendation does not fit empirical development. Jean Imbs and Romain Wacziarg (2003: 64) in a broad empirical analysis found that »countries diversify most of their development path«. Obviously a broad spectrum of industries makes it possible to create synergies between different industries and increases the likelihood and possibilities of entrepreneurship. Development has a lot to do with random discovery, which cannot be explained by comparative advantage (Rodrik 2004).

Sometimes there is the hope that FDI can overcome a country's development problems via high technological spill-overs. But hopes of using FDI as a ladder of development should not be too high. Foreign investors will not bring the newest technology to a foreign country and will not transfer research departments or other key functions of the company to a country like Russia. To transfer technologies to foreign countries could create a situation in which domestic firms acquire these technologies, thereby creating new competitors, which cannot be in the interest of a profit maximising firm. In manufacturing, foreign companies tend to transfer activities with relatively low value added and relatively low technological standard to less developed countries. Within global value chains leading firms concentrate on high value creating activities in the home country. The power relationship within value chains seems to lead to a new global exploitation model with a concentration of profits in multinational companies in home countries and tax havens. Developing

competition. Indeed the United States developed like many other countries under a regime of heavy protection (Chang 2002).

countries with a very low level of technology, let us say Vietnam, may gain even from low-tech FDI, as for these countries this leads to a technological upgrading. However, a country like Vietnam may be caught in a so-called middle-income trap, which will be reinforced by the type of FDI it attracts. In many cases FDI spreads into areas that do not contribute much to development or sometimes even destabilise the domestic economy. For example, foreign real estate investment can add to a bubble or FDI in the banking sector can reduce the credit availability of domestic small and medium-sized firms as foreign owners prefer to channel deposits to London or New York and do not like to give more risky loans to the domestic economy. For Russia relatively low-tech and low-value adding FDI may not be very beneficial. And FDI in Russia in sectors such as real estate likewise does not add much to positive development.⁸

Industrial policy depends first of all on protection via tariffs and other institutions and on fiscal measures that support certain industries and even companies with subsidies or tax exemptions. Monetary policy is not at the centre of industrial policy, but it should play a supportive role. Besides controlling the exchange rate central banks can and even must influence credit allocation. The relevant instruments include special capital requirements or special reserve requirements for certain types of bank credit or a general ceiling or prohibition of certain types of credit, for example credits from the commercial banking system to non-bank financial institutions or the real estate sector.⁹ However, monetary policy should not only sanction some types of credit; it should also subsidize and support other types. For example, development banks can get privileged access to central bank refinancing.

The conclusion is that the best combination for development is to use the exchange rate as a *general protection* and industrial policy as a *selective support* of certain industries. FDI can play a positive role if they are integrated in an industrial policy strategy, but it cannot be the backbone of a development strategy. Monetary policy can influence credit allocation in a way that supports sustainable development.

⁸ In many cases multinational firms prefer outsourcing through subcontracting. This gives them more freedom and allows them to let suppliers compete for contracts. In such cases the technological spill-over is even lower (Azarhoushang et al. 2015).

⁹ After the disastrous real estate bubbles in many countries before the Great Recession in 2009 it is obvious that credit allocation cannot be left to private decisions completely. Monetary policy provides *one* of the needed instruments to control asset price bubbles which are all linked to credit expansion. Credit expansions that inflate, for example, a speculative shadow banking system or stimulate a real estate bubble have to be stopped by the central bank.

4. The Russian Economy – Suffering from Dutch Disease?

In this section the Russian economy is discussed in a development perspective. The first issue is exchange rates. Figure 1 shows the development of the real effective exchange rate of the rouble and the oil price (which also stands for the gas price and other natural resource prices). Clearly a real appreciation can be seen in the second half of the 1990s, followed by a huge real depreciation during the crisis in 1998. Then there is a very close correlation between a substantial increase of the oil price and the real effective exchange rate of the rouble. From 1999 to 2009 the rouble's real value doubled. Then it remained more or less at the same level – like the oil price – until the phase of falling oil prices and a weak rouble in 2014–2015. However, this weakness of the rouble could not by any means compensate for the huge appreciation after 1999. The development of the rouble's real value closely fits the predictions of the Dutch disease model, which argues that natural resource exporting countries will suffer from real appreciation when natural resource prices increase (Corden and Neary 1982; Humphreys et al. 2007).

The enormous and increasing dependence of Russia on oil and gas exports becomes clear from Figure 2. In 1995 around 30 per cent of Russian exports came from oil and gas. By 2013 this percentage had increased to almost 70 per cent, a very peculiar constellation for an industrialised country.

Figure 3 supports the fear that Russia fundamentally suffers from Dutch disease. Russia's current account with and without oil and gas revenues is shown as a percentage of GDP. The current account including oil and gas remained positive. However, even during the period of increasing oil and gas prices in the 2000s, the surplus as a percentage of GDP became smaller and in 2013 became almost balanced. The dramatic of the Russian development becomes clear when the current account without oil and gas is analysed. In 2000 the non-natural resource current account was almost balanced but then deteriorated and in 2013 showed an extremely high deficit of 17 per cent of GDP. Russia's current account development reflects the enormous appreciation of the Russian rouble and the relatively good growth performance of the Russian economy from 2000 until 2008 (see Figure 6).

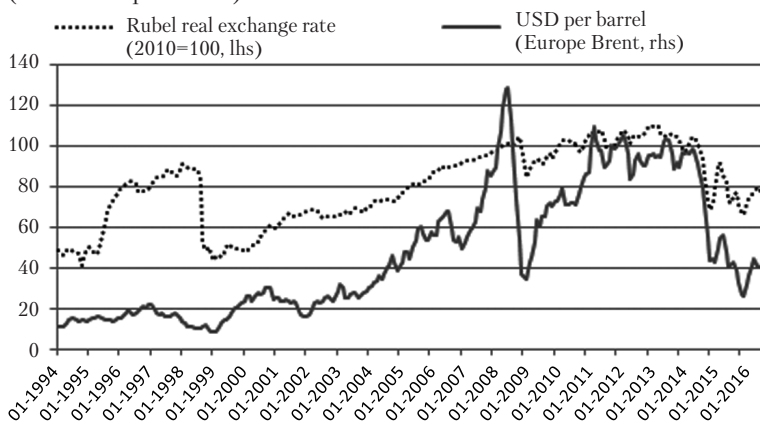
A country that imports high volumes of non-resource products and pays with oil and gas revenues cannot have good industrial development, including internationally traded high quality services. In the Russian constellation after 2000 the exchange rate creates such an extreme disadvantage for the domestic non-resource sector that positive economic development is hardly imaginable. This argument is supported by Simon-Erik Ollus and Stephan Barisitz (2007: 14):

In our view, the observed tough import competition can be interpreted as a certain degree of the Dutch disease syndrome in many – but not all – of the Russian industrial production sectors, especially in some important ones that could have the potential for driving diversification of the economy. This overall picture may correspond to an incipient deindustrialization process affecting large parts of manufacturing.

Similar arguments have been stressed recently (Dülger et al. 2013; Mironov and Petronevich 2015).

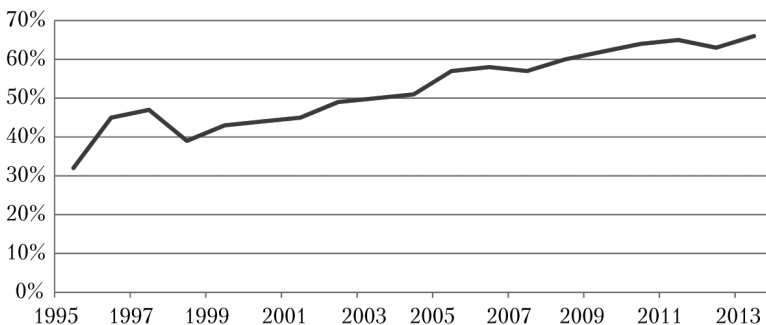
According to OECD estimates, in 1995 Russian productivity measured in real GDP in US dollars per hour was 10, compared with 40 in

Figure 1. Real effective exchange rate of the Russian rouble and oil price (US dollars per barrel)



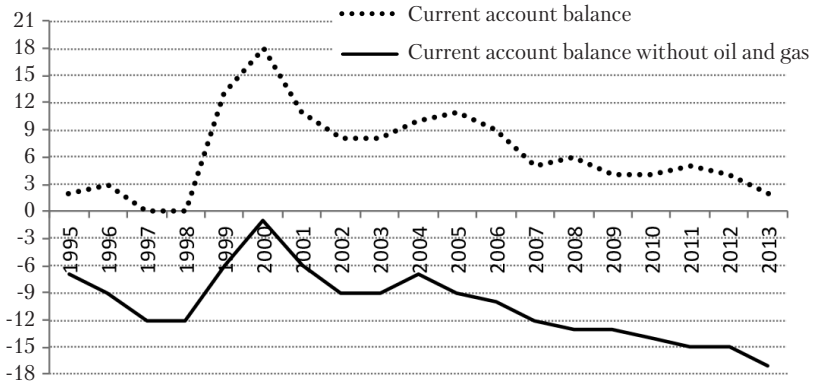
Source: EIA (2015), BIS (2015).

Figure 2. Russian oil and gas exports as a percentage of total exports



Source: Center for International Development (2015).

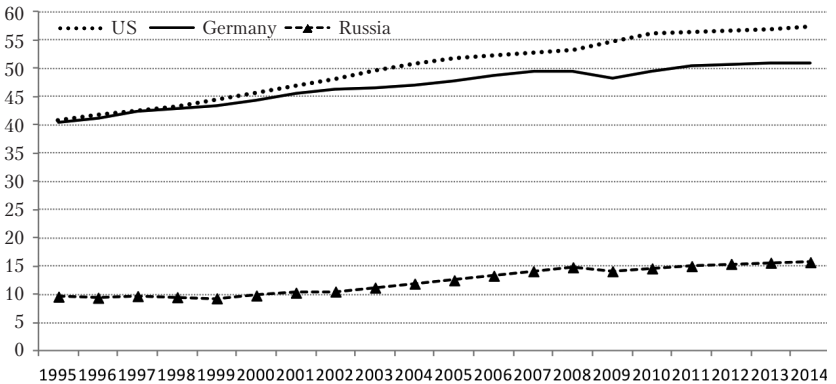
Figure 3. Russian current account balance with and without oil and gas as a percentage of GDP



Source: IMF (2015).

the USA and Germany. In 2014 the value in the USA increased by 17 to 57 and in Germany by 11 to 51. In Russia the increase was below 6 (Figure 4). National productivities are difficult to measure, but it is clear that Russia is not catching up with leading Western countries, quite the opposite. Russia's economy is not very competitive internationally and not very dynamic.

Figure 4. Productivity development in selected countries*



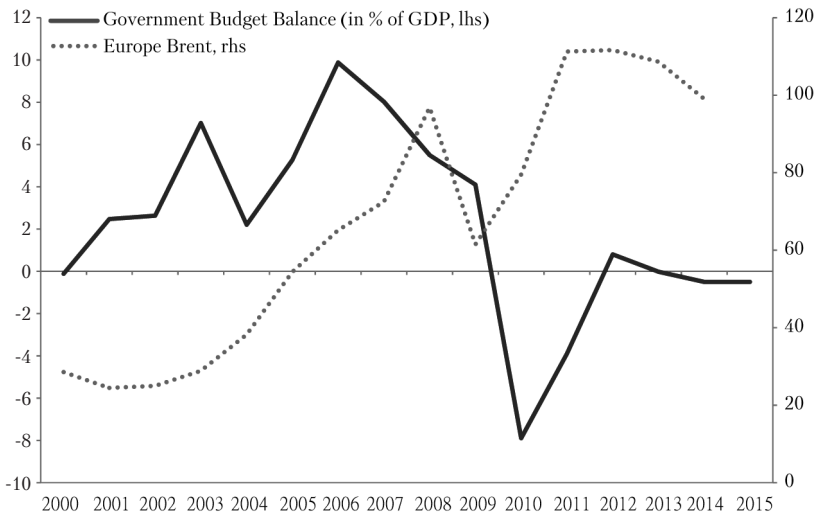
* GDP per hour worked in US-dollar at constant prices and 2005 purchasing power parity.

Source: OECD (2015).

One weakness of economies dominated by natural resources is the dependency of the state budget on the development of natural resource revenues. Periods of high natural resource prices and high natural re-

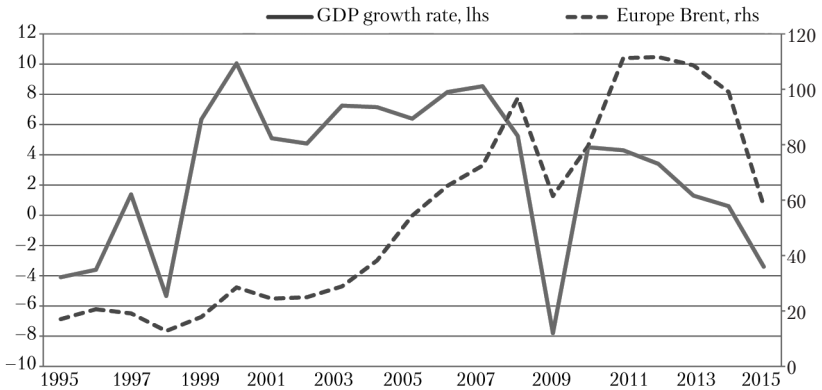
source demand lead to high public revenues, while low natural resource prices and low natural resource demand lead to shrinking public revenues. As natural resource prices and demand are volatile, budget balances in natural resource rich countries must be expected to change accordingly. Russia is a typical example of this problem. According to the Russian Ministry of Finance, 50 per cent of Russia's federal budget revenue in 2013 came from mineral extraction taxes and export customs duties on oil and natural gas (EIA 2015). Figure 5 shows this dependence of the Russian budget on oil revenues. Periods of increasing oil prices led to an improvement of the budget balance and periods of low natural resource prices led to a deterioration. Above, it was argued that industrial policy to a large extent depends on fiscal activities. The dependence of public revenues on volatile natural resource prices and demand makes a rational and long-term oriented industrial policy difficult as budgetary needs start to dominate industrial policy. Long-term projects are started in periods of high fiscal revenues and have to be curbed when fiscal pressure increases along with falling natural resource revenues. Industrial policy then becomes preoccupied with remedying negative shocks and Dutch disease. Yuri Simachev et al. (2014: 21) exactly support this point: »The industrial policy of Russia in the 2000s was aimed primarily at avoid-

Figure 5. Budget balance in Russia as a percentage of GDP and the oil price (US dollar per barrel)



Source: IMF (2015), EIA (2015).

Figure 6. Russian real GDP growth (%) and oil price (US dollar per barrel)



Source: IMF (2015), EIA (2015).

ing negative structural changes and offsetting the losses of domestic producers.¹⁰

Last but not least, Russian real GDP growth is very much influenced by natural resource prices.¹¹ Low natural resource revenues make it more difficult for Russia to grow than high natural resource prices. Figure 6 indicates this relationship. First, natural resources are an important sector of the economy and contribute more to GDP when natural resource prices and demand for natural resources are high. Second, high natural resource prices provide stimulus by means of high rents in the resource sector of the economy. This stimulates demand and employment in the rest of the economy. The natural resource sector creates a kind of autonomous demand which stimulates the whole economy via a goods market multiplier. Third, government spending is stimulated when public revenues are high and vice versa.

5. Conclusions and Recommendations

Overall, the Russian economy is dominated by oil and other natural resource prices and natural resource demand. High natural resource prices

¹⁰ There were in addition other shortcomings of industrial policy in Russia, see Simachev et al. 2014.

¹¹ Of course, other factors also play a role, such as monetary and fiscal policy or expectations of firms and private households.

and high demand for natural resources are usually positively related and intensify Russia's dependence on natural resources. Russia clearly suffers from Dutch disease, leading to an industrial sector that lacks dynamism and competitiveness, especially with regard to high quality consumption and capital goods and international high quality traded services. The natural resource sector also dominates public budgets and fundamentally influences Russian real GDP growth. Without fundamental changes Russia is in danger of becoming a natural resource exporting rent economy of secondary importance in the group of industrialised countries.

To overcome Dutch disease and stimulate dynamic economic development in Russia the current account balance without oil and gas exports – which is deeply negative in Russia – has to be balanced at a level around zero. Such a current account constellation would give the Russian industrial sector, including internationally traded services, the profitability and competitiveness needed to develop in a positive way. Low Russian GDP growth reduces Russian imports and improves the current account. To balance the Russian non-natural resource current account by low GDP growth is a sign of crisis and obviously not a good option. To increase productivity in Russia faster than in other countries would be one option and indeed a highly desirable one. However, increasing productivity takes time. More importantly, the Russian market constellation, with a huge deficit of the non-natural resource current account, makes it difficult to create a dynamic domestic economy. The best and most efficient measure available in the short and medium term to make the Russian non-natural-resource sector competitive is a substantial real depreciation of the Russian rouble. Especially if institutions are not able to implement an efficient industrial policy a real depreciation of the rouble is needed to fight Dutch disease. Such a policy would also reduce the dependence of Russia on natural resources and limit external shocks to the Russian economy, which suffers from volatile natural resource prices.

A balanced non-natural resource current account for Russia entails the reduction of oil and gas exports. Of course, Russia could continue to produce and export huge volumes of natural resources and to achieve a balanced non-natural resource current account by investing *all* revenues from natural resources abroad. In other words Russia could prevent a development-unfriendly real exchange rate by creating huge government controlled capital exports to compensate oil revenues. The usual instrument for such a policy by natural resource rich countries is to build up sovereign wealth funds. Russia did indeed do this. In 2008, when the Great Recession started, Russia had built up two sovereign wealth funds, the Stabilization Fund of Russia, with around 141 billion US dollars, and the National Welfare Fund, with around 49 billion US dollars

(Drobyshevsky 2011). In addition, in 2008 the Russian central bank had accumulated foreign reserves of around 600 billion US dollars (Adomanis 2015). Obviously, the central bank in particular wanted to slow down the disastrous real appreciation of the rouble and followed a policy of foreign exchange market intervention. However, these policies were not strong enough and not implemented as consistently as, for example, in China after 1994 to prevent the extreme real appreciation of the rouble. After 2008 the Russian economy was hit by several negative developments, especially the radical fall of the oil and gas price (see the figures above), the sanctions against Russia in connection with the crisis in Ukraine from 2014 on and increased capital flight. This shrank Russian international central bank reserves to 360 billion in 2015 and also sovereign wealth funds were exploited to fight the crisis (Adomanis 2015). To build up sovereign wealth funds and foreign reserves for security reasons makes sense for a country like Russia, but to go on producing oil and gas as much as possible and invest all earned revenues abroad to keep the non-natural-resource current account balanced makes no sense. In addition, the global economy in the next decades might be less dynamic than during recent decades and rates of returns in international asset markets may be low for sovereign wealth funds.

A much better strategy is to keep natural resources in the earth than to invest them in uncertain foreign financial or other asset markets. Such a policy is employment-friendly because non-natural resource production is in almost all cases more labour intensive than natural resource production. A shift away from the focus on the natural resource sector is only possible in the medium term when the non-natural resource current account becomes balanced and domestic manufacturing in Russia picks up and creates new employment opportunities.

A key role in restructuring the Russian economy in a healthy and sustainable way could be played, as mentioned above, by a solid and well managed real depreciation of the rouble. Can Russia afford the necessary substantial real depreciation? Let us discuss the potential problems of such a strategy following the debate in Section 2.

First, the Marshall-Lerner condition seems to be fulfilled in Russia. Russia is big and diversified enough to show a normal exchange rate reaction. Russian exports and especially Russian imports (foreign beer and wine, foreign cars and so on) are likely to react to price changes sufficiently strong. Also the sharp depreciation of the Russian rouble in 1998 and its positive effects on the Russian current account and GDP growth is a sign that the exchange rate mechanism works (see Figure 3). To avoid too strong a real depreciation of the rouble, even if the Marshall-Lerner condition holds, and avoid negative effects for Russian economic development,

administrative measures should be linked to the depreciation process. In a development perspective in particular the import of consumption goods and simple intermediate goods should be reduced. All possibilities for implementing tariffs and quotas on the import of consumption goods – including agricultural goods – should be used to support depreciation. The import of needed capital goods which help to increase productivity and to achieve the technological state-of-the-art in industries that lag behind in Russia should not suffer. Tariffs on capital goods should be low and supported by subsidies, preferential access to credit and similar measures.

Second, high debt in foreign currency can make real depreciation difficult. In 1999 foreign Russian debt was over 90 per cent of GDP. By 2014 this had fallen to 33 per cent (CIA 2015). Domestic credits in foreign currency as a percentage of GDP were slightly above 10 per cent in 2014 (Ponomarenko et al. 2011; CIA 2015). Taking both credit sources in foreign currency together the total sum of foreign debt to GDP is in Russia around 50 per cent. This means that a real depreciation would substantially increase the real debt burden of foreign currency loans. However, together with a policy to forbid domestic economic units to take out foreign loans and also to fight domestic loan dollarization it should be possible to depreciate substantially in the medium term. Russia should immediately switch to a regime of strict capital controls and financial market supervision to avoid any currency mismatch in future. Private households should not be allowed to take out loans in foreign currency. The same should apply to enterprises without foreign currency revenues. These regulations must be considered part of financial market supervision. As a rule, capital imports should be allowed only in the form of FDI and only in selected industries. Private capital exports should be restricted. A regime of capital controls is also needed to manage exchange rate movements of the rouble and gain room for domestically oriented monetary policy.

Third, the inflationary pass-through of a depreciation should be manageable for Russia. Imports as a percentage of GDP in Russia were around 16 per cent in 2014 (CIA 2015). A nominal depreciation of 30 per cent would create an inflationary push of a little less than 5 per cent. If the import quota in the consumption basket is higher than 30 per cent the inflationary effect of the depreciation for households would be higher. Inflationary pushes of 5 per cent or even 10 per cent with corresponding cuts in real income are politically not easy to digest. They have to be combined with a policy to stabilise nominal domestic wages to prevent a wage–price spiral. And they probably have to be combined with special transfers to the very poor to prevent an explosion of poverty.

In addition to a reduction in natural resource production and substantial real depreciation Russia has to implement a comprehensive long-term

oriented industrial policy. This is not the place to discuss successful industrial policy models (see Rodrik 2004), but it should be clear, as mentioned above, that the lower a country's capacity to implement industrial policy the more important the exchange rate becomes as a general protection.

Russia has to reduce the dependence of the public budget on natural resources. This entails the reform and building-up of a comprehensive tax system beyond the natural resource sector. Such a system could also be used as *one* instrument to make the income distribution in Russia more equal. A more equal income distribution would be an additional important factor to stimulate GDP growth by increasing domestic demand (poor households have a higher propensity to consume than rich households) and also better supply conditions (for example, poor households can invest more in education when their incomes increase) (Gallas et al. 2015).

This leads us to the last point. A substantial real depreciation and restriction of consumption good imports imply a trade-off. Real income in the domestic economy would be reduced, but real GDP growth and employment would increase and boost the domestic economy. This implies that in Russia not only the very poor will experience a cut in real income in the first period after a sharp depreciation; the middle classes, too, who are used to consuming Western products have to accept a change in their consumption. Politically a strategy that burdens all groups in society according to their capacity seems likely to be the most successful.

Literature

Adomanis, M. (2015) Russia Is Still Burning Through Its Foreign Currency Reserves. *Forbes International* 4/24/2015.

Azarhoushang, B., Bramucci, A., Herr, H., Ruoff, B. (2015) Value Chains, Under-Development and Unions Strategy, in: *International Journal of Labour Research*, vol. 7, 153–175.

BIS (Bank for International Settlement) (2015) *Broad Indices*, Bale.

Calvo, G.H., Reinhart, C.M. (2002): Fear of Floating, in: *Quarterly Journal of Economics*, vol. 117, 379–408.

Center for International Development (2015) *The Atlas of Economic Complexity*, Harvard University, <http://www.atlas.cid.harvard.edu>

Chang, H. J. (2002) *Kicking Away the Ladder. Development Strategy under Historical Perspective*, London, Anthem Press.

CIA (2015) *World Factbook*, Washington D.C.

Corden W.M., Neary J.P. (1982) Booming Sector and De-Industrialisation in a Small Open Economy, in: *The Economic Journal*, vol. 92, 829–831.

Dülger, F., Lopcu, K., Burgaç, A., Balli, E. (2013) Is Russia suffering from Dutch Disease? Cointegration with structural break, in: *Resources Policy*, vol. 38, 605–612.

Drobyshevsky, S. (2011) Russian Sovereign Wealth Funds, in: Sovereign Wealth Funds: New challenges for the Caspian countries, Revenues Watch Institute, Baku.

EIA (U.S. Energy Information Administration) (2015) Today in Energy, <http://www.eia.gov/todayinenergy/>

Gallas, A., Herr, H., Hoffer, F., Scherrer, C. (2015) Combating Inequality: The Global North and South, London: Routledge

Herr, H. (2008) Capital Controls and Economic Development in China, in: Arestis, P., De Paule, L.F. (eds): Financial Liberalisation and Economic Performance in Emerging Markets, Cheltenham: Edward Elgar.

Herr, H. (2010) Credit Expansion and Development: A Schumpeterian and Keynesian View of the Chinese Miracle, in: Intervention. European Journal of Economics and Economic Policy, vol. 7, 71–90.

Humphreys, M. Sachs, J., Stiglitz, J. (2007) Escaping the Resource Curse, New York: Columbia University Press.

IMF (2015) World Economic Outlook, Washington D.C.

Imbs, J., Wacziarg, R. (2003) Stages of Diversification, in: American Economic Review, vol. 93, 63–86.

Kaldor, N. (1978) Further Essays on Economic Theory, New York: Holmes and Meier.

Kaminsky, G.L., Reinhart, C. M. (1999) The Twin Crises: The Causes of Banking and Balance-of-Payments Problems, in: The American Economic Review, vol. 89, 473–512.

Krugman, P. (1991) Geography of Trade, Cambridge: MA, MIT Press.

Marshall, A. (1890) Principles of Economics, London: MacMillan.

Mironov, V.V., Petronevich, A.V. (2015) Discovering the signs of Dutch disease in Russia, Bank of Finland, BOFIT Institute for Economies in Transition, BOFIT Online 2015. No. 3.

OECD (2015) OECD.Stat, Paris.

Ollus, S.-E., Barisitz, S. (2007) The Russian Nonfuel Sector: Sign of Dutch Disease? Evidence from EU-25 Import Competition. Bank of Finland, BOFIT Institute for Economies in Transition, Discussion Paper 2/2007.

Ponomarenko, A., Solovyeva, A. and Vasilieva E. (2011) Financial dollarization in Russia: causes and consequences. Bank of Finland, BOFIT, Institute for Economies in Transition, Discussion Paper 36/2011.

Ricardo, D. (1817) On the Principles of Political Economy and Taxation, 1. ed., London: John Murray.

Robinson, J. (1979) Aspects of Development and Underdevelopment, Cambridge: Cambridge University Press.

Rodrik, D. (2004) Industrial Policy for the Twenty-First Century, Harvard University, John F. Kennedy School of Governance, Cambridge MA 02138, September.

Rodrik, D. (2005) Growth Strategies, in: P. Aghion, S.N. Durlauf (eds), Handbook of Economic Growth, London, North Holland.

Simachev, Y., Kuzyk, M, Kuznetsov, B., Pogrebnyak, E. (2014) Russia on the Path Towards a New Technology Industrial Policy: Exciting Prospects and Fatal Traps, in: Foresight Russia, vol. 8, 6–23.

Verdoorn, J. P. (1949) On the Factors Determining the Growth of Labor Productivity, in: Pasinetti, L. (ed.), Italian Economic Papers, Vol. II, Oxford: Oxford University Press, 1993.

IMPORT SUBSTITUTION POLICIES – REFLECTIONS ON STRENGTH AND WEAKNESS

Rudolf Traub-Merz

1. Introduction

Since Russia was awakened from the boom and bust cycle of resource economies by the ugly side of an oil price collapse and at the same time became the target of Western financial sanctions for its intervention in Ukraine, the term »import substitution« has become the official slogan for an economic policy response. A country that can no longer import sufficient goods due to a slump in export revenues and barriers to its access to foreign capital markets, has to produce by itself whatever it needs.

Import substitution as an industrial development concept is not new to Russia. It was applied during Soviet times when foreign products were copied for domestic production. The Soviet and Russian automotive industry has already twice been the object of import substitution policies. In 1931, US car maker FORD opened an assembly plant in Nizhniy Novgorod, which gave way to the establishment of Gorkovski Avtomobilny Zavod (GAZ), Russia's first national car producer. Under different circumstances, import substitution was applied in 2005 as a means to safeguard the domestic automotive industry from collapse.

Import substitution is a vague development concept and under the heading of producing domestically what was hitherto imported, very different tools can be applied. It is obvious that the economic environment of a command economy differs greatly from an economy based on private ownership, even though import substitution techniques can be applied by both to push domestic production.

The Russian debate on import substitution in one regard appears to have a profile of its own. It is marked to a considerable extent by the absence of reflections on what happened in Latin America and East Asia, two key regions in which import substitution policies were applied in previous decades. One reason for the failure to take on board experiences of other countries may be psychological: import substitution has featured prominently in countries that were trying to establish manufacturing for

the first time and this connotation of promoting infant industries to maturity may not go down well in a country that has once already succeeded in industrialising its economy, at enormous social and political cost. Not first-time industrialisation but re-industrialisation and not a slow climbing up the ladder but a jump back to a position somewhere near the top in producing high-tech goods is what Russia appears to expect from import substitution.

Whatever the expectation, history may still provide hints about which path to follow. Even though we know that no uniform and comprehensive concept of import substitution exists and that no policy that may have worked in one country can be transferred to another country without further ado, some general messages can still be learned from other countries' experiences. This chapter takes a summary look at some conceptual issues concerning import substitution and argues its strong and weak points.

2. Short Historical Overview

In the current debates on industrial policy and in particular in the comments of those who assert the superiority of so-called »free markets« over any kind of protectionism, it is often overlooked – or deliberately ignored – that import substitution is a form of economic-policy intervention that many countries resorted to at the outset of their industrialisation, even if this policy went by another name.

The key issue, both then and now, concerns how domestic industries can be built up when other countries have already developed industries that can supply one's markets with products of a quality and price that domestic producers are not yet able to emulate? In brief, the question is, how can the competitive disadvantages of domestic suppliers be eliminated?

Import substitution is linked to the work of German economist Friedrich List. In the first half of the nineteenth century – that is, at the outset of German industrialisation – List repeatedly pointed out the need for two reforms that would strengthen Germany economically:

- (i) internal German tariffs should be abolished so that a larger internal market could develop, which could then be supplied with products by expanding the railway network;
- (ii) for international trade he called for the opposite: a tariff wall should be erected to keep foreign products at bay because otherwise the German economy would be reduced to the roles of »drawers of water and hewers of wood for Britain«.

List and Alexander Hamilton, whose writings he became familiar with during his stay in the United States, may be described as the first de-

velopment economists, who contradicted Adam Smith and his ideas on the efficiency of »free market economies« and already in the first half of the nineteenth century broached many matters that today we discuss in relation to catch-up industrialisation. The two were convinced that the United States and Germany could develop their economies only by using protective means to oppose Great Britain's industrial lead.

The idea came to the fore again in Latin America, this time under the term »import substitution«. It was promoted especially by the two economists Hans Singer and Raul Prebisch.¹ According to the Prebisch-Singer hypothesis, prices of primary commodities fall relative to the prices of manufactured goods. This necessarily leads to negative terms of trade for the exporters of raw materials. Because Latin America primarily exports raw materials the region is at a disadvantage in international trade.

When decolonisation took its course in Africa many countries picked development models from Latin America. Their approach of building and protecting infant industries was supported by the World Bank and UNCTAD, demonstrating the fact that, in the 1960s and 1970s, import substitution was accepted by international donors and their economists as a workable strategy to overcome underdevelopment.

After 1980 import substitution came under criticism as an industrial policy and was displaced in many economic-policy debates by neoliberal development paradigms. The International Monetary Fund (IMF) in particular sought to bury import substitution and to promote »free market« ideology. Initially confined to intervention in balance of payments crises in industrialised countries, the IMF, during the major international debt crisis triggered chiefly by the oil price boom in 1978–1980 (the price of a barrel of oil rose from 17 to 44 US dollars), turned into the new arbiter of policy direction. Starting in Mexico in 1981, on which it imposed its first »structural adjustment« programme as a so-called »rescue package«, the IMF enthusiastically embraced the policy of reversing the development strategies of African and Latin American countries.²

The foreign debt crisis was less virulent in other regions, and so was the influence of the IMF. From Africa and Latin America the focus on industrialisation shifted to East Asia where many countries practiced import substitution policies.

¹ Raul Prebisch, as head of the Economic Commission for Latin America (CEPAL), was one of the most important strategists on the development of manufacturing industry in Latin America.

² Why import substitution was condemned by neoliberal critics is well described in the book *Kicking Away the Ladder* by Korean economist Ha-Joon Chang, currently professor of economics at Cambridge University.

The establishment of the World Trade Organisation (WTO) 1994 shifted many economic policy discourses towards promoting global trade policies. Lowering trade barriers and improved access to markets were supposed to strengthen the export potential of member economies. Export diversification instead of import restrictions was to decide on economic development.

Since the Doha round, the WTO has entered into a crisis and appears institutionally unable to conclude a new round of lowering trade barriers. Too many of their members are calling for recognition of and the right to retain national instruments for market protection, arguing the failure of »free market« policies in developing their economies.

The global financial crisis of 2008–2009 further added fuel to the fire of those calling for more state intervention in the economy and the return of active industrial policies. Watching the growth of emerging economies with suspicion, the EU has rediscovered the developmental character of manufacturing and talk of a »European Industrial Renaissance« has emerged. The European Commission wants to take the lead and launched a new initiative in 2010 to increase the share of manufacturing in member states to 20 per cent of gross value added by 2020 (European Commission 2014). None of the policies applied may be called import substitutive. But they are interventionist, provide subsidies and aim to promote national or European industries against competitors in the rest of the world.

3. Assessing Import Substitution: Weaknesses and Success

Overall, one has to conclude that at no point in time – in the pre-WTO world – did any country ever try to develop its manufacturing sector without applying some protection for its infant industries before opening up to competition. No industry was ever able to survive in open competition on domestic or foreign markets before it had a chance to mature within a protected environment. Customs duties and other protective measures were always intended to equalise productivity differentials and many countries applied a full import ban when it suited their own industry.

But import substitution did not always succeed or lead to what policymakers wanted to see implemented. Historical experience allows us to select key issues and put them into a national development perspective.

• *Balance of payments, import substitution and foreign debt*

At first glance, import substitution is a strategy to reduce the need to earn foreign currency. Ultimately, however, this can be answered only by

looking at the particular stage at which import substitution is being implemented. Import substitution rarely means that a product is produced locally in all its parts and in a single step. In the main, the transition begins with the local fabrication of the finishing phase. Consequently, import demand for components, machinery and raw materials increases. Whether currency savings are made in this initial phase depends on the individual instance, although it is generally unlikely. If many products are subject to import substitution at the same time, the import and thus foreign currency dependence of the overall economy may increase.

Looking at it in terms of a single product or sector, foreign currency relief will be experienced only after many parts of a long production cycle have been subject to import substitution; from the standpoint of the national economy, the sequencing is relevant. Moving into new product lines and sectors before others have been completed successfully and become exporters may become a drain on foreign currency. Import substitution for quite a while depends on other economic sectors to generate foreign earnings. This dry spell can last a long time.

Precisely this was Latin America's problem. Many countries achieved considerable success with import substitution over many years, which is easily confirmed by their economic growth rates. This was brought to a somewhat abrupt end, however, imposed externally by the IMF and not due to any popular national desire to pursue a different economic policy. The IMF's intervention was »successful« because too many projects had become subject to import substitution. When the oil price shot up, governments had little room to manoeuvre and had to seek refuge in foreign debt or close down plants.

Many East Asian countries have also practiced import substitution policies successfully. Their approach differed from that of Latin America, however. The at that time newly industrialising countries first built up processing capacities in sectors in which they felt they had location advantages, rapidly making the new industries competitive and bringing protectionism to an end just as quickly by shifting to export promotion. While Latin America implemented import substitution across the board, in East Asia it was concentrated in individual sectors for specific goods. Without exception, emerging Asia launched import substitution first in the clothing and textile industry, in which the technological requirements were fairly modest, and turned their attention to industrialisation in branches with longer and more complex supply chains only after they were already competitive in technologically less intense sectors and had been able to capture export markets. The scheme was repeated in car manufacturing. It took Japan and South Korea about one decade of protectionism to build a national car industry before opening up to exports.

Sequencing import substitution according to sectors and pressing hard for early exports instead of putting most of the economy under import substitution policies at the same time can be considered the key difference between the two regions.

• *Domestic markets for foreign or national companies?*

The import substitution policy implemented in the Russian automobile sector is an example of opening up the domestic market to foreign companies and allowing FDI to crowd out local companies. In this instance no special protection was provided for local companies.

Historically and strategically most import substitution schemes have aimed at developing local enterprise. If multinational companies were allowed into the country special deals were struck to oblige them to support local companies – by joint ventures, sub-contracting, technology transfer requirements, quotas for management and particular occupational groups and other things.

The stringency and orientation of requirements imposed on foreign companies depend on the size of a country's market, which determines the scope of national policy and the willingness of foreign companies to accept obligations for the development of national competitors. China and India, accordingly, have far more scope to »demand« technology transfer in favour of domestic companies than small economies. The latter may have little option other than to focus on exports, whether of raw materials, cheap labour or services for tourists and so on. Only populous states with (potentially) large domestic markets offer opportunities for economies of scale and provide national policy enough space for a trade-off between demand and access to markets. Large countries miss opportunities if they do not maximise this trade-off, while small countries are not serious if they even try.

Russia comes somewhere in the middle. Using population as an indicator of size it finds itself far from states with large numbers of consumers such as China and India. Its policy space for imposing a radical policy on foreign companies to develop the national economy is only in the medium range, and under the current crisis even further restricted.

Russia's new approach on import substitution is confronted with a difficult environment. It comes during a demand crisis that includes a crisis in foreign currency earnings and at a time when sanctions are in place. Both factors dampen the interest of foreign investors in locating in Russia. Import substitution depends mostly on domestic companies.

On domestic companies, the state has leverage as many are still state-owned or depend on sales to public authorities. There is space and a temp-

tation simply to issue administrative orders on the speed and direction of import substitution, not just to sectors but to single enterprises. Import substitution thus runs the risk of becoming an anti-market forces policy with central allocation plans, in some respects reminiscent of Gosplan.

• *Import substitution and the World Trade Organisation (WTO)*

Russia wrestled for 18 years with the issue of whether it should join the WTO or not. Accession occurred in 2012.

The WTO is basically opposed to import substitution and has the fundamental aim of restricting tariff policy. The question of the extent to which trade restrictions should continue to be allowed for the purpose of national development policy, especially industrial policy, was one of the contentious issues on which the WTO Doha round foundered. After arduous negotiations Russia obtained a WTO special protocol for its automobile sector, which permitted higher customs duties up to 2018. After that, protective tariffs have to be reduced substantially.

If the scope for policy intervention by means of protective tariffs is restricted, two key instruments for supporting import substitution remain: (i) public procurement (sales promotion) and exchange rate policy (protection against import competition using low rates). Russia retained this room for manoeuvre by refusing to sign the WTO protocol on public procurement. Thus it can continue to provide targeted support for import substitution companies.

Low exchange rates have the same effect for the business sector as high protective tariffs. Between 2000 and 2014 Russia constantly revalued its currency in real terms (with a break in 2008/2009), but did not neutralise the accompanying competitive disadvantages for domestic companies – with the exception of the automobile sector – with protective tariffs. The currency crash in the second half of 2014 opened up an opportunity for an exchange rate–linked reindustrialisation policy. Such an industrial policy is always thwarted if the central bank (as it did between January to May 2015) resumes the appreciation of the rouble.

• *Import substitution or export promotion?*

Import substitution is not an anti-export or even isolationist strategy. While it is an inward-looking concept to enhance domestic market dynamics, seclusion from exports should end when competitiveness has been achieved. But import substitution does not have to be practised in sequence with export promotion; both processes can be at work at the same time. Cases in point are the car manufacturing industries in Mexico

and India, where FDI was granted access to local markets with clauses on high local content and the need to export a certain percentage of newly produced cars. Russia has been blinded by its belief that oil prices will stay high and the growth of the domestic market is assured. Under the new economic circumstances, export sales should be added to depressed domestic demand and an export promotion policy could be enacted without giving up local content requirements.

- ***Competitive markets or monopolies?***

Industrial policy can be implemented in a competitive or a monopoly economy. In the Russian automobile sector, the government used import substitution policy to break Avtovaz's monopoly and create market competition through FDI.

The effects of import substitution on market conditions depend closely on the nature of demand. If consumption is not from private households but rather the state, import substitution can easily lead to a supply monopoly. This applies, for example, to pharmaceuticals, if certain medicines are prescribed primarily via state hospitals and supplied by a state authority. A large foreign investor may be willing to engage in local production but given the risk of having only a single consumer, may demand long-term commitments. If such a situation arises the state is compelled to take the role of controller and to put constant pressure on monopoly companies which it has only just given long-term purchase guarantees. If it is unwilling or unable to do that, productivity may stagnate in this particular branch (and corruption may creep in).

Governments are generally not a lasting replacement for economic competition. If local markets are too small to create a competitive environment, industrial policymakers are well advised to push import substitution companies into export markets as soon as possible. Companies that enjoy a domestic monopoly position need exposure to competition in export markets.

- ***Import substitution and supply chain globalisation***

Supply chains occupy a prominent position in the current discussion. Many see a new form of international division of labour at work that may restrict the options of or even nullify national industrial policies. Supply chains in that perspective manifest a shift of power from states to international companies.

Indeed, international trade has deepened in recent decades and a shift is taking place from the trading of finished products to intermediate prod-

ucts and components. In almost every country today components are imported, worked up and then the still unfinished product is re-exported for further processing somewhere else. A product's value creation process often goes through several production stages in different countries before it reaches the end consumer. This is the main reason why international trade has grown much more rapidly in recent decades than global production of goods. As a result, there are almost no countries with complete supply chains any more. The vast bulk of all products are manufactured in a division of labour that cuts across borders. This division of labour has asserted itself to the extent that protective tariffs and communication and transport costs have fallen. Today it has become unlikely that a country can organise all stages of a production cycle or of a supply chain better than the rest of the world, which takes advantage of this.

A country that nevertheless focuses on complete supply chains is likely to lag behind internationally with regard to productivity. An economic policy that tries to impose complete supply chains regardless of productivity criteria appears not to be seeking competitiveness but rather self-sufficiency or autarchy, which is a political notion, not an economic one. And autarky is likely to perpetuate backwardness.

Notwithstanding this general logic, policies that push for the localisation of production processes in which competitiveness has not (yet) been achieved nevertheless make sense and are feasible from a development-policy standpoint. Subsidies have to be provided to cover up for production and cost inefficiencies, but they should be temporary. A clear timetable should be put in place to measure progress and to decide on additional »pressure instruments«. Clearly, the easiest road is always to concentrate on production segments in which the gap to international productivity and the costs of catching up are lowest.

Conclusions

Classic import substitution policy was formulated in relation to domestic production for the domestic market. The state intervenes to bring production and consumption together.

The discussion on supply chains separates demand from production processes and directs attention to international companies that shift preliminary and intermediate products from country to country in search of the most productive (or cost effective) manufacturing phases, before they – and this is no longer viewed as under political control – are consumed somewhere. This conception of a dissolving area for political action may make sense for small economies that are integrated in the global economy only because of such location advantages as availability of resources or

low wages. Large economies, however, which can trade demand for access to markets, still have plenty room for a policy of localisation.

The discussion of supply chains is thus ultimately only old wine in new bottles. It has never been in the national interest to renounce political control of local production processes and it was never a good idea for economies not to aim at competitiveness.

The same applies to import substitution as applies to any political intervention in an international supply chain: anyone who believes in opting out of economic competition with other countries should keep in mind that if productivity at home grows more slowly than abroad, protection against competition must be constantly increased. Local production becomes ever more expensive.

Import substitution is a good policy if not only production capacity is expanded but competitiveness is achieved early on. The Russian state has proved in the case of automobile production that it was not in a position to modernise large national enterprises (for example, Avtovaz). If this also applies to other sectors and other large state-owned enterprises import substitution should be pursued primarily where competition can easily be established. Competitiveness for the domestic market is indispensable.

(Temporary) protection against cheaper imports becomes more difficult if the application of customs tools is restricted. Public procurement and direct subsidies may continue to be used, but both have a tendency to become company- rather than sector-specific. Corruption may constrain productivity development. Exchange rate policy remains the most important instrument. This is up to the central bank. If the central bank is tasked only with monetary stability, as is the case in Russia, and it implements a policy of appreciation, as it did between 2000 and 2014 and during a short span in 2015, it may help to combat inflation. In terms of industrial policy, however, the appreciation of the currency counteracts the localisation of processing capacities and destroys any hope of being able to pursue an import substitution policy in an economic crisis.

RUSSIA'S HIGH-GROWTH COMPANIES: CRISIS AND GROWTH PATTERNS¹

Yuri Polunin and Andrey Yudanov

Introduction

In 2012–2015, the Russian economy went through a protracted stagnation for the first time in its history. This was not an acute crisis followed by a recovery, as was the case in 1998 and 2008, but sluggish growth and then a substantial decline. Depreciation of the rouble exchange rate, forced down by falling commodity prices in the main export markets and prohibitively high lending rates, continues. On top of this come the effects of economic sanctions and counter-sanctions. The result is a slump in domestic demand and investment. The external conditions for dynamic business have thus sharply deteriorated. This set of negative factors has become a test for Russian medium-sized businesses and in particular high-growth medium-size companies, so-called »gazelles«.

1. High-Growth Companies in Russia

1.1. »Gazelles«

The notion of a »high-growth firm« or »gazelle« was introduced in the 1980 and 1990s by David Birch (Birch 1987; Birch and Medoff 1994). This pioneering approach was based on monitoring individual firms' growth trajectories instead of the previously used analysis of aggregate statistics on groups of firms of a specific size. Birch's research involved processing large databases (containing dozens or even hundreds of firms) and largely laid the foundations for the modern approach to firm »population dynamics«.

¹ This chapter was partly funded by the Russian Fund for Basic Research (Project 15-01-07944).

It was found that the »population« of national firms shows a highly uneven distribution by rates of growth. Most large firms (»elephants« in Birch's terminology) and the overwhelming majority of small firms (»mice«) grow very slowly and make a very modest contribution to employment and GDP growth. At the same time, there is a small group of firms that show high dynamics and stable growth. Birch named these high-growth firms »gazelles«, a term that is now in common use. Like the animal of the same name these firms are capable of gaining a lot of ground very quickly.

Most »gazelles« are small or medium-sized businesses, as Birch stressed. Therefore, much of the later literature on high-growth firms has been part of research on SMEs, which to some extent obscures the phenomenon. Starting as small firms, »gazelles« quickly grow into medium-sized firms and some turn into large companies, without slowing their rate of growth. The constitutive feature of »gazelles« is not their size, but a stable high growth rate.

Having dynamic growth, »gazelles« contribute substantially to national economic growth. According to Birch's initial estimates (Birch and Medoff 1994), which caught the attention of scholars and politicians alike, »gazelles«, although they accounted for only 4 per cent of the total number of firms, created around 70 per cent of new jobs in the United States in 1988–1992. No wonder these firms, which had become so important for the national economy, triggered universal interest. Subsequently, research on »gazelles« acquired an international dimension.

The initial discussion focused on proving or disproving the very existence of the phenomenon of high-growth companies and on assessing their contribution to national economic growth. Objections to Birch's conception were both factual (challenging the robustness of the database he used, namely DUN's Market Identifiers DMI, concerned with firms' creditworthiness) and methodological (for example, questioning the validity of his account of how these firms were set up, grew and, sometimes, were liquidated). Such criticism (see Davis et al. 1996) is regularly renewed (Neumark et al. 2011; Haltiwanger et al. 2013).

Despite the objections, most of Birch's findings have been confirmed (Kirchhoff 1994; Delmar, Davidsson and Gartner 2003; Europe INNOVA 2011). On a qualitative level, Birch's hypothesis has gained universal recognition and Birch himself received the prestigious Swedish NUTEK AWARD in 1996 (in 2009, the award was renamed the Global Award for Entrepreneurship Research), which is considered by many to be a kind of »Nobel Prize« for entrepreneurship researchers. According to a most cited overview of »gazelle«-related literature:

As compared with non-high-growth firms, the few high-growth firms generate a disproportionately large share of the total net employment growth. This is a clear-cut result. All research shows that gazelles create a greater part of employment growth or the total growth, or even more than the total growth (in case total employment at all non-gazelle firms goes down). (Henrekson and Johansson 2009: 14)

The most recent overview (Coad et al. 2014: 92) says laconically: »the few high-growth firms play a decisive role in creating jobs«.

On a quantitative level, the economic impact of »gazelles« is estimated in present-day research within a broad value range, leaving no doubt, however, about the significant, if not decisive role of the phenomenon. A EU research panel (2008) says: »The most cited research shows that in each new firm cohort, 3–10 per cent of the firms account for 50–80 per cent of the aggregate economic impact produced by that cohort during its lifetime« (Europe INNOVA Gazelles Innovation Panel 2008: 6).

The bulk of empirical research on »gazelles« is confined to a narrow group of 11 developed countries (Henrekson and Johansson 2009). High-growth firm research beyond this group has emerged only recently, to date covering only a few emerging and post-socialist economies (including the Czech Republic, Bulgaria, Tunisia, Brazil, Chile, Mexico, Latvia and Estonia; Coad et al. 2014; OECD 2010; OECD 2015; Olevsky 2015). As for the post-Soviet space, views on the role and distinctive features of its »gazelles« are still inchoate, with only initial theoretical approaches emerging so far (see Kantarbayeva 2000).

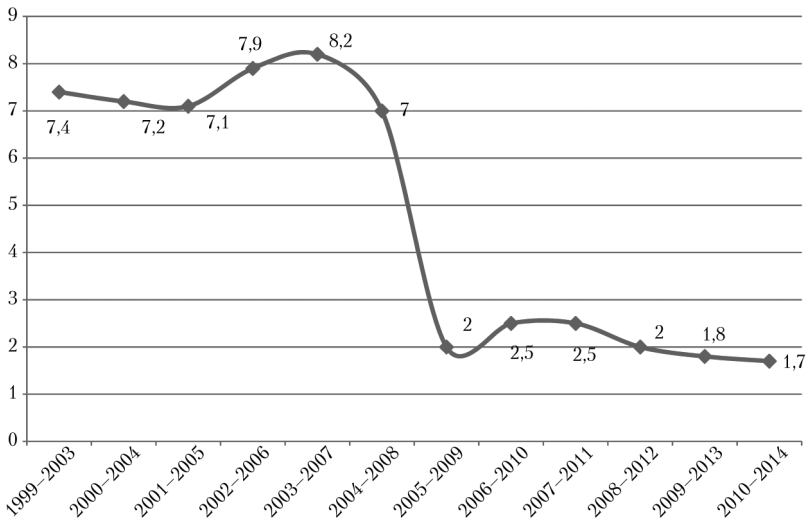
1.2. Gazelles in Russia: Before the Crisis

With regard to Russia, empirical studies of »gazelles« were launched independently at the Financial University in 2003 and by *Expert* magazine, a little later. Since 2006, »gazelles« have been studied jointly by the two groups (Yudanov 2007; Polunin and Yudanov 2013; 2014). The source of input data is the total population of Russian firms that, at least in 1999–2013,² had revenue of over 200 million roubles (»SPARK-Interfax« database – System for Professional Analysis of Markets and Firms). A total of over 170,000 firms have been analysed, in other words, all Russia's medium and large firms, as well the »top-tier« small businesses. Data on each firm included revenues, fixed assets, receivables, payables, R&D expenditures (for part of the period, not for all firms), as well as profits. There are no systematic headcount statistics for Russian firms.

² Preliminary data are available for 2014.

The studies recorded the formation in pre-financial crisis Russia of an extremely strong population of high-growth firms. Figure 1 shows that in 1999–2008, the share of »gazelles« was constantly within 7–8 per cent of the total number of the country’s medium-sized and large firms, which is approximately double the comparable³ indicator typical of developed economies. Moreover, Russia’s compiled statistics (which lack consolidated data for groups of firms) artificially reduce the number of »gazelles«. The undistorted numbers, therefore, would have been even higher, in our estimate by around 12 per cent or three times as high as in the West.

Figure 1. Share of »gazelles«* among Russian firms with revenues over 300 million roubles (%)



Note: * Gross assessment of all high-growth firms including subsidiaries of large firms.
 Source: The authors’ analysis using SPARK database.

Quantitatively similar assessments are produced, using another technique involving the »soft« criterion for identifying high-growth firms, adopted by EUROSTAT and OECD (EUROSTAT – OECD 2007: 61–62). This widespread definition considers high-growth firms to be those

³ That is, the share of »gazelles« in the population of firms, calculated using Birch’s method. According to the latter, »gazelles« are firms that showed growth rates of at least 20 per cent each year throughout a five-year period. For Russia, we used the cut-off level of 30 per cent to compensate for the distorting effect of inflation, which has stayed at 10 per cent for a long time.

that show an average annual growth rate of over 20 per cent over three years. Growth can be measured in terms of an increase in the number of employees or revenues. It is to be noted that this method, besides reducing the minimum length of high growth from five years (in Birch's algorithm) to three, removes another difficult requirement, namely obligatory (without slowdowns) high growth in each year of the period, measuring instead the average growth over the entire period.

The use of the »soft« criterion significantly broadens the set of high-growth firms across countries. In 2006, before the financial crisis, analysis of a number of OECD countries using this method did not find a single country with the share of high-growth firms of less than 5 per cent of the total firm population. The share of high-growth firms was within the 5–10 per cent range in Romania, Italy, Finland, Luxembourg and Canada; within 10–15 per cent in Sweden, Denmark, Hungary and Norway; and within 15–23 per cent in Estonia and Bulgaria (see OECD – EUROSTAT 2009: 29). In the pre-financial crisis Russia, however, the respective indicator,⁴ in our analysis, was much higher, reaching as high as 42 per cent in 2007.

In terms of the share of high-growth firms, Russia at the time might well have been among the world's leaders. Clearly, the ability of »gazelles«, known from international experience, to revolutionise the environment and transform their sector within a number of years played a significant role in modernising the country. It was »gazelles« that shaped contemporary Russian markets in retail chains, consumer lending, cell phone communications, some food subsectors, construction and production of construction materials, poultry, pig farming/meat processing, oil refining, oil services, private healthcare/ diagnostics, and a whole range of IT businesses (including search engines, e-payments, e-document flow and e-advertising). Almost all the subsectors that have shown considerable growth in recent decades benefited from the effort of high-growth firms. And the change was as impressive as it was rapid.

The retail trade is a good case in point. Only 15 years ago, retail was little more than outdoor cash-and-carry markets with portable stalls, stands and delivery trucks as trading places. Now, due to the success of a whole group of »gazelles« (one should note the demonstration effect of »Pyatyorochka«, »Dixie« and »Magnet«), retail chains clearly dominate the market. Whatever deficiencies the latter may have in Russia, the sec-

⁴ As with the Birch method, for the »soft« criterion the 30 per cent cut-off rate (not 20% per cent) was used for Russia.

tor has become a system of trade outlets (from supermarkets and hypermarkets to neighbourhood shops and drug stores) and support sectors, including logistics, factoring, private label production, IT support and so on.

Overall, the potent »gazelles« population became an engine of Russia's economic boom in the 2000s, which ended the hardest stretch of market transition, justified Russia's inclusion in the highly dynamic BRICS group and generated hopes of the beginning of a hitherto unrealised »Russian economic miracle«. Such an important role for »gazelles« is fairly predictable. Within the existing views on catch-up development, the fact that »gazelles« spread most widely in Russia is well explained by the following:

- (i) abundance of free niches, typical of emerging economies, which are suitable for high-growth businesses (benefiting from transplantation to Russian soil of the best international technological and managerial practices);
- (ii) high educational/intellectual level of the population as a whole, and particularly of its most active, entrepreneurial part, capable of turning those niches into active, successful businesses.

Theoretically, both factors fit well Aghion's widely recognised »distance to frontier« model (see Aghion, Acemoglu and Zilibotti 2006), which uses these variables to explain the major potential of emerging catch-up economies for accelerated growth. One can also refer to empirical research that finds a comparatively higher number of »gazelles« in eastern European countries (though not as high as in Russia), where the proliferation of high-growth firms has been promoted by prerequisites similar those found in Russia (see OECD–EUROSTAT 2009: 29; OECD 2015: 72–73).

1.3. »Gazelles« in Russia during Economic Stagnation

The position of »gazelles« has changed drastically in the most recent, challenging period of Russia's economic development. During the global crisis, the share of high-growth firms has fallen down four times (in 2009, to 2 per cent of the total firm population), before growing slightly in 2010 and 2011, to 2.5 per cent. More recently, however, the situation has deteriorated. In 2012, the share of »gazelles« returned to the crisis level of 2 per cent. In 2013 – a non-crisis year! – the share of »gazelles« reached a new bottom (1.8 per cent), against all expectations. It was in that year that the share of »gazelles« should have benefited from the post-crisis economic recovery and grown (with some lag, due to some features of Birch's

methodology⁵). In fact, the opposite happened. Apparently, real-life negatives turned out to be so powerful that they completely overcame the positive statistical effect. According to preliminary estimates, in 2014 the share of »gazelles« reached its historical nadir (1.7 per cent).

The decline of the »gazelles« population proved not to be a short-term disruption, but a long-term trend, and quite an unexpected one, at first glance. Indeed, within several years, the country's position, in terms of its »distance to frontier«, could not have undergone a dramatic change. Fundamental positive factors continue to exist: there are still many free niches in the economy and the educated population continues to provide the human material capable of making use of those niches.

Likewise, macroeconomic perturbations do not seem to be able to explain fully the »gazelle« population decline. One well-known feature of »gazelles« is that even unfavourable conditions do not prevent them from existing in large numbers. This is how, for instance, British »gazelles« grew during the most recent global crisis: »Despite the worst recession in the past 80 years, many companies continue to show high growth. In 2007–2010, the number and share of British companies growing at the rate of over 20 per cent a year, remained generally the same as in 2002–2005 and in 2005–2008« (see NESTA 2011: 5). Available statistics do not show any noticeable decrease in the share of high-growth firms between 2008 and 2012 in Canada, Italy and Denmark (the developed economies for which there are data comparable with Russian data for both years on revenue growth – see OECD 2015: 72).⁶

In other words, according to developed economies' experience at a micro-level, »gazelles« are quite capable of surviving amidst macroeconomic perturbations. To quote the British study once again:

These businesses [»gazelles«] continue to account for a disproportionately high share of employment growth. Moreover, companies that showed high growth before the recession are less likely than other firms to fall prey to insolvency once the recession starts. This shows that some features of the companies that drive high growth can also provide them with greater agility during hard times. (NESTA 2011: 2)

⁵ According to Birch, for a firm to qualify as a »gazelle«, it should show an uninterrupted high grow rate (without temporary slowdowns). Should a potential »gazelle« stumble and fail to show high growth in a single year, it cannot claim »gazelle« status for as long as five years. Therefore, a one-off drop in growth rate (absolute output decline in the crisis 2009) excluded many dynamic firms from the class of »gazelles«. By 2013, the consequences of this mass slump in dynamics were supposed to have been exhausted.

⁶ The same statistics, however, show a decrease in the share of high-growth firms in some post-Socialist countries – Hungary, Slovenia, Romania.

It appears therefore that the fourfold (!) drop in the population of Russian »gazelles« is not so much a cyclical phenomenon, as an indirect indicator showing that most of them did not display those »features that provide them with greater agility during hard times«. On the contrary, their strategic weaknesses appear to have manifested themselves amidst the protracted stagnation.

2. Lifecycle of Russian »Gazelles«: From Growth Patterns to Lagging Behind

Alongside fluctuations in the population of Russian high-growth firms, the latter's outstanding strengths and no less significant vulnerabilities are evidenced by their typical lifecycle. To identify »gazelles'« development pattern, the growth dynamics of nine generations of »gazelles« were studied (from 2003 to 2011, 108 aggregate observations in total). Median growth rates were analysed for each generation of »gazelles«, not considering absolute values, but deviations from the same indicator for Russia's entire medium and large business for the respective year. From the revenue growth shown by a typical (median) »gazelle« median growth for the entire firm population was subtracted. This showed whether »gazelles« had had a faster or slower growth in the respective year than was typical of all the country's firms. This technique (use of deviations) allows one to eliminate the impact of the macroeconomic situation, because it shows not the current state of gazelles (absolute growth rate), which can be affected by a specific phase of a business cycle, but whether gazelles do better or worse than most firms within the same phase of the business cycle.

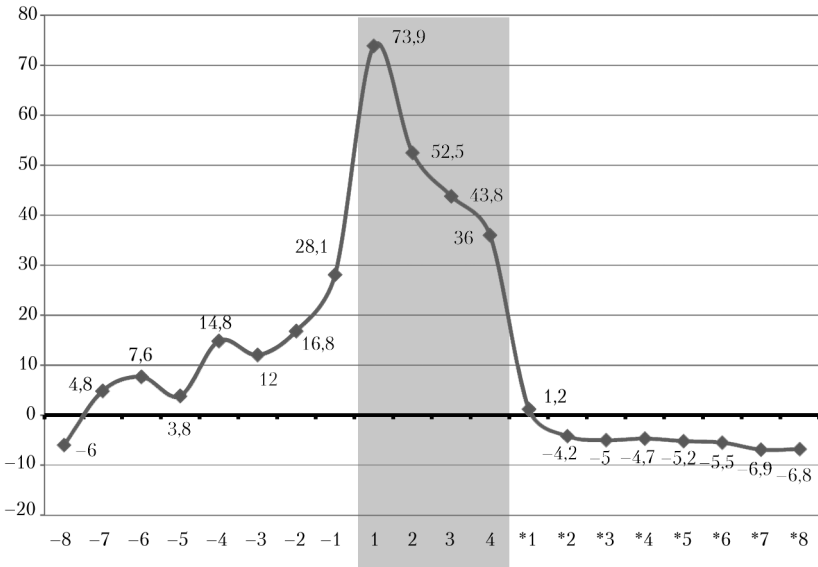
Let us recall that each »gazelle« by definition has a period of high growth (with annual revenue growth of no less than 30 per cent for five years), which it is convenient to consider as a marker of a lifecycle. It was found that in the development of each generation (without exceptions) of high-growth firms there is a recurrent standard pattern:

- as a period of high growth approaches, »gazelles« increase their lead over other firms;
- during the period of high growth, their lead is at its height, but diminishes;
- after the high-growth period is over, the lead is replaced by stable lagging behind.

Because on a qualitative level all generations of »gazelles« show the same dynamic, it appeared justified to draw up a generalised or average profile of the Russian »gazelle« lifecycle (see Figure 2). To this end, the growth of all generations of »gazelles« was synchronised relative to their

high growth periods. The years of the high growth period itself were numbered using ordinary numbers (1, 2, ...), the years preceding it using negative numbers (-1, -2, ...), the years following it using numbers with * (*1, *2, ...). The average deviation was plotted on the chart for all generations of »gazelles« during the respective year of the lifecycle.

Figure 2. Aggregate dynamic of nine generations of Russian »gazelles« compared with growth rates of total medium business (by life cycle years)



Note: *Median growth rates for nine generations of »gazelles« (from 2003 to 2011) for each year were compared with median growth rates of the total medium business population for the same year. In case of »gazelles« higher growth rates, the difference was assigned a plus (+), in case of lower rates – a minus (-).

Source: Authors' analysis using the SPARK database and the medium-sized business database of the Financial University – »Expert« Media Holding.

One is particularly impressed by the dramatic edge shown by »gazelles« during their high growth period (highlighted in figure 2). During the period, they surpassed other firms' growth rates by 36–74 per cent, depending on the year. For instance, if the »statistically average« firm shows 10 per cent growth, a »gazelle«, during a high growth period, increases its revenue by 48–84 per cent, that is, 4.6–8.4 times more. And this is not a one-off gap; it is observed throughout the five-year period.

»Gazelles'« growth rate is indicative on a qualitative level as well. It appears that the long-term maintenance of stupendously high growth rates inevitably determines these firms' distinctive development economics:

- making products enjoying virtually unlimited demand (one can raise production only because a rapid increase in supply is readily accepted by the market);
- continuous investment in the future (one cannot increase output by 50–80 per cent a year without having created requisite capacity a year or several years in advance);
- priority of strategic thinking in management (mental focus on growth, »Napoleonic plans«);
- permanent need for large financial injections (virtually, finance famine: given lack of access to cheap long-term lending in Russia, it makes firms reinvest all profits from year to year).

There is another interesting fact. Figure 2 shows »gazelles« growth rates higher than other firms' rates well before they gain »gazelle« status. It is clearly seen that four years before the onset of the high growth period per se the growth rate gap between »gazelles« and other firms is in double-digits, the size of the gap increasing as »gazelles« approach the highest growth phase (see lifecycle years from –4 to –1). In other words, when researchers identify a firm as a »gazelle«, they only capture the most intensive phase during which it taps a market niche. Successful development of a niche lasts much longer. Taking into account not only a rapid growth phase, but also the preceding years, one can speak with confidence about a decade of high »gazelle« growth. Over this time, a firm manages to achieve quite a lot.

The quantitative assessments of »gazelles'« rapid growth and its duration, presented above, make it easier to understand the role of such firms as a factor of macroeconomic change. Why, despite constant government policymaking and all the publicity, has the poor condition of Russia's roads not been improved for decades? Why was the no less challenging task of creating a network of cellular phone stations solved at forest-fire speed (this huge country was completely covered within 5–7 years)? Why were endless queues at savings banks with people willing to pay their utility bills for decades seen as an ineradicable evil, while self-service payment terminals dealing with the same task appeared within a few years at every corner of any town and city in Russia (within 3–4 years after their launch)?

Analysis of »gazelles'« lifecycles makes it possible to link the successful modernisation of transformed sectors – be it mobile communications, e-payments or others – with the presence of specific firms capable of ex-

panding their business over an extended period at an accelerated rate. Figure 2 shows that during a decade of accelerated growth, a typical (median) »gazelle« has an 18 times higher rate of growth than a statistically average firm. It is the existence of active agents, which are commercially interested in solving long-standing issues and put in place the abovementioned development conditions, that becomes a key driver of change. Any sector is transformed in a revolutionary way once someone manages to find in it a business model that can open the way to long-term rapid (»gazelle-like«) growth.

At the same time, that same generalised lifecycle shows that the success of Russian »gazelles« has its darker side: after the end of the high-growth period, they experience a catastrophic growth rate decline (already in *1 year of the lifecycle, the lead goes from 36.0 per cent down to 1.2 per cent). And over all subsequent years, former »gazelles« show even a slower revenue growth compared with average companies.

Firms that not long before displayed a record-high dynamic do not seem to be themselves. It is to be stressed that »gazelles« do not »get diluted« among other firms, gradually going down to the latter's growth rate, but change their modality abruptly: they begin to continuously lag behind dynamically. If (as one might suggest a priori), after they have exhausted their distinct dynamic, »gazelles« became »like everybody else«, further on, years of somewhat higher growth would alternate more or less randomly with years of somewhat slower growth, relative to the indicators of the other Russian companies. However, Figure 2 shows an entirely different picture: with the end of the high grow period, negative indicators prevail (from -4 to -7 percentage points for years *2-*8 of the lifecycle).

It is interesting that the strange deceleration is not confined to aggregate data, after the end of the high growth period; it affects not just some generations of »gazelles«, but all those we have information about. Even the »gazelles« of the 2009 generation (high growth period 2005–2009), which, at the peak of the crisis showed strong growth (in 2009, the median revenue for this group of firms grew by 61 per cent, whereas the median decrease of the revenues of the country's large and medium-sized firms was -3 per cent), in 2010 they grew worse than average firms (by -1.9 per cent). What could have happened in that fairly favourable year to the generation of »gazelles«, which appeared to have proven their resilience and capacity to grow even amidst a severe crisis?

3. Instability of Russia's »Gazelles«

The shift from the successful growth of »gazelles« to an evident »deceleration tail« leads one logically to the hypothesis that dynamic busi-

nesses in Russia are prone to instability.⁷ It appears that local »gazelles« include a large share of firms whose success is short-term. The way in which »gazelles« are identified – if they meet Birch’s strict criteria – tends to mask this. Only those firms are selected that, during the selected period, showed a very high growth rate. However, beyond the period of artificial selection, the situation changes. Each generation of »gazelles« starts to have a quickly rising share of »bad« firms; that is, those whose growth model exhausts itself and often lead the firm implementing the model into a dead end.

The issue is not that there are such »bad« firms. They must exist among »gazelles«, because super-high growth cannot last forever. The trouble is that the instability of »gazelles« in the national population appears to be systemic in nature.

Let us look at the sectoral structure of Russian »gazelles« (Table 1). It is to be noted that, by and large, the distribution of such firms by economic sector follows global trends. One out of seven stylized facts concerning »gazelles«, as described in a recent authoritative literature overview, is that »high-growth firms do not concentrate in high-tech sectors«. It further says:

Some authors link high growth to an enhanced innovation capability. While this statement may be correct in the sense of entrepreneurial [innovations], it does not appear correct in the technological sense. There is no evidence to support the thesis that concentration of high-growth firms is higher in high-tech sectors. If there is anything to be observed, it is a larger presence of high-growth firms in services compared with other sectors, such as manufacturing. (Coad et al. 2014: 98)

The above-described effect is clearly seen in Russian high-growth firms. There is a clear dominance of trade (55.4 per cent of »gazelles’« revenues in 2013), construction (13.6 per cent) and extractive industry (12.7 per cent). True, the high-tech group »Science, ICT, engineering« moved to the forefront of manufacturing »gazelles« in 2013. But having a share of 6.7 per cent in total revenues only, it has a secondary position in the structure of the Russian »gazelle« population.

⁷ It may be not a purely Russian characteristic, but rather a common feature of »gazelles« in post-Socialist economies. Anyway, many of them, typically, have an elevated size of »gazelle« population during boom years and a drastic decline during a crisis.

Table 1. Revenue share of Russia's »gazelle« population, 2007–2013 (%)

	2007	2011	2013
Trade	37.8	49.4	55.4
Construction and production of construction materials	4.3	11.3	13.6
Extractive industry	2.7	9.6	12.7
Manufacturing industry	13.1	14.5	11.0
• Machine-building and metal working	5.7	6.9	1.8
• Chemistry, petro-chemicals, pharma	2.4	4.1	1.7
• Consumer goods	3.8	2.7	0.8
• Science, ICT, engineering	1.2	0.8	6.7
Transport and communications	5.4	4.5	2.6
Finance and real estate	31.0	3.2	1.1
Services	2.5	2.8	2.4
Other	3.2	4.7	1.2
Total	100	100	100

Source: Authors' analysis using the SPARK database and the medium-sized business database of the Financial University – “Expert” Media Holding.

However, the dynamic of sectoral structure appears to be more informative for studying the growth patterns of »gazelles« than the structure in itself. There is a conspicuous instability with regard to the share of specific sectors. The most graphic example is »Financial and real estate activity«. In 2007, the sector had one of the largest shares, at 31.0 per cent. By 2011, it had declined to a catastrophic 3.2 per cent and by 2013 it was as small as 1.1 per cent (a 30-fold decline within six years, an unthinkable change in a stable environment). In other words, whereas previously financial activity had opened up the prospect of dynamic growth for virtually anyone, it now virtually excluded high growth.

Trade also merits special attention. The sector's share in the overall revenue of all »gazelles« was initially the largest (37.8 per cent in 2007). But by 2013, it increased more, exceeding one half (55.4 per cent), and by 2014, according to preliminary data, it went up as high as 61.7 per cent. Trade accounts for about two-thirds of the revenues of the newest generations of »gazelles«. The situation in Russia has changed so that a large-scale dynamic business can be developed almost exclusively in this sector.

There was also a dramatic increase in the revenue share of construction (from 4.3 per cent to 13.6 per cent) and extractive industry (from 2.7 per cent to 12.7 per cent). The above-mentioned group of sectors »Science, ICT, engineering« saw its share increase from 0.8 per cent in 2011 to 6.7 per cent, within just two years. Although the latter shift is undoubtedly positive, its steepness casts doubt on its stability. All the more so as the

share of machine building and metal working, within the same two years, changed in the opposite direction (going down from 6.9 per cent to 1.8 per cent). Production of consumer goods, transport and communications also showed a dramatic decrease in their share.

It appears that excessive sector-specific fluctuations of the structure of the population of Russian »gazelles« are indicative of their strong embeddedness in specific sectors and therefore their dependence on the latter's market situation. The growth waves of this immature market economy alternately raise the financial, trade or construction sectors, and then abandon them, turning to others. Russian »gazelles« manage to make use of tail waves, even to generate them, fairly often. They have successfully developed general trade (as in the case of food retail chains), general real estate and general construction. This is why unusually potent generations of high-growth firms regularly emerge in those sectors.

However, unlike their Western counterparts, Russian »gazelles« have so far been unable to maintain high growth rates after a change of wave direction. This indicates that the competitive advantages of individual »gazelles« are weaker than the competitive advantage of their respective sectors. Real estate firms grow as real estate prices rise, construction firms when there is large-scale construction, for example, of Olympic facilities. But all cease to grow once the relevant activities cease. The result is the above-mentioned instability of »gazelle« population growth and its sensitivity to crises.

Other tools of analysis can be used. Studying the phenomenon of high-growth firms based solely on »gazelles« has the limitation of focusing attention on success stories, ignoring negative cases. There is, however, an approach that enables us to identify – and then compare – not only agents with positive growth impulses, whose activity helps to accelerate economic growth, but also their opposites, firms whose failures decelerate economic growth. The tool in question is the so-called Birch Index, which can be positive or negative. An additional advantage is that it can be used to measure growth impulses,⁸ whether they come from small or large firms (Hölzl and Friesenbichler 2010: 1018).

⁸ The use of the phrase »to measure growth impulses« with respect to the Birch Index is a figure of speech. This Index is close to the notion of impulse in physics, which is equal to the velocity vector multiplied by body mass. In classical mechanics, impulse is quite often used to measure the amount of impact on an object. A person can as easily be knocked down by a relatively slow push by a heavyweight Sumo wrestler as by a 9-gram submachine-gun bullet. Using the same logic, the Birch Index takes into account both a firm's size and the rate of its growth/decline (see below).

The Birch Index (m) compares a firm's revenue in the year under analysis ($x_{i,t}$) and in the baseline year (in our case, five years previously, $x_{i,t-5}$) using two methods simultaneously. The Index multiplies the absolute growth value (as the difference in revenue between the two respective years) by the rate of growth (as the ratio between the revenues):

$$m = (x_{i,t} - x_{i,t-5}) \frac{x_{i,t}}{x_{i,t-5}}$$

Revenue difference is large mostly in firms of large size. It is not too difficult for a company with revenues of 10 billion roubles to increase it by another 500 million, whereas for a small firm with a baseline revenue of 10 million roubles, it would be extremely difficult to do the same. On the contrary, a small or newly created firm often has a huge growth rate – sometimes reaching thousands of percentage points. At the same time, it is so much more difficult for a large firm to achieve a multiple revenue growth. Thus, the Birch Index, which takes into account both absolute growth value and growth rate, makes possible an adequate assessment of growth impulses from firms of various sizes.

We now turn to look at the sectoral structure of companies that gave the strongest positive and negative impulses to Russia's economy in 2009–2013. Out of the total set of 25,400 large and small firms that provided full statistics for that period, we selected 2,000 top and 2,000 bottom firms in terms of the Birch Index (see Table 2).

There is one unexpected finding: virtually the same sectors delegated most firms to the two lists. Contrary to the standard view that there are sectors that are the economy's engines and depressed sectors, at the enterprise level one observes a mixed picture. The strongest impulses in opposite directions are generated by firms belonging to the same sectors.⁹ The four top positions in terms of number of firms on both lists are taken by trade, construction, real estate and finance, and transport.

⁹ The same result was found for 2008–2012 (Polunin and Yudanov, 2014).

Table 2. Aggregate sectoral structure of the 2,000 companies with the highest and the 2,000 companies with lowest Birch index values, 2013 (percentage of total number of companies)

Sector	Highest	Lowest
Trade	41.0	32.9
Construction and production of construction materials	12.4	17.2
Real estate, finance, insurance	8.7	11.0
Transport	6.2	7.9
Extractive industry	5.9	2.8
Services	5.7	6.2
Machine-building and metal working	5.5	6.0
Chemicals	3.6	1.4
Consumer goods	3.3	6.1
Science, ICT, education and health care	2.6	3.0
Metallurgy	1.2	0.8
Agriculture, forestry, fish industry	1.1	1.7
Other	3.0	3.3

Source: Authors' analysis using the SPARK database and the medium-sized business database of the Financial University – »Expert« Media Holding.

Trade firms form by far the largest group (41 per cent) on the list of 2,000 firms with the highest Birch Index. At the same time, most firms on the list of 2,000 firms with the lowest (negative) Birch Index values are also trade firms (32.9 per cent). We do see among the top Birch Index firms the entire elite of retail chains (Tander, Perekryostok, Metro, Lenta and so on), leading car dealership companies and a number of specialised wholesale firms (for example, pharmaceutical companies Katren and Protek). Their rapid growth, no doubt, imparted powerful impulses to Russian economic development. At the same time, among the direct competitors of the abovementioned companies (Kopeika in food retail, CIA International in pharmaceutical wholesale trade and so on), there were a number of companies that abruptly discontinued their business and, therefore, found themselves on the list of 2,000 companies with lowest Birch Index values.

Trade is not the only such case. Companies operating in construction and construction materials production account for 12.4 per cent of the total number of Birch Index Top 2,000 companies, as well as the 17.2 per cent of Bottom 2,000 companies. Other aggregate sectors that often generated both growth impulses and »anti-impulses« are finance and real estate, and transport.

It is easy to understand why the Birch Top 2,000 list consists mainly of trade, construction, finance/real estate and transport firms (together, they account for over two-thirds of the companies). These sectors represent almost the entire range of activities loved by Russian business for high margins, low entry barriers, quick capital turnover, fairly low capital intensity and not very sophisticated technology. It is not fortuitous that almost all the famous captains of local business, no matter what became of them later, created their first companies in these sectors. It is these sectors that opened a quick and easy path to success.

The prevalence of companies from the same sectors among Birch Bottom 2,000 (together accounting for two-thirds of the total number of companies), however, allows one to see clearly the other side of the coin. Success is not only easy, but also easily reversible. Being easily accessible, it does not create long-term competitive advantage and can turn into failure.

Israel M. Kirzner, a distinguished economist of the neo-Austrian school, is known to have described, back in the 1970s, the relationship between success and security in entrepreneurship. He noted that entrepreneurial success is most often based on alertness or being sensitive to existing opportunities, often on the ability to be the first to pick what, literally, »lies underfoot«. It is an entrepreneurial idea that opens the road to success. But the latter alone does not create a stable business, because »opportunities offered by the market, in principle, can be accessible to anybody« (Kirzner 2001: 25). Nothing prevents the numerous emulating competitors from ejecting the trailblazer or, at a minimum, reducing their market share and profitability.

It is assets that ensure a business's security. To intrude in a market controlled by asset owners, competitors need to create their own assets, not inferior in quantity and quality. This is not easy because many assets are tailored to the format of a particular business. And building up assets always takes money and time. Or, in Kirzner's words, »while market participation by asset owners is always protected in some way (by the specific nature of available assets), an entrepreneur's market activity is never protected in any way« (Kirzner 2001: 25).

Long-term projects can be unattractive because they cannot be implemented without an initial slow return on investment in capital assets. Furthermore, there is a lack of accessible and affordable sources of long-run external financing and many other well-known factors that for decades have complicated the running of businesses in Russia's real economy. These things have not made it impossible to create successful and dynamic companies in Russia, but they left the real sector unprotected or barely protected by specific assets.

Analysis of Russia's medium-sized and large businesses using the Birch Index shows that the patterns of success and failure of firms do not just go hand in hand, but are interrelated. To sustain themselves in the harsh Russian economic climate, successful high-growth businesses should stick to those economic sectors that do not require significant investment in specific assets. However, the same factor inevitably results in the instability of initially successful firms.

4. Conclusion

Studies of high-growth firms testify unequivocally to their enormous importance for Russia's economy. Pursuing success scenarios, these firms have proved capable of radically transforming entire economic sectors, solving long-standing economic problems with stunning speed. The sizable population of so-called »gazelles« that took shape in Russia at the turn of the century and continued over a decade until the 2009 crisis, has, undoubtedly, made a huge contribution to Russia's modernisation.

At the same time, a number of indicators show the instability of Russian high-growth companies. First, their population, reduced fourfold by the financial and economic crisis – which contrasts with the resilience to the crisis displayed by »gazelles« in developed countries – has remained at a low level and even has a tendency to decrease further. Few firms have been able to show high growth under difficult macroeconomic circumstances. Second, our analysis of the stylised lifecycle of Russian »gazelles« shows a rapid growth rate decline following the high-growth period. At later stages of their development, most »gazelles« in each generation lose their dynamic, systematically lagging behind the bulk of Russian firms. Third, the sectoral structure of the »gazelle« population undergoes abrupt changes from generation to generation – high-growth businesses, initially, focus on some sector and then the latter loses all importance for the former. Only a smaller number of »gazelles« show the stability of high (or, at least, moderately high) growth to be expected from firms relying not on the sector's, but rather on their own intrinsic competitive advantages. Fourth, at the same time, the strongest impulses of economic growth acceleration and deceleration are generated by firms belonging largely to the same sectors. In other words, a success scenario goes hand in hand with a failure scenario.

»Gazelles« are clearly an important resource that, potentially, can be used to take the Russian economy back to a growth trajectory. No less clear is another of this chapter's findings, namely the depressed state of Russia's »gazelle« population in recent years. These two factors combined appear to be sufficient grounds for developing a government policy toward high-growth firms.

Bibliography

Birch, D. L. (1987) *Job Creation in America. How Our Smallest Companies Put the Most People to Work*. N.Y.: Free Press.

Birch, D. and Medoff, J. (1994) Gazelles, in: L.C. Solomon and A.R. Levenson (eds), *Labor Markets, Employment Policy, and Job Creation*, pp. 159–168, Boulder, CO: Westview.

Coad, A., Daunfeldt, S., Hoelzly, W., Johansson, D. and Nightingale, P. (2014) High-growth firms: introduction to the special section. *Industrial and Corporate Change*, 23 (1): 91–112.

Daunfeldt, S., Elert, N. and Johansson, D. (2010) The Economic Contribution of High-Growth Firms: Do Definitions Matter? Ratio Working Papers, No. 151, 10 May.

Davis, S.J., Haltiwanger, J. and Schuh, S. (1996) Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts. *Small Business Economics* 8 (4): 297–315.

Delmar, F., Davidsson, P. and Gartner, W.B. (2003) Arriving at the High-Growth Firm. *Journal of Business Venturing* 18 (2): 189–216.

Europe INNOVA Gazelles Innovation Panel (2008) Summary and Conclusions from Panel Discussions. Authored by Erkkö Autio with helpful contributions from Werner Hölzl, 7 July 2008. Online at: <http://www.europe-innova.org/index.jsp?type=page&lg=en&from=child&classificationId=10532&classificationName=Europe%20INNOVA%20Gazelles%20Innovation%20Panel%20-%20Summary%20and%20Conclusions%20from%20Panel%20Discussions&cid=10530&parentClassificationId=5232&parentClassificationName=Latest%20Results&parentContentId=>

Europe INNOVA (2011) *Gazelles – High-Growth Companies- Final report. Task 4, Horizontal Report 5*, Authored by K. Mitusch and A. Schimke, Europe INNOVA.

EUROSTAT–OECD (2007) *Manual on Business Demography Statistics*, European Communities / OECD.

Haltiwanger, J., Jarmin, R. S. and Miranda, J. (2013) Who Creates Jobs? Small versus Large. Old versus Young, *Review of Economics and Statistics*, 95 (2): 347–361.

Henrekson M. and Johansson, D. (2009) Gazelles as Job Creators: a Survey and Interpretation of the Evidence, *Small Business Economics*. Online at: <http://www.springerlink.com/content/c341050r0573835v/>

Hölzl, W. and Friesenbichler, K. (2010) High-growth firms, innovation and the distance to the frontier, *Economics Bulletin*, 30 (2): 1016–1024.

Kantarbayeva, A. (2000) *The Entrepreneurship: An Institutional-Evolutionary Approach*. Almaty: Raritet (in Russian).

Kirchhoff, B.A. (1994) *Entrepreneurship and Dynamic Capitalism*. Westport, Conn: Praeger.

Kirzner, I. (2001) *Competition and Entrepreneurship* (translated into Russian). Moscow: Unity-Dana Publishers.

NESTA (2011) *Vital growth. The importance of high-growth businesses to the recovery*. Research summary: March 2011.

Neumark, D., Wall, B. and Zhang, J. (2011) Do small businesses create more jobs?: New evidence for the United States from the National Establishment Time Series, *Review of Economics and Statistics*, 93 (1): 16–29.

OECD–EUROSTAT (2009) Measuring entrepreneurship. A Collection of Indicators, 2009 Edition. OECD–Eurostat Entrepreneurship Indicators Programme.

OECD (2015) *Entrepreneurship at a Glance 2015*, Paris: OECD Publishing.

Olevsky, G.M. (2015) Contribution of high-growth firms to tackling employment issues, *World Economy and International Relations*, 3: 18–27 (in Russian).

Polunin, Yu. and Yudanov, A. (2013) Fragile Strength of Medium Business, *Expert*, 20: 38–59 (in Russian).

Polunin, Yu. and Yudanov, A. (2014) Medium Business and Conservative Economic Values, *Expert*, 26: 13–21 (in Russian).

TRAPPED IN INFORMALITY: SMALL FIRMS IN RUSSIAN CAPITALISM

Alexandra Vasilieva

1. Introduction

After a decade of liberalisation in the 1990s, the role of the state in the Russian economy increased conspicuously in the 2000s. One side of this development concerned formal state involvement in the economy. For example, strategic assets such as hydrocarbons and machine building were nationalised and consolidated in large state corporations. The sustained oil boom ensured stable growth and rising living standards and helped the state to finance a sovereign wealth fund and invest in large national projects.

The flip side of this »etatisation« trend was a political backlash: throughout the 2000s Putin's government systematically rolled back civil liberties, suppressed independent political and societal actors, undermined the rule of law, strongly centralised the state and diminished democratic control. The growing reliance of the economy on oil rents facilitated the authoritarian turn and spurred rent-seeking and corruption.

These developments had an adverse effect on the business climate and security of property rights. To be sure, property rights were insecure in the 1990s, too, when criminal protection rackets were rife. However, in the 2000s private criminal coercion gave way to state aggression: many businesses suffered bureaucratic extortion, legal harassment or even illicit state-backed asset grabbing, so-called »raiding« (Gans-Morse 2012). Freedom of property as assessed by the Index of Economic Freedom deteriorated, falling from 50 to 20 points out of 100 since the 1990s (Heritage Foundation 2016).

Regulatory officials and law enforcement agents became notorious state predators in Putin's Russia, using the judiciary and coercive state machinery instrumentally for the attainment of private goals. For instance, law enforcement agents may threaten firms with criminal prosecution with the aim of extorting bribes or seizing lucrative assets (Volkov

et al. 2010). The threat is effective because criminal charges entail immediate freezing of bank accounts and the imprisonment of the owner. The ban on pre-trial arrests of businessmen accused of economic offences and other attempts to »liberalise« the Criminal Code in 2010 did not have any significant effect on law enforcement practices and did not help to reduce violent pressure on business (Yakovlev et al. 2014: 178). Even after the half-hearted amnesty for entrepreneurs in 2013, more than 13,000 businessmen remain incarcerated. About 150,000 cases are filed annually for so-called economic crimes such as fraud or embezzlement. Only a minority of cases (10–15 per cent) result in sentencing; the majority of cases are dropped or not brought before court, indicating the commercial interest of rent-seeking law enforcement agents (Volkov et al. 2010).¹

Insecurity of property rights affects all Russian companies. However, small and medium-sized firms (SMEs) are the most vulnerable: they have less political weight and fewer resources to protect their property than large companies, some of which can make use of high-placed connections or register property offshore. At the same time, it is the SMEs that are deemed to be the motor of innovation and growth in an economy, a fact often acknowledged even by the Russian leadership (Putin 2015).

This chapter focuses on small and medium-sized firms in the Russian economy and addresses three questions:

(i) *How have small and medium-sized firms developed in the context of state threats to their property?* I provide a statistical review of SME growth in the past two decades (Section 2) and examine in detail two behavioural strategies that firms have adopted in response to state threats to property rights (Section 3).

(ii) *Why do SME strategies often not reduce state threats to property?*

I explain the mechanism dubbed the »informality trap«, which perpetuates the insecurity of property rights (Section 3).

(iii) *What can be done to address insecurity of property rights?*

I provide a critical review of current policies towards small and medium-sized firms (Section 4) and offer some recommendations (Section 5).

To answer these questions, I use official Russian statistics (Rosstat) and data from my in-depth interviews with 23 entrepreneurs and eleven experts: business association executives, corporate lawyers, journalists and academics (Annex).

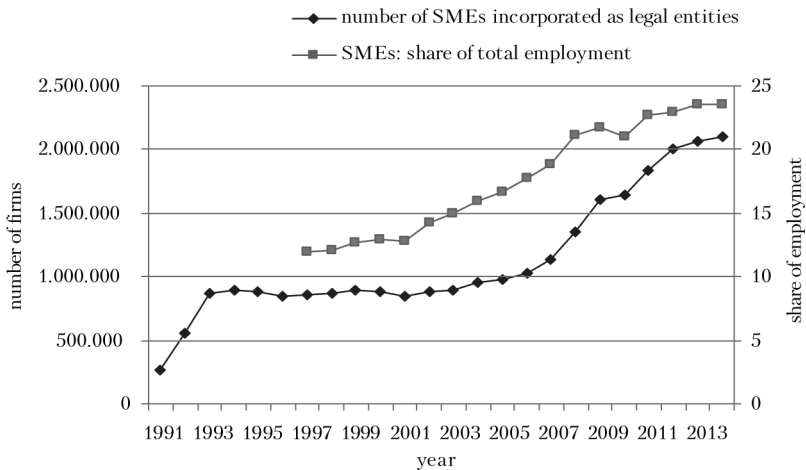
¹ A case can be brought before court once the investigation is completed.
http://www.vedomosti.ru/politics/articles/2013/05/24/dlya_ammistii_slshkomsyro

2. Development of SMEs in the Russian Economy

The share of the SME sector in the Russian economy is still comparatively small. Currently, it contributes only about 23 per cent of GDP and 25 per cent of employment, in contrast to 50 and 60 per cent, respectively, in advanced industrialised economies. Only 2 per cent of people consider starting their own business, compared with 26 per cent in countries with comparable income (OECD 2014: 64).

However, over the past two decades SMEs' share of the economy has grown constantly, despite the less than favourable business environment and recent pressure from rent-seeking bureaucrats. Both these firms' absolute number and their share of total employment have been rapidly increasing since the 1990s (Figure 1).² The rise was especially steep in the 2000s up until the 2008/2009 economic crisis. After 2009 SME growth

Figure 1. Number and employment share of SMEs (1991–2014)



Source: Rosstat, SME surveys, various years.

² Here I include legal entities with up to 100 workers and a certain turnover, which is the definition of small firms used by the Russian statistical service (the standard international threshold is 50 workers). Although before 2008 Rosstat used a different assessment (various employment and turnover thresholds, depending on the economic sector), we can assume the general comparability of the data. Firms with 101–250 employees are not included because data on them were not collected before 2008. Nor do I include individual entrepreneurs due to the absence of comparable data. For the exact Russian legal definition of SMEs, see Federal Law 209-FZ.

slowed down (the share of employment even decreased), but recovered from 2011 onward. In 2013 and 2014, SME growth was very modest given the economic stagnation from 2013 onwards and the subsequent recession since the end of 2014. It should be noted that in the 1990s many small firms were operating in the shadow economy and are thus not captured by the official statistics. However, we can expect this to be compensated by the similarly high number of registered but idle firms, as well as shell companies, which do not have significant operations but act as vehicles for (sometimes illicit) business transactions (Polishchuk 2001).

The growth of SMEs (in particular in 2001–2008 and, at a slower pace, in 2011–2014) can be attributed to various factors as it coincided with the economic boom of the 2000s and generally started from a very low level in the wake of the collapse of the Soviet Union. Most notably, the trend indicates that SMEs grew despite state pressure and apparently managed to adapt to it.

3. Two Business Strategies and Two Sides of the State

There are two fundamental ways to conduct business in Russia: »white« and »grey« (the third way, »black«, has been gradually disappearing since the end of the 1990s). Doing »white business« entails using a formal business strategy: a company is run fully in accordance with the law, while conflicts with the authorities are solved in a formal fashion, for example through a court. Conversely, »grey« businesses use an informal strategy. They typically deploy shadow practices such as tax evasion; problems with the authorities are usually solved informally involving personal networks and bribes.

Even though numerous shadow business practices are widespread in Russia (see, for example, Ledeneva 2006), doing white business is far from impossible. Particular behaviour strategies tend to depend on three factors, which will be detailed below: first, firm-level characteristics; second, external (institutional) factors; and, third, a conscious choice by entrepreneurs that reflects the predominant societal mores.

Among my 23 respondents were owners of manufacturing and service companies with up to 100 employees, located in Moscow, St Petersburg and the regions. Nine of the entrepreneurs claimed that their firms were »white« (I believe that at least four of them were indeed in legal compliance), while eleven respondents admitted doing »grey« business. The remaining three companies can be assumed to be engaged in some informal practices, too (for details, see Annex). Given the sensitivity of the topic no data exist to confirm whether this distribution is representative of Russia as a whole. However, there are good reasons to believe that the re-

sults roughly capture the occurrence of the two business strategies among Russian SMEs.

The dichotomy of company strategies (formal vs informal) reflects a certain ambivalence on the part of the Russian state. On one hand, the state represents an ensemble of formal impartial institutions whose aim – at least in theory – is to promote the common good; on the other hand, the state constitutes an assembly of individual bureaucrats. The latter often pursue their private gains and instrumentally deploy the formal power resources of the state.

In the following sections the two business strategies are juxtaposed with the ambivalence of the state. The main thesis is that while the state can simultaneously deploy formal and informal power resources, firms cannot easily combine or switch strategies: in practice the formal and the informal strategies are often at odds. In this way firms tend to lose out to the Janus-faced state and may get stuck in the »informality trap«, a vicious circle that perpetuates the insecurity of property rights.

3.1. Formal Strategy

The formal strategy entails strict compliance with legislation and institutionalised behaviour such as the use of courts in disputes or forging alliances with stakeholders to secure property rights (Markus 2012; Gans-Morse 2012; Yakovlev et al. 2014). The formal strategy can be a reliable way to minimise trouble in interactions with the state, but is not a guarantee against government predation (interview with L2;³ Markus 2012: 256).

Especially larger SMEs tend to have more resources to pursue a formal strategy. By the same token, profitable firms, such as in the pharmaceutical sector, or firms that have few competitors, such as producers of special products or popular brands, can »afford« legal compliance. Such firms will have bookkeepers and lawyers, who are essential for navigating the numerous regulations governing businesses and are better equipped to carry the cost of potential litigation (interview with L1). Similarly, mobilising stakeholders or raising public awareness for the defence of property rights is easier for larger or high-profile firms. The economic sector matters, too: SMEs in different sectors are not equally exposed to administrative regulations. As a rule, firms in manufacturing, construction or the food industry face more regulations, inspections or licensing requirements than companies in other sectors. Consequently, the former firms tend to have more interactions with state officials and are thus more susceptible

³ The codes refer to particular interview respondents (see Annex).

to corruption. Conversely, firms in the service sector (retail, IT, consulting or publishing) tend to have fewer encounters with officials and find themselves in fewer corrupt situations.

Finally, firms differ in their ability to distance themselves from or outsource corruption-prone activities (cf. Polishchuk 2004, Shestoporov et al. 2008), which technically allows them to remain in the »white« realm. For example, customs clearance or licensing procedures may be delegated to professional consultants for a fee (interviews with B3, B9). Similarly, firms that choose to rent premises (widespread in the service or retail sector) rather than owning them (more typical in manufacturing) are not exposed to extortion by most agencies authorised to inspect businesses: usually the owner of the premises deals with them, including potential »bribe expenses« in the rent (interviews with B5, B7). Finally, larger companies can afford to have opaque or sham subsidiaries that handle corrupt transactions (interview with B23).

3.2. Informal Strategy

The informal strategy entails shadow practices (for example, corruption, tax evasion) and resolving disputes in a personal, non-institutionalised way (for example, private networks, bribes). Typically, smaller firms, as well as firms in manufacturing and the food service industry embark on an informal strategy; they can devote fewer resources to legal compliance and institutionalised defence of their property rights and also tend to have more intensive contacts with state officials. Additionally, firms dealing with public procurement can hardly avoid informal practices. For instance, most construction companies that live off contracts from the state face pressure to pay kickbacks. In order to generate the »black cash« needed for such corrupt transactions they need to conduct part of the business in the shadow economy (interviews with B7, B12).

The informal business strategy arises not only in response to imperfect institutions and state pressure; it may also reflect a conscious (though often misrecognised) choice of entrepreneurs. Therefore, I distinguish three factors that drive firms to behave informally. Two of them – the regulatory environment and bureaucratic extortion – correspond to the formal and informal power resources of the »ambivalent state«. The third factor – the normality of informality – concerns the agency of entrepreneurs and reflects cultural norms deeply embedded in Russian society.

Regulatory Environment

One of the drivers of informality is the overregulation of business activity. Red tape remains a serious obstacle for Russian SMEs, despite some

improvements in recent years. A 2009 survey of 2,000 small Russian firms in 20 regions showed that the regulatory burden imposed by inspections, licensing and registration had remained largely unchanged since the mid-2000s (Bessonova et al. 2010). According to the Ministry of Economic Affairs, between 2003 and 2012 180,000 legal acts, regulations and provisions were adopted on the federal level alone, or about 50 a day (Yakovlev 2015). This does not mean that conducting business in full compliance with the law is impossible, contrary to the recurrent laments of many of my respondents. However, the complexity and partial ambiguity of legal regulations governing business makes breaking the rules in some cases inevitable. For instance, a Moscow kiosk operator complains about the government-sponsored auctions for retail space that make it almost impossible to acquire appropriate space:

[The state] creates an area in which it is impossible to do everything in accordance with the law. For example, 7 sq.m. were auctioned for fish. Not even a fridge would fit in that. Or a pharmacy – 10 sq.m. According to the sanitary standards you need to have provision for sewage there. ... He [the official from sanitary agency] comes and says, ‘Why don’t you have a water supply?’ Non-compliance. They can close you down. (interview with B19)

Moreover, bureaucratic discretion in law enforcement is a predicament for many small companies. Often officials strictly follow the letter of the law, but violate its spirit. Facing penalties, legal charges or even legal harassment, many entrepreneurs have to step outside the law to avoid prosecution. This is particularly true of businessmen who have few resources for litigation or cannot afford to spoil their relations with the authorities. One entrepreneur illustrates the absurdity of the broad interpretation of the criminal law by rent-seeking authorities:

The Criminal Code retains the spirit of Soviet-era prohibition against entrepreneurship. ... In particular, profit is often interpreted as the extraction of selfish interest. ... [The entrepreneur] sold for 100 roubles instead of 90, so the 10 roubles must be stolen. And where is the motive? Apart from the fact that the motive of every entrepreneur is to make profit? (interview with B10)

Business people are keen to avoid legal prosecution and try to resolve the conflict informally, making use of their networks or paying bribes. The reason for this is the financial and reputational damage caused to a company in case of legal prosecution. Business operations are usually suspended, bank accounts frozen and owners may even be imprisoned. Once in custody entrepreneurs have very limited possibilities to defend their rights (interview with L1).

Bureaucratic Extortion

While overregulation can be viewed as a formal power resource of the Janus-faced Russian state, bureaucratic extortion is an informal resource. Extortion often takes the form of »an offer you can't refuse« and compels firms to opt for an informal strategy. For instance, extortion by the tax authorities is among the problems most commonly cited by Russian companies (Markus 2012: 256) and featured in many of my interviews.

Sometimes extortion occurs in a crude fashion, when inspectors assert suspicions of tax evasion or are behind alleged »tax collection plans« (most of my business respondents believed that such plans exist). The resulting fines and exorbitant back-tax claims can be lowered for a bribe, which some inspectors demand openly. Firms that evade taxes often prefer to pay a bribe and have cash that is off the books for that purpose. But even »white« firms sometimes succumb to extortion and prefer to »go with the tide« for pragmatic reasons, because a thorough inspection of the books, which may last several weeks, is a waste of time for the business owner. However, by paying bribes »white« entrepreneurs enter the grey zone, which makes them vulnerable to further extortion and legal harassment.

Sometimes extortion is more subtle. For example, the tax authorities are not keen on loss-making firms, which spoil the tax collection statistics, and push firms into violation, for example, by making them forge financial statements. A furniture manufacturer from Kaluga recalls such a situation, echoing similar stories by a Moscow construction company (B12) and a metal manufacturer from Tver Oblast (B14):

If you report losses, the [tax authorities] summon you up and read you the riot act: 'This is not allowed. You'd better not show [losses]; leave them out of the financial statements, we'll come to an agreement.' On one hand, I want to be safe, to avoid further claims. But on the other hand I surrender and compromise. Later on I can be caught out by this compromise any time (ottyanut za ushi, literally: they can pull me by the ears). You're on the hook. (interview with B16).

Bureaucratic extortion may be less apparent if it occurs through private companies affiliated with the authorities. These »risk-free companies« often do not have local competitors and offer services that firms are legally required to purchase (interview with A3). As a result, the beneficiary of the company enjoys a stable revenue stream. A business association executive recalls an example:

A person works as a chief of the fire inspectorate while his wife's firm provides services to entrepreneurs for risk assessment. This [risk assessment] is mandatory. ... So he [the chief of the fire inspectorate]

demands from entrepreneurs that they order a risk assessment in this particular company. And he does so in a fairly blatant way. (interview with A2)

In some regions the market appears to be divided informally into almost »neo-feudal« zones of influence, under the purview of particular bureaucrats or affiliated companies (interview with E1). This indirect capture of parts of the economy by state-related actors limits competition and impedes market entry for new SMEs. An entrepreneur recalls a story of an »outsider« company that planned to build a hotel in Siberia. The mayor of the town told the company to discuss the project with »his guys«, who appeared to be little more than »bandits«:

Give us your project, we will build it. Give us your money, we will provide the construction company as well as the materials, [since] nobody else works here. We have one company that builds for the entire region. That's it. If you try to build anything without us, it simply won't work. (interview with B10).

Normality

The above examples amply illustrate that Russian firms may behave informally in response to formal (overregulation) and informal (extortion) state pressure. However, often firms resort to shadow practices consciously (if not exactly voluntarily), reflecting widespread popular perceptions of normal and appropriate behaviour. I dub these taken-for-granted perceptions »normality«.

One aspect of normality is the prevalent notion that the whole business community allegedly engages in illicit practices such as tax evasion or bribery: »In our country it is simply impossible to do business fair and square« (interview with B18). In this context entrepreneurs regard informal behaviour as a factor in maintaining competitiveness; if you do not comply, you lose out:

I do not want to be a tax violator, to be under the sword of Damocles. But what is going to happen in such a case? I immediately become uncompetitive, because this [shadow scheme] is the rule by which the whole market plays. You will not be able to compete price-wise. You will pay taxes several times larger than those that everybody else pays. (interview with B20)

Another aspect of normality concerns the deeply embedded attitude towards the state as an oppressive and venal institution. Law in Russia is traditionally associated with the power of the arbitrary state machine rather than any notion of justice; it is feared and circumvented rather than respected (Ledeneva 2006: 27). Against this backdrop, some small businessmen consider paying taxes a waste, a nuisance or even a donation to

the corrupt bureaucrats: »I am not sure that our taxes go where they are supposed to. It is even a pity to pay them« (interview with B12). The notion of a state keen to fleece entrepreneurs propels a lax attitude to taxes: firms do not shy away from admitting paying only »some taxes«, »half of what we are supposed to« or paying taxes »according to our possibilities« (interviews with B7, B9 and B12, respectively).

While the state as an anonymous apparatus is utterly mistrusted and widely perceived as inefficient and corrupt, personal connections with bureaucrats based on trust and reciprocity are cherished. Dealing with the state on a personal, »human« level and investing in good relations with its agents »for the sake of maintaining good relations for the future« is regarded normal, predictable and safe (interview with B5). Moreover, personal relations with state agents help small businessmen to solve problems or to prevent them in the first place. For instance, several times during the interview the owner of a sausage kiosk chain instantaneously solved problems with local migration police who were harassing his foreign-looking employees by calling one of his patrons in the police department on his mobile phone (interview with B13). Conversely, the owner of a small medical clinic offered a job to »the son of the official who was inspecting my business ... in order to head off any artificially created problems« (interview with B6). Similarly, some manufacturing firms adopt voluntary »social responsibility« in the form of support for local projects in order to establish »good relations« with the authorities. For example, a plant owner from Tver Oblast admitted supporting two local colleges, while a factory owner from Moscow Oblast reported that he financed a canteen for local veterans, hoping to appease the authorities (interviews with B14 and B22, respectively).

Finally, normality concerns the – fairly cynical – perception of the most effective ways to do business. In matters of registration, licensing and business inspections informal deals appear to be a welcome shortcut in a cumbersome Russian regulatory jungle:

It is much easier to dogovoritsa (come to an arrangement), than carry formal costs. ... It is just quicker, more mobile and easier to make money instead of waiting for all those permissions. It is easier to bribe than not to work for a month. ... Everything is in the grey zone of personal contacts, well-established relations. This accelerates the process and makes it cheaper. (interview with B5)

Given that noncompliance with some, sometimes even minor, requirements (many of them purely technical, for example, quality of water, intensity of light, size of kindergarten group) may lead to serious sanctions: »it is easier to *dogovoritsa* with him [the inspector] than try to comply

with all those minor regulations«, admits a lawyer specialising in conflicts with state organs (interview with L2). In general, obtaining licences, paying taxes, drawing up proper work contracts and invoices are sometimes viewed as unnecessary transaction costs rather than a *sine qua non* of legal business operations. Small companies in particular consider doing business *»po znakomstvu«* (literally *»by acquaintance«*), avoiding formal documentation and thus taxation, normal (interview with B9).

On balance, many Russian entrepreneurs seem to regard personal connections and informal arrangements a better protection of property rights than formal channels. At the same time, informal arrangements undermine the rule of law because they foster the exclusiveness of the legal system. Rather than applying general rules, *»a specific affair is solved as an exclusive matter in a special way«* (Pastukhov 2002: 68). This is reminiscent of the adaptation mechanisms of Russian society as a whole described by sociologist Alexey Levinson: *»The practice of individuals buying off the state destroyed the seeds of universalism in our society«* (Lipskiy 2008). By attempting to secure an individual business advantage, to undercut competitors or to cheat the ever corrupt state, in the long run firms inadvertently undermine the impartiality of the state, the universal applicability of laws and, ultimately, the security of their property rights.

3.3. Informality Trap

Firms that resort, for whatever reasons, to informal business strategies may fall into the *»informality trap«*. As a vicious circle, the informality trap serves as a mechanism of perennial property rights insecurity: having once violated a regulation or paid a bribe, firms are under the sword of Damocles of sanctions and can be selectively prosecuted by the state, *»can be taken by the scruff of the neck«* (interview with B15). At the same time, firms cannot easily defend themselves formally (for example, in court) due to their legal noncompliance. As a result, firms are bound to resort to informal means to secure their property and defend their rights (for example, by paying bribes or coming to an arrangement) and face *»suspended punishment«* yet again; the state can prosecute the violator any time with the full severity of the law. This makes SMEs ultimately vulnerable, renders their property insecure and exacerbates the vicious circle of informality.

Why is it in practice difficult for a firm to avoid or escape the informality trap? Obstacles to a formal strategy (or a return to it) abound. Consider the example of courts: suing the state is not always feasible or desirable for a firm because it may provoke retaliatory measures, such as legal harassment. For instance, a medium-sized metal manufacturer from

St Petersburg, who won a lawsuit against the tax authorities, was later told by the very same authority that in the future his firm will be given »very close attention« (interview with B18). Another businessman notes an unspoken practice that »if a firm starts suing them [the tax authorities], the bias of inspections increases« (interview with B17). No matter whether a firm is »white« or »grey«, the retaliatory stance of the inspection authorities may provoke further conflicts, which in turn may encourage or push firms to find informal solutions.

Another example concerns kickback-ridden public procurement. If a contractor pays kickbacks, it becomes hostage to a corrupt system and »will not even think of fighting [formally]« (interview with B10). Therefore some contractors choose not to defend their rights for the sake of »not spoiling relations«. The same logic applies to cases of »social obligations«, when local administrations demand »voluntary« contributions from firms to the municipal budget or the financing of pet projects:

Entrepreneurs complain [following the official path], but often they do so to their own detriment, because local authorities can make their life unsavoury. (interview with A2)

In practice this may involve legal harassment from agencies authorised to inspect businesses or even a state-sponsored corporate raid. Given the large discretion in law enforcement and an instrumental judiciary, this can result in serious trouble for a company.

Even though the way out of the informality trap back into formal behaviour is never totally barred, on balance, having embarked on an informal strategy, firms have trouble switching to the formal strategy and re-entering the »white« realm. As a result, they get stuck in the informality trap.

4. Review of Current SME Policies

In addition to the informality trap, today many Russian SMEs face waning direct state support⁴ and tightening of formal regulations, coupled with the reinforcement of informal bureaucratic pressure. Furthermore, SME are suffering the adverse effects of the current economic slump. At the same time, some supportive policies have recently been adopted, the effect of which is yet to be seen. However, some of these policies are riddled with contradictions or suffer bureaucratic inertia or outright sabotage at the local level.

⁴ The Ministry of Economic Affairs reduced its funds to support SMEs by 40 per cent in 2016 compared with the previous year (<http://www.kommersant.ru/doc/2896360>).

4.1. *Economic Slump*

The economic downturn that has been unfolding in Russia since the end of 2014, precipitated by the strong oil price decline, is arguably one of the biggest troubles of Russian SMEs. The slump negatively affects companies in two ways. First, business opportunities for SMEs diminish as consumer demand declines and double-digit inflation reduces real wages, pensions and savings. This concerns especially (retail) trade and services, two areas in which 75 per cent of Russian SMEs are active. Falling revenues and declining profitability leave less room to compensate for the side effects of the adverse business climate, as was the case before the crisis (Yakovlev 2014: 16). Only a few SMEs profit from import substitution, facing less foreign competition as a result of currency devaluation and Russian counter-sanctions. Although the overall SME growth trend has remained positive so far – in 2015 the number of legal entities increased by 4 per cent and that of individual entrepreneurs by 2 per cent, according to the Ministry of Economic Affairs – the situation may worsen if the crisis persists.⁵

The second adverse effect of the crisis lies in the growing bureaucratic pressure on business. As oil rents decline and budgets wane, competition for resources among the bureaucratic elite intensifies. In this context, business is exposed to increasing informal bureaucratic pressure and bribe extortion. Anecdotal evidence suggests that state officials seem determined to »fleece entrepreneurs as if it was their last chance«. While before the crisis bureaucrats had expected to draw »dividends« from their informal control over cash flow from private property for many years, since the advent of the crisis they seem to have been trying to extract maximum resources as quickly as possible. Under these circumstances the well-established informal practice of »coming to an arrangement« does not seem to work as reciprocally as previously. For instance, law enforcement agents are extorting increasing sums of money from »grey« businesses without providing protection or services in return; for example, without turning a blind eye to tax evasion (author's private correspondence; cf. Yakovlev 2014).

Room for firms' resistance is limited due to the aforementioned mechanism of »suspended punishment«: state officials in their formal capacity can prosecute firms found in non-compliance with the full severity of the law, so that the sword of Damocles of sanctions is constantly hanging over them. As a result, businesses will probably be pushed further into the shadow economy (pay more bribes), even though the cost of buying-off

⁵ <http://economy.gov.ru/minec/about/structure/depmb/20160203>

may approach the actual cost (for example, taxes) of doing »white« business. Going into the shadow economy may be viewed as a tried and tested crisis adaptation mechanism that helps firms to weather the storm;⁶ however, shadow practices harm SMEs by pushing them into the informality trap and ultimately render property rights insecure.

4.2. State Policies to Support SMEs

While informally the state – through its corrupt agents – exerts pressure on many SMEs, formally it has declared that developing the sector is among its top priorities. Thus the Russian government has established several supporting initiatives in line with the official goal of increasing the contribution of SMEs to GDP and employment. The measures include:

- taxes: tax relief for small firms (revenue threshold) and some other simplified tax schemes; tax freeze 2015–2018; tax holidays or tax breaks for new companies (at the discretion of regional governments);
- business check-ups: introduction of a Unified Registry of Inspections, aimed at curbing unplanned and baseless inspections, as well as a three-year ban on planned inspections for firms that have a clean record (2016);
- entrepreneurs' rights: creation of the office of a federal Business Ombudsman, as well as regional offices (2012); setting up the high-level Working Group on Monitoring and Analysis of Law Enforcement in the Area of Entrepreneurship as a consultative body in the presidential administration, aimed at reducing violent pressure on businesses (February 2016);
- financial support: establishment of the Corporation for the Development of SMEs, aimed at supporting sluggish bank lending to SMEs by creating a system of state credit guarantees (May 2015);⁷
- public procurement: introduction of a threshold for purchases by the state, state companies and natural monopolies to be allocated to SMEs (18 per cent since 2015, 25 per cent planned for 2018).

4.3. Critical Evaluation of State Policies

The government's recent effort to support Russian SMEs is a welcome development. However, many of the initiatives are of questionable effec-

⁶ <http://www.rbc.ru/opinions/economics/04/02/2016/56b301ef9a794799311d7cc2>

⁷ <http://www.kommersant.ru/Doc/2890896>

tiveness due to their limited scope, sabotage at the local level or contradictions with other restrictive policies.

For example, the tax freeze does not compensate for the strong rise of the tax burden in 2013/2014, given the increase of social security contributions (which rose again in 2016), the introduction of a retail levy in large cities and a reassessment of the land tax, measured according to the cadastre value of the land.⁸ The latter measure implies much higher costs for owning or renting premises, as well as numerous possibilities for bureaucratic manipulation. For example, local authorities would set the cadastre value of land higher than the actual market price, arbitrarily reassess it every six months or change the cadastre category of land (for example, agricultural or industrial) in order to provide affiliated entrepreneurs with lucrative business opportunities (interviews with L2, B16). Moreover, regional governments seldom grant tax breaks or tax holidays because they are not interested in losing revenue in a crisis. As regards simplified taxation regimes for small companies, these benefits are routinely misused by larger firms that artificially break up their companies into several smaller ones.⁹ Through a similar technique, big companies or firms affiliated with the bureaucrats exploit the public procurement benefits intended for small firms.

Some legal improvements, such as the welcome three-year ban on planned inspections for firms that have a clean record, might be negatively compensated by the toughening of other regulations. For example, the period during which back taxes can be demanded was extended from one to three years, expanding the authority of law enforcers to probe firms.¹⁰ Another challenge to the ban on planned inspections is non-implementation by local authorities, who have learned how to respond to orders from above in a purely formalistic fashion without any changes in the real practice of interaction with business (Yakovlev 2014: 17). Furthermore, the ban does not concern unplanned inspections.

Despite improvements in some areas of business legislation, in other areas the screws have been tightened and the authority of law enforcement and security agents (so-called *siloviki*) has been increased. This was symbolised by an overnight demolition of a hundred commercial pavilions in the centre of Moscow in February 2016. A new law declared that the buildings had been built illegally, although the owners had valid construction permits. Also, SMEs face increased administrative pressure, just like

⁸ <http://www.garant.ru/article/602378/>

⁹ <http://www.rbc.ru/opinions/society/11/06/2015/557563299a7947bdc253e819>

¹⁰ http://www.gazeta.ru/politics/2015/12/18_a_7977215.shtml

in the wake of 2008 crisis, when the government was fighting corruption and capital outflows with tough administrative measures. (Notably, that campaign did not reduce corruption but rather increased the influence of law enforcement agencies; Yakovlev 2014: 17). For example, the recent amendments to the Code of Administrative Offences tightened penalties for firms (up to liquidation of the business) and increased fines by several orders of magnitude, for instance for violations concerning security standards, sanitary norms and consumer rights. The latter measure affects the majority of SMEs, 40 per cent of which are in retail trade and 35 per cent in services (Rosstat 2012).

The measures to improve entrepreneurs' rights appear as mere window-dressing and expose the weakness of the rule of law. The office of the Business Ombudsman deals with property rights abuses in the familiar mode of »manual steering«, making the flaws of the legal protection of property rights obvious. The same regards the new high-profile Working Group on Monitoring and Analysis of Law Enforcement in the Area of Entrepreneurship, which President Putin established as a consultative body in the presidential administration. It consists of representatives of »force ministries« (*siloviki*) and business associations, as well as presidential aids on economic and legal issues. It is doubtful whether the Working Group can tackle corruption and violent pressure on business in a systematic fashion. Due to its consultative character it can be viewed as at best an informal alternative to the dysfunctional legal control over the *siloviki*.

As regards financial support, it remains to be seen whether the Corporation for the Development of SMEs is an effective tool to support sluggish bank lending to SMEs. The achievements have been modest so far: it took the Corporation almost nine months from its establishment in May 2015 to come up with a programme and it remains to be seen whether its capitalisation is large enough to satisfy demand for loans. To date, the Corporation has issued guarantees worth 16 billion roubles, while the potential credit demand from SMEs is 100 times higher, up to 1.5 trillion roubles.¹¹ Furthermore, it is questionable how far the Corporation can incentivise banks to lend at the envisaged 10–11 per cent, which is substantially lower than the market interest rate.

On the whole, these initiatives do not affect the bulk of business actors and are not likely to change the situation on the ground unless the formal and informal bureaucratic pressure described above are pushed back.

¹¹ <http://www.kommersant.ru/doc/2860738>

5. Recommendations

The point of departure for the policy recommendations are the aforementioned shortcomings of the recent government SME policy. The recommendations focus primarily on enhancing security of property rights and ways out of the informality trap. This in turn requires tackling the sources of informality and the shadow economy. Therefore, the recommendations are structured around the three drivers of the informal business strategy: the regulatory framework, bureaucratic extortion and prevailing normality. I further include some specific recommendations that target the woes of SMEs in the current economic slump.

(1) Tackling overregulation

First, reduce the regulatory burden on small and medium-sized firms and streamline the contradictory regulations. Cutting red tape will reduce inadvertent non-compliance and perhaps violations and help release at least some companies from the informality trap. For example, if contradictory regulations are eliminated and some unrealisable Soviet-era technical standards are scrapped, more firms will be able to be in legal compliance and will not face »suspended punishment«.

Second, decrease the influence of those factions in the political elite who are keen to toughen regulations and promote firmer control and supervision, in particular the *siloviki*. To this end, genuinely commit to developing business and in particular SMEs beyond lip service and strengthen the role of the »economic block« of the government through appointments, for example in high-level bodies such as the Working Group. The Minister of Economic Affairs, as well as the Business Ombudsman are conspicuously missing from the Group, whereas they should be crucial actors in matters of entrepreneurs' rights. At the same time, change the performance assessment criteria for inspection bodies from the purely quantitative ones that prevail today (for example, number of inspections and fines) to effectiveness-oriented ones (for example, the monetary value of collected fines as a proportion of the cost of the inspection bureaucracy).

Third, decriminalise economic law and soften the Criminal Code (chapter on economic crimes) in accordance with the principle »economic penalties for economic offences«. This measure will help to empty state prisons and bring money into state coffers. Additionally, reverse the disproportionate increases in fines in the amended Code on Administrative Offences because these are likely to increase corruption rather than dis-

courage violations, unless the overall regulatory burden on firms is reduced radically.

(2) Fighting bureaucratic extortion

Tackle informal bureaucratic pressure on firms by a combination of incentives for lawful conduct (for example, promotional, monetary) and tougher controls and sanctions. To this end, specify corruption and its concrete manifestations in the Criminal Code beyond bribery. Suspend extortionists from service and impose high fines.

Bridge the gap between on-paper initiatives and their actual implementation. Make good policies (for example, an inspections break for »prudent« SMEs) work in practice by pushing back the covert resistance at middle and low levels of bureaucratic hierarchy, for instance by changing promotion criteria from loyalty-oriented to economic performance-oriented.

(3) Tackling the »normality of informality« by promoting sound financial conditions

Changing the predominant entrepreneurial culture is tricky. The primary responsibility seems to lie with entrepreneurs: they should stop evading taxes, cease bribing state officials or fighting competitors through instrumentalisation of the judiciary. These changes are slow or difficult to attain because they require a transformation of deep-seated perceptions and cultural attitudes.

Making business change its entrenched informal practices requires active state policies. The predominant coercive approach based on stricter laws and tougher controls has not proven successful so far; instead, provision of opportunities and incentives for leaving the shadow economy is lacking. The state can provide such opportunities and incentives by improving the business climate and, specifically, by creating sound financial conditions. These measures are overdue in the context of the economic slump. They comprise two components: taxation and credit.

First, decrease the overall tax burden on SMEs and thus give them maximum incentives and a real possibility to conduct »white« business. Revise the new land tax and the retail levy that impose a disproportionately high burden on small firms. Additionally, provide a stimulus programme to support the SME sector in the current economic slump, similar to the stimulus programme for big business in the 2008/2009 crisis. Given the current constraints on the state budget the stimulus can be in form of tax breaks or tax exemptions for companies that plan to invest. In addi-

tion, incentivise regional governments to introduce tax holidays or other support measures for local SMEs by increasing the tax share from SMEs allocated to municipal budgets.

Second, provide access to credit, which remains among the biggest problems for Russian SMEs (BEEPS). The volume of credits to SMEs fell by 6.5 per cent in 2015 compared with 2014, while the share of overdue loans doubled to 14 per cent, according to data from the Central Bank.¹² Almost half of SME loan applications are still rejected across the banking system. Interest rates on loans remain very high, at about 17–20 per cent, and banks commonly seek marketable collateral of up to 200 per cent of the loan amount (OECD 2013: 21).

Tackling these shortcomings requires active promotion of accessible credits. Increase the capitalisation of the Corporation for the Support of SMEs to meet the demand for affordable credits. Create a system of low-interest micro-loans for the smallest firms that does not require cumbersome paperwork and collateral. Lower the benchmark interest rate of the Central Bank with a view to expanding lending and lowering bank interest rates, because inflation is not likely to rise in response to increased money supply under current economic conditions (Titov 2016).

To be sure, the situation of Russian SMEs can improve radically only if all three sets of recommendations are implemented. We cannot expect entrepreneurs to stop evading taxes if the tax burden remains high or bureaucrats continue to extort bribes. At the same time, we should be aware that the fulfilment of most recommendations requires much broader and comprehensive reform efforts that would tackle the very foundations of the current Russian politico-economic regime; for example, fighting rent-seeking and corruption, the attainment of the rule of law, an effort to keep the *siloviki* at bay, a genuine modernisation of the economy and its diversification away from oil. Given the recent political and economic developments the prospect of such reforms is very uncertain.

If the Russian government could fulfil merely one recommendation, it would be well-advised to pick the issue of affordable credits. Creating conditions for large-scale low-interest private lending to SMEs will not eliminate all other problems, but it will allow entrepreneurs to invest, develop and grow.

¹² http://www.rbc.ru/ins/own_business/19/02/2016/56c5e2fa9a79471a2f89ec82

List of interviews

Position	Code	Business form	Date of interview
Entrepreneur/M, sewing factory, Moscow Oblast	B1	White?	4.04.2014
Entrepreneur/S, publishing house, Moscow	B2	White	4.04.2014
Entrepreneur/S, retail, Moscow	B3	White?	6.04.2014
Entrepreneur/S, PR agency, Moscow	B4	White	8.04.2014
Entrepreneur/S, street food, Moscow	B5	Grey	8.04.2014
Entrepreneur/S, medical clinic, Moscow	B6	Grey	9.04.2014
Entrepreneur/S, construction company, Moscow	B7	Grey	10.04.2014
Entrepreneur/S, private kindergarten, Moscow	B8	White?	10.04.2014
Entrepreneur/S, legal services, Moscow	B9	Grey	10.04.2014
Entrepreneur/M*, manufacturing (chemicals), Moscow	B10	White	11.04.2014
Entrepreneur/S, translation agency, Moscow	B11	Grey	11.04.2014
Entrepreneur/S, construction company, Moscow	B12	Grey	14.04.2014
Entrepreneur/S, retail, Moscow	B13	Grey?	15.04.2014
Entrepreneur/M, manufacturing (metal), Vishniy Volochek (Tver Oblast)	B14	Grey	15.04.2014
Entrepreneur/M, IT services, Moscow	B15	White?	15.04.2014
Entrepreneur/M, manufacturing (furniture), Kaluga (Kaluga Oblast)	B16	White	16.04.2014
Entrepreneur/M*, manufacturing (plastic), St Petersburg	B17	White?	17.04.2014
Entrepreneur/M*, manufacturing (metal), St Petersburg	B18	Grey?	17.04.2014
Entrepreneur/S, retail, Moscow	B19	Grey?	18.04.2014
Entrepreneur/M, retail, Moscow	B20	Grey	21.04.2014
Entrepreneur/M, confectionary production, Moscow	B21	Grey	21.04.2014
Entrepreneur/S, manufacturing (industrial fans), Zelenograd (Moscow Oblast)	B22	Grey	22.04.2014
Entrepreneur/S, car retail, Moscow	B23	Grey	23.04.2014
Business association executive, Moscow	A1		3.04.2014
Business association executive, Moscow	A2		7.04.2014
Business association executive, Moscow	A3		8.04.2014
Corporate Lawyer (Centre »Business Against Corruption«), Moscow	L1		7.04.2014
Corporate Lawyer, private legal company, Moscow	L2		7.04.2014
Academic, Moscow	E1		9.04.2014
Academic, Moscow	E2		14.04.2014
Academic, Moscow	E3		21.04.2014
Academic, Moscow	E4		22.04.2014
Journalist, <i>Kommersant Dengi</i> , Moscow	J1		8.04.2014
Journalist, <i>Forbes Russia</i> , Moscow	J2		11.04.2014

Note: Entrepreneur = owner of small- (/S) or medium-sized (/M) business.

* = CEO.

Small business: 1–50 employees; medium-sized business: 51–100 employees.

Location indicates the physical location of the business. All 34 interviews were conducted and recorded in Moscow and, in case of B17 and B18, St Petersburg.

References

Bessonova, E. et al. (2010) Problemy malogo biznesa v 2009 godu: administrativnije barjery i dostupnost vneshnego finansirovaniya. CEFIR Working Paper No. 33.

Business Environment and Enterprise Performance Survey (various years). <http://www.enterprisesurveys.org>

Gans-Morse, J. (2012) Threats to Property Rights in Russia: From Private Coercion to State Aggression. *Post-Soviet Affairs* 28, 3: 263–295.

Heritage Foundation (2016) Index of Economic Freedom. <http://www.heritage.org/index/>

Ledeneva, A. (2006) *How Russia Really Works*. Ithaca: Cornell University Press.

Lipskiy, A. (2008, 3 April) Fotorobot rossiyskogo obyvatel'ya. Adaptatsiya k repressivnomu gosudarstvu (Interview with L. Gudkov, B. Dubin and A. Lewinson). *Novaya Gazeta*. <http://www.novayagazeta.ru/politics/40804.html>

Markus, S. (2012) Secure Property as a Bottom-Up Process Firms, Stakeholders, and Predators in Weak States. *World Politics* 64, 2: 242–77

OECD (2013) *Russia: Modernising the Economy*. Paris: Organisation for Economic Cooperation and Development.

OECD (2014) *OECD Economic Surveys: Russian Federation 2013*. Paris: Organisation for Economic Cooperation and Development.

Pastukhov, V. (2002) Law under Administrative Pressure in Post-Soviet Russia. *East European Constitutional Review* 11, 3: 66–74.

Polishchuk, L. (2001) *Small Businesses in Russia: Institutional Environment*. IRIS Working Paper 240.

Polishchuk, L. (2004) *Bureaucrats, Businessmen, and Middlemen: Gainers and Losers*. Paper presented at the annual meeting of the APSA, Chicago. http://www.allacademic.com/meta/p59704_index.html

Putin, V. (2015, 3 December) *Poslaniye presidenta federalnomu sobraniyu*. <http://kremlin.ru/events/president/news/50864>

Rosstat (2012) *Itogi sploshnogo federalnogo statisticheskogo nablyudeniya za deyatel'nostyu subjektov malogo i srednego predprinimatel'stva za 2010 god*. Moskva: IIZ "Statistika Rossii".

Shestoperov, O. et al. (2008) *Posredniki mezhdru chatsnym sektorom i gosudarstvom: sodeystviye biznesu ili souchastiye v korrupcii?* *Voprosy Ekonomiki* 3: 106–123.

Titov, B. (2016, 18 January) Interview to *Kommersant* newspaper. <http://www.kommersant.ru/doc/2895655>

Volkov, V. et al. (2010) *Proizvol'naya aktivnost pravookhranitel'nykh organov v sfere borby s ekonomicheskoy prestupnostyu. Analiz statistiki*. Institute for the Rule of Law, European University, St Petersburg.

Yakovlev, A. (2014) Russian Modernisation: Between the Need for New Players and the Fear of Losing Control of Rent Sources. *Journal of Eurasian Studies* 5: 10–20

Yakovlev, A. (2015) Stimuly v sisteme gosudarstvennogo upravleniya i ekonomicheskij rost (opyt SSSR, Kitaya i Rossii). *Obchestvennyje nauki i sovremenost* 2: 5–19

REGIONAL PROFILE OF THE RUSSIAN ECONOMIC CRISIS

Natalia Zubarevich

The first signs of the new economic crisis appeared as early as 2013 with stagnation in industry and investment, and rising regional budget debts. The new crisis is driven by internal factors: the current institutional model of a rent-based economy with poor institutions cannot offer any other growth prospects. The lack of property-rights guarantees and overwhelming corruption interfere with business activities. A heightened government presence in the economy has led to extreme inefficiency among state-owned companies and their investments. Since mid-2014 sanctions and the fall in oil prices have added to the already existing negative trend, as did the decrease in global prices and demand for the products of other Russian exporters (non-ferrous metals, coal, iron ore and so on) in 2015. Due to poor institutions and low oil prices the economic crisis will be long lasting. But how is it developing in regional terms and does it resemble any previous crises?

1. Geography of Previous Crises and Adaptation Models

Every Russian crisis has its own regional characteristics. The transformational crisis of the early 1990s was a product of the transition from a planned to a market economy and was severe in all former Soviet republics, as well as the countries of Eastern Europe. There was a 50 per cent contraction of the Russian economy and during the first years of the crisis personal incomes decreased to 44 per cent of the level of 1991 (Ochavova et al. 2014). The generalised regional profile of the transition crisis was as follows: economic recession was less severe in export-oriented regions (fuel and energy, and, in some cases, metallurgy) and in Moscow, where a considerable industrial slump after a few years was balanced by rapid development of the market services sector, which created new jobs. The regions specialising in textiles and machine-building suffered more than others, because these industries were uncompetitive and failed to enter

global markets. The crisis of 1990s was also hard for coal-producing regions, which were going through industry reorganisation with massive layoffs. As a result, by 1996, exporting regions were at 60–70 per cent of 1990's production level, while federal cities, textile producing and some machine-building regions were down to 27–35 per cent (with an average of 48 per cent throughout Russia). Underdeveloped republics were effectively deindustrialised, keeping a mere 16–30 per cent of their 1990 production level (Zubarevich 2005).

The financial crisis of 1998 and the crisis of 2008–2009 in Russia were caused by global economic recessions. In 1998, it led to an almost four-fold devaluation of the rouble and a 25 per cent decrease in real personal incomes. The industrial slump of 1998 happened before devaluation; it was short (from January to August 1998) and quite mild (7 per cent in the same period). Devaluation of the currency helped cut high business costs caused by the overvalued rouble that previously had had a negative impact on export earnings. Thus, the autumn of 1998 saw rapid industrial growth in Russia that lasted for the next ten years. From a regional perspective, Moscow suffered more than others, because most Russian banks were based in the capital.

The next global crisis reached Russia in autumn 2008, and first of all struck the banking sector, then the metallurgy industry due to a decrease in global demand and prices, while in 2009 it hit the uncompetitive machine-building sector. To fight the crisis the state for the first time allocated huge sums from accumulated reserves to support banks, major companies and people. Although the recession was serious (in 2009, GDP dropped by 7 per cent, industrial production by 11 per cent), real personal income did not decrease, unlike with previous crises. Furthermore, this crisis was relatively short-term, and from the summer of 2009 the economy began to grow again, although this recovery was slower than that in 1998. However, by 2012 the Russian economy had overcome the recession. The impact on the regions of the 2008–2009 crises was different from the previous ones: regions with metallurgy and machine-building industries experienced the hardest recession, but the former began to recover faster. The following four groups of territories were less influenced by that crisis: first, Southern regions where the food industry accounted for a large share of the economy; second, Far East regions where many inefficient enterprises were closed or »contracted« during the 1990s crisis, while a larger number of transfers from the federal budget supported employment in the budget sector; third, underdeveloped regions mostly depending on transfers from the federal budget; and fourth, leading oil-producing regions, because the drop in oil prices was short-term (Independent Institute for Social Policy n.d.).

The crises of the 1990s revealed the character of Russia's adaptation models. There are two methods of reducing business costs during a crisis: cutting working hours or wages. According to research by Maleva and other economists (Maleva et al. 2007) the Russian labour market adapted to the crises of the 1990s mainly by cutting wages (late payment, part-time employment, leave without pay and so on) and, as a result, decreasing personal incomes, while unemployment growth was slower (in 1998 it reached 13.2 per cent, calculated using the ILO method). The characteristic Russian model of labour market adaptation to crises corresponds to employees' preferences: they accept reduced wages if they can keep their job. In this model, however, the crisis fails to eliminate inefficient jobs.

The adaptation mode changed in 2008–2009 due to the use of accumulated state financial reserves. Major companies received massive financial aid and they avoided bankruptcy and mass redundancies. Considerable funds were allocated to support employment and new approaches were introduced: employment-supporting policies, such as welfare activities, covering almost 2 million people; on a smaller scale, additional training of employees and financial support for self-employment. Apart from that, the government restricted redundancies in industrial enterprises and in one-factory towns. As a result, even at the height of the crisis, in the first quarter of 2009, the unemployment rate calculated using the ILO method did not exceed 9.5 per cent. In 2009, average real wages decreased by only 3 per cent, and average real personal incomes even grew by 1.8 per cent due to a 25 per cent pension increase, which contributed to personal incomes. Employment and wages in the budget sector, supported by transfers from the federal budget, rose by one third. As a result, consolidated regional budgets fell by only 4 per cent. For these reasons, during the crisis of 2009 the traditional adaptation model of the 1990s (dramatic wage cuts and modest unemployment growth) was not really applicable to Russia as a whole.

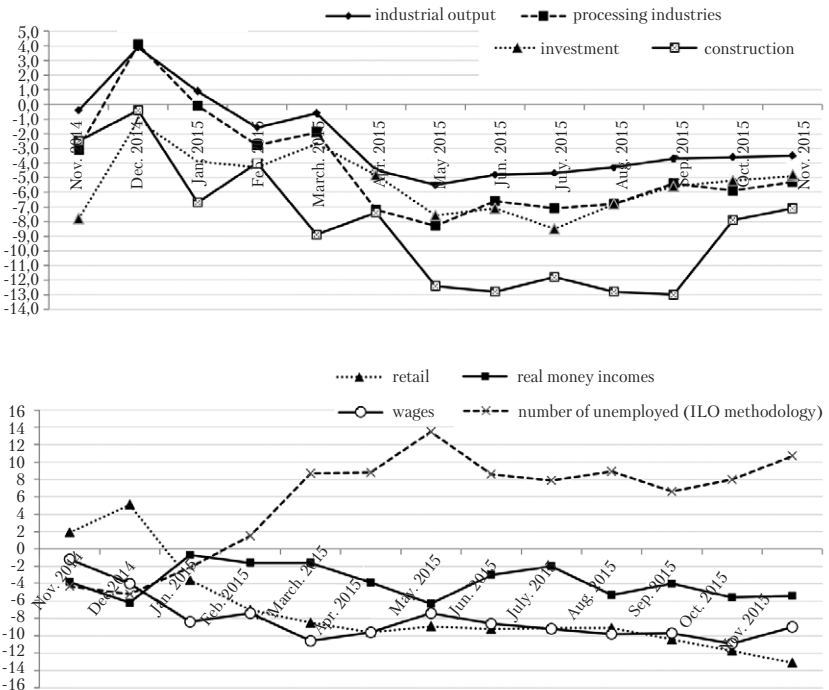
With considerable state support each region reacted to the 2009 crisis in different ways, revealing regional differences in unemployment and personal income dynamics. At the height of the crisis, in February 2009, the unemployment rate calculated using the ILO method reached 12–15 per cent in nearly 15 regions, mostly depressed. In 2009, personal incomes decreased in more than half of Russian regions, with massive drops in more developed exporting and industry-oriented regions and in territories with two major agglomerations rather than in regions with a high unemployment rate. In exporting industries wages usually include many supplements (extra payments and bonuses) that are not paid during a crisis, and that caused a more serious fall in personal incomes. In regions with labour-intensive processing industries part-time employment was

more widely used, which also led to a decrease in wages and incomes. As a result, more developed regions went through a deeper crisis in 2009, using the model of the 1990s (income decrease); whereas in less competitive regions with a high level of inefficient employment unemployment growth was mitigated by active supporting policies; and the regions mostly dependent on federal transfers and incomes from unofficial employment remained almost unaffected by the crisis.

2. Major »Risk Zones« of the New Crisis and Their Geographic Projection

The new crisis unfolded in a different way. Three problems came to the fore: regional budget destabilisation and debt growth, falling investment and falling personal incomes and wages (Figure 1). The industrial recession began only in February 2015, but it has been unfolding slowly and has had a deeper impact on processing industries. The labour market remains relatively stable.

Figure 1. Dynamics of main socioeconomic indicators compared with the corresponding month of the previous year (%)



Destabilisation of Regional Budgets

This began as early as 2013, following the President's May decrees of 2012, which ordered substantial wage rises for public sector employees. While central transfers to the regions were increased to cover 30 per cent of the additional expenditure, regional budgets already suffering under a revenue shortage had to cover the remaining 70 per cent. As a result, in 2013 77 out of 83 regions had negative budgets and an overall regional budget deficit, which grew threefold (to 642 billion roubles). The regions were forced to borrow, and by the beginning of 2014 the total debt of regions and municipalities reached 2 trillion roubles. In 2014, 75 regions had budget deficits and at the beginning of 2015, total debt was already 2.4 trillion roubles. The regional budget system was destabilised.

In the first half of 2015, the situation improved slightly due to two factors. First, the revenue of consolidated regional budgets increased by 11 per cent following the growth of income tax returns and transfers from the federal budget. Second, the regions began to make savings and their costs grew by only 4 per cent. They had to cut social expenditure: spending on education decreased in 25 regions, on health care in 11 regions and on social welfare in 11 regions. Consequently, in the first eight months of 2015 debt rose by only 1 per cent, but the situation remains extremely tight. The average debt in Russian regions corresponds to 34 per cent of revenue generated from own sources (consolidated revenue without transfers); in four regions it exceeded 100 per cent (Republic of Mordovia, Chukotka Autonomous Okrug, Smolensk Region and Kostroma Region), and in 20 regions it reached 70–94 per cent of own-source revenue. The list of the most troubled regions has not changed since 2014.

Structural issues of the debt also remain the same. Although the federal government promised to help regions to restructure their debt by transferring loans from commercial banks to public budget loans, there have been no substantial changes. From January to August 2015, the proportion of loans from commercial banks decreased insignificantly (from 45 per cent to 40 per cent of the debt), while the share of public budget loans increased from 31 per cent to 36 per cent. In 11 regions debt servicing reached 3–4.5 per cent of all budget expenditure and exceeded expenses for culture and mass media. Only the richest regions (Moscow, Tyumen Region, Sakhalin Region, oil-producing autonomous regions and Saint Petersburg) have the necessary resources to ensure balanced budgetary policies.

How has the federal government reacted to the growing challenges of regional budgets? In 2014, financial aid for regions was less aimed at mitigation of the budget crisis and reflected more the geopolitical focuses of the Russian government, namely, support for the remote Far East federal

districts neighbouring China, troubled North Caucasus republics and annexed Crimea. This geopolitical focus meant that 30 per cent of transfer payments went to areas in which only 11 per cent of the Russian population are living (Table 1).

Table 1. Share of federal districts, transfer earnings and population (%)

	Transfers		Population
	2014	1st half 2015	2014
Federal districts			
Central	17.5	22.1	26.6
North-western	8.3	6.5	9.4
Southern	6.6	6.9	9.6
North Caucasian	12.3	12.5	6.6
without Stavropol territory	(10.6)	(10.8)	(4.7)
Volga	15.4	16.3	20.3
Ural	6.0	5.6	8.4
Siberian	14.5	14.6	13.2
Far Eastern	12.2	11.6	4.3
Crimean*	7.2	3.9	1.6
ALL	100.0	100.0	100.0

Note: *In 2014, all transfers to the Republic of Crimea and Sevastopol went into the consolidated budgets of these regions, but in 2015 transfers from non-budgetary funds and the Pension fund went through other channels, so Crimea's share in transfers to consolidated regional budgets decreased.

Source: Author's calculations based on Rosstat and Federal Treasury data.

The priority support for Crimea came at the expense of other Russian territories, deteriorating the state of their budgets. In the first half of 2015, amid the economic crisis the policy changed: overall transfers to regions increased by 11 per cent, while transfers to Crimea grew by only 2.6 per cent. Summarised data show that the government cut transfers to the richest regions, excluding Moscow, as well as to heavily subsidised regions (republics of North Caucasus and Southern Siberia, and the Far East). More transfers were aimed at the regions harder hit by economic recession and/or having more acute budget problems (Central regions, Volga region and Siberia). The crisis thus resulted in a slight change of the regional pattern of transfers, shifting them from a geopolitical focus to anti-crisis policies.

Fall in Investment

The fall in investment in the regions began in 2013 (–0.2 per cent), *accelerated* in 2014 (–2.7 per cent compared with 2013) and in the first half of 2015, it dropped by 5.4 per cent compared with the first half of 2014. The number of regions with negative investment dynamics increased. In the first half of 2014, there were 32 of them; in the corresponding period in 2015 – 49, or 51, if the two districts of Crimea are included. According to Rosstat, investment to Crimea was cut by 20 per cent. Political and financial restrictions prevent the implementation of the programmes announced by Russian government. The highest number of regions with decreased investment are in the Ural, Siberian and North-western federal districts – industrial and resource-extracting territories. The maximum investment drop in the first half of 2015 (by 30–50 per cent) was seen mainly in industrial regions (Arkhangelsk, Nizhny Novgorod and Sverdlovsk regions, republics of Komi and Khakassia, and Khabarovsk territory), and only in the Krasnodar territory was it due to the base effect following the Olympic preparations.

Dynamics in the construction sector, heavily dependent on public sector investment, have been even more negative: from January to July 2015, the recession accelerated and expanded, covering 59 regions (compared with 41 regions in the corresponding period of 2014). The downturn grew faster in most federal districts. The worst dynamics were seen in the Ural and Southern federal districts (–12 per cent in January–July 2015 compared with the corresponding period of 2014), and the Siberian (–11 per cent) and North-western (–10 per cent) federal districts. The economic slump in the construction sector in the Far East is of the same strength (–8 per cent) and in 2014 it was even worse (–12 per cent), so the negative trend has been present for three years. Statistics show that the »turn to the East« has failed in this area. Moreover, construction is decreasing in the oil-producing regions that are vital for the Russian economy (by 8 per cent in the Khanty-Mansiisk autonomous district and by 15 per cent in the Yamal-Nenets autonomous district), which will inevitably result in a future decrease of hydrocarbon production.

Falling Personal Incomes and Consumption

Stagnation of real income began in early 2014. It was caused by domestic problems but external factors (sanctions and low oil prices) and the following inflation growth and dramatic devaluation of the rouble contributed to the negative trend. A rapid slump began in December: real incomes fell by 7.3 per cent compared with December 2013, and real

wages by 4.7 per cent. As a whole, in 2014 real incomes decreased in nearly 40 per cent of regions, while the dynamics for December 2014 (compared with December 2013) worsened considerably, affecting up to two thirds of regions. Although the accuracy of the regional personal income statistics is the lowest among all indicators available, the negative trend is explicit. In the first half of 2015, real incomes decreased by 4.1 per cent and the recession affected 67 regions (no data for Crimea available). The geographical pattern is gradually becoming clear: a stronger fall in the real income of the population took place in regions with processing industries in the Volga and Central federal districts, as well as in the North-western regions, where the economic recession began as early as 2014.

The decrease in real incomes has led to a consumption drop. In April 2015, retail volume had fallen by 10 per cent, and then became stable, remaining at that level. The scale of the retail drop is the highest among all the indicators considered. The Russian population is adapting to the crisis in the usual way – by reducing consumption. Moreover, people now tend to cut service expenditures (vacations, entertainment, community services and so on), which results in an elevated crisis risk for market services.

3. Industrial Crisis: Later and Slower

The new economic crisis differs from the previous ones in terms of industry dynamics, too. Stagnation of *industrial production* began in 2013, but in 2014 it was replaced by weak growth (by 1.7 per cent) due to the rouble devaluation and enhanced import substitution capabilities. The crisis recession in industrial production did not begin until February 2015. In January–July 2015, it was 3 per cent throughout Russia, with 35 regions showing negative dynamics. The geography of recession is determined mainly by the industry specialisation. Processing industries saw a stronger slump (–4.9 per cent in January–July 2015), while extractive industries remained relatively stable (+0.1 per cent in the same period). The geography of recession in processing industry was broader, covering 45 regions. The most troubled industries include transport machine-building (in particular, automobile industry and production of train carriages), other engineering industries and production of construction materials. Fostering import substitution faces massive obstacles. Production growth needs investments that are decreasing; demand for industrial production is contracting due to higher prices; rouble devaluation has caused a lot of damage to Russian industries that have large volumes of intermediate imports of equipment and components; falling personal incomes and a bursting consumer credit bubble have reduced effective demand.

The geography of the new industrial crisis is partly different from that of previous ones. As before, the recession is stronger in federal cities and the Moscow agglomeration (by 7–13 per cent in January–July 2015). They are finalising their post-industrial transformation, industrial production is contracting and being replaced by the service industry. The recession is also stronger in the regions specialising in non-modernised and non-competitive industries (Ivanovo, Kostroma, Tver and Kurgan regions, republic of Chuvashia, and less developed regions of the Far East: 6–10 per cent). However, production also dropped dramatically in »newly industrialised« regions that actively enticed investors, particularly to the assembly facilities in the automobile industry (Kaliningrad and Kaluga regions saw a 10–12 per cent decrease). This was caused by a rapid contraction of effective demand. The Central and Far Eastern districts accounted for the largest number of regions suffering from industrial recession in 2015.

A unique feature of this crisis is the continuing growth of industrial production in the regions specialising in the military industrial sector, particularly in the Tula, Bryansk and Vladimir regions, and the republic of Mari El (increased by 11–23 per cent in the first half of 2015) due to larger state orders and better funding from the federal budget. Furthermore, in order to support the defence industry, in early 2015 enterprises in the military industrial sector were pre-funded directly from the federal budget, which allowed them to avoid bank loans with very high interest rates. The question is whether the federal government can maintain massive funding of the military industrial sector with its own rising budget deficit (797 billion roubles in the first half of 2015). The federal budget projects for 2016 plan a further increase in defence expenditure at the expense of social ones, but this strategy can only be a short-term decision, since the accumulated savings in the Reserve fund are diminishing, and political risks are increasing.

Apart from the regions with military industrial sector enterprises, the Tyumen region (without autonomous districts) also maintained production growth due to the recent introduction of new processing enterprises, as did the new hydrocarbon-extracting regions in the eastern part of the country (Sakhalin, Yakutia and the Irkutsk region) and in the Nenets autonomous district. However, in the leading fuel and energy producing regions (Khanty-Mansiisk and Yamal-Nenets autonomous districts) that account for most income to the federal budget, industrial dynamics are close to zero. The regions with a high proportion of other exporting industries (ferrous and non-ferrous metallurgy and coal production) maintained growth, except for the Krasnoyarsk territory and the Sverdlovsk region, but the forecast for them is unfavourable due to decreasing global

prices for metals and coal in 2015. The southern regions specialising in the food industry have also seen continuous growth: it became more stable as a result of Russian anti-sanctions that pushed a considerable part of food imports out of the market. So the situation in the industrial sector has proved to be better in exporting and extractive regions, particularly oil-producing, in southern regions specialising in the agricultural sector, and those with military industrial enterprises, for the first time in post-Soviet history. As usual, a stronger industrial recession is seen in the major agglomerations and semi-depressed regions with non-competitive industries (machine-building and textile production), as well as a part of newly industrialised regions, where the slump is due to a rapid decrease in effective demand.

4. Labour Market: Why Is Unemployment Not Rising?

Despite industrial recession, the unemployment rate remains at the minimal level of the post-Soviet period as a whole. In May–July 2015, it even fell slightly compared with the beginning of the year (from 5.8 to 5.4 per cent) due to seasonal factors: in summer the unemployment rate in Russia is always lower. The situation in the regions is quite favourable; none of them had any marked growth of unemployment. Why has the labour market reacted to the crisis so weakly? There are several reasons.

First and foremost, the Russian labor market has a special model of adaptation to economic recessions by increasing part-time employment. This involves lower wages, which helps to cut business costs. From a psychological perspective, Russian employees prefer lower wages than lost jobs. The state benefits from the low risk of protest by those who have lost their jobs and from decreased budgetary expenditures on unemployment benefits. Part-time employment takes many forms (part-time jobs, down time, unpaid leave). Rosstat gathers data only for the headcount of organisations, without taking into account small business and unofficial employees. In the second quarter of 2015, the headcount was 46 per cent of the overall number of employees (33.2 million out of 72 million). There are no statistics on the situation in small business and unofficial employment.

Since 2014, part-time employment has been growing slowly and is unevenly present in different economic sectors. According to Rosstat, in the second quarter of 2015 the transport machine-building and equipment production industries saw the highest level of part-time employment: 16 per cent of headcount had part-time jobs or down time. In the hotel and restaurant business, 11 per cent of employees were working part-time.

Another form of part-time employment is unpaid leave. In the processing industry the proportion of employees on unpaid leave is twice the average, while in machine and equipment building it is two and a half times higher. So, as during previous crises, part-time employment is more widely used in processing industries, particularly in machine-building and its transport segment. The service industry has acute problems only in the segment of market services – in hotels and restaurants, where the number of customers has dropped considerably.

The geographical pattern of part-time employment in the second quarter of 2015 is defined by regional economic specialisation. The largest proportion of part-time and downtime employees is in the automobile-building regions (Samara and Kaluga regions – 6–7 per cent with an average of 3.2 per cent), and the troubled machine-building and textile-producing regions (Chuvashia, Tver and Ivanovo regions – 5–6 per cent). The proportion of employees on unpaid leave is the largest in Ural metallurgy and machine-building regions (Sverdlovsk and Chelyabinsk regions – 10–11 per cent with an average of 7 per cent), the machine-building regions of the Volga and Central federal districts (Nizhny Novgorod, Samara, Yaroslavl and Vladimir regions – 9 per cent), as well as in the Omsk region, where a major construction company went bankrupt.

The second reason is demographic: the small generation of workers born in the 1990s is entering the labour market, while the considerably larger generation of people born in the 1950s is leaving it. Due to the special features of the Russian population pyramid, the number of people of employable age is annually decreasing by 600,000–800,000 people, and this trend will continue until the end of the decade. This dynamic is extremely unfavourable for economic development, but amid the crisis at least it mitigates the tensions on the labour market.

The third reason is the large number of labor migrants in the Russian economy (4–6 million people, according to realistic estimates). They are engaged in construction and services. Some of them leave due to the lack of jobs, which also relieves tensions on the labour market. For the moment, migration statistics do not reflect any mass exodus of labour migrants, however. Researchers from RANEPA (Russian Presidential Academy of National Economy and Public Administration) explain that migrants tend to shift to the underground economy (Ranepa 2015).

The fourth reason is the flow of employees to the informal economy. Its scale is enormous: in Russia as a whole over 20 million people are employed unofficially, and in a crisis this number always grows. Lack of statistics does not allow us to measure how the crisis has affected the informal economy sector, but it is evident that wages are falling and finding a

job is becoming more and more challenging. But people are still managing to cope.

The cumulative impact of all these factors helps balance demand and supply on the labour market, although in some regions and cities the situation on local labour markets is becoming increasingly tight. At the moment it is reflected in the growth of part-time employment, particularly in the cities with major automobile-building enterprises. The labour markets of one-factory towns, mostly specialising in machine-building and metallurgy, are more vulnerable in the crisis.

5. Conclusions: Crisis Risks – Regions and Cities

There are a number of differences between the present and the previous crises. First, Russian regions are suffering from unbalanced budgets and huge debts. Second, the risks of falling employment are higher in market services and the public sector. Third, the regions cannot rely on the support from the federal budget that was seen in 2009, when the volume of transfers was increased by a third. The regions have to adapt to these changes by cutting budget expenditures, including social ones, and employment in the public sector.

The crisis is hitting both developed and underdeveloped regions, although this results in different risks and damage. Having a higher potential for import substitution in the food industry, the Russian South is doing better than the North-western region, the Urals and the East. The Central and Volga federal districts account for a larger number of troubled and non-competitive regions with machine-building and textile-producing industries. Actively investing regions (Kaluga, Kaliningrad, Belgorod and other regions) are worth highlighting: they used budget funds to develop infrastructure in order to entice investors. This success resulted in the growth of the regional budgetary debt burden. Amid the crisis, they are not able to pay debts, it is hard to attract new investors and the budget revenue cannot rise without investments. Actively investing regions have fallen victim to the federal policies that triggered the crisis.

For the moment, the increasing tensions on the labour markets of regions with processing enterprises is leading to growth in part-time employment. For the worst-case scenarios, particularly in one-factory towns, the government has tools to actively support employment. First of all, these are welfare activities that are not too costly for the budget and can relieve the tension. However, these measures are not designed to solve the problem of inefficient positions in non-competitive industries, and they are becoming increasingly expensive in a long-term crisis.

The exporting regions are less affected by the crisis, because the two-fold devaluation of the rouble led to lower costs for exporting companies. The leading oil-producing regions are more sustainable even when oil and gas prices are low. The regions specialising in metallurgy and coal production have less favourable prospects due to the continuous fall of global prices and demand for their production. Nevertheless, developed regions, especially with diversified economies, have a higher »margin of safety« even if the recession is long-term.

The Far East is more affected by the crisis as a result of a sustained fall in investment. During the previous crisis it remained safe thanks to the growth of federal transfers (most Far Eastern regions enjoy high levels of subsidisation) and a considerable increase in investments from state and public-owned companies in the construction of the ESPO pipeline and preparations for the APEC Summit. The federal government is trying to encourage the flow of investment in different ways that offer favourable conditions to investors. These include »territories of advanced development«, the free port of Vladivostok covering 14 municipalities of the Primorsky territory. The use of the free port regime in other Far Eastern regions is under consideration. However, it is not clear whether these mechanisms would work in the country's current economic isolation.

The major risk for underdeveloped republics with the highest level of subsidisation is the decrease of federal budget funding. The first half of 2015 saw considerably lower transfers to Tyva and most republics in the North Caucasus, with the exception of Dagestan and Karachay-Cherkessia. It is still unclear whether the number of transfers will fall further, or the federal government will have to give up these risky policies. Employment sustainability in the public sectors of underdeveloped republics is crucial for political stability due to the lack of other formal jobs. High employment rates in the informal economy result in additional challenges, including, first of all, a dramatic drop in personal incomes, which can also be caused by a decrease in labour migration from the North Caucasian republics to other regions. However, survival strategies based on inter-family support and in-kind household incomes can help to overcome this crisis. The out-of-date model of survival is typical not only for underdeveloped republics with stiff development barriers, but also for rural territories throughout the country.

This crisis will be tough for major cities with very developed market services and a considerable middle class populace. Most citizens from large cities are engaged in the service sector (78 per cent in Moscow), as well as small businesses, which are more developed in major cities. Market services are much more affected by the devaluation of the rouble, sanctions and the drop in oil revenue than other sectors. The decrease in the

income and effective demand of the population has already led to the contraction of the market services sector, underemployment in tourism and banking. Market services are represented mainly in larger cities, with the risk of mass layoffs and unemployment growth. Moreover, the increasing budget deficit and regional debt are leading to underemployment in the public sector, particularly in the social segment. For the first time the public sector is not a »safe haven« anymore, with the same level of layoff risks as in the market services sector.

Previous crises have shown that the labour market in federal cities, million-plus cities and other major regional centres is more diversified, so there are lower risks of unemployment. However, at the moment they are rising because the new crisis might be long-lasting. Many people will have to take lower-paid jobs, which will lead to a dramatic fall in the living standards of the educated middle class in major cities. Moscow will suffer from the decreasing flow of labor migrants renting accommodation in the capital. The »grey« rental market that provides many Muscovites with unofficial income is contracting. The people from major cities used to consume more imported and foreign products – recreational, entertainment, educational and medical – so they are more sensitive to the devaluation of the rouble.

The crisis has an impact not only on the living standards and consumption structure of many people from Moscow, Saint Petersburg and other major Russian cities, but also on their lifestyles. Development strategies will be replaced by survival strategies. It is more than just a fall in living standards – it is a negative transformation of lifestyles that seriously affects social well-being. Educated people from large cities have more opportunities and resources to adapt, but they are limited, nevertheless. The political situation and the scale of economic damage for people from large cities with high levels of income are forming two vectors. First, it is leading to frustration and apathy, and »internal emigration«, as in the Soviet era. Second, some competitive and active specialists are opting for emigration. As a result, Russia is again losing human capital.

References

Independent Institute for Social Policy (n.d.) Regional development monitoring in Russia (2008–2014) (in Russian), http://www.socpol.ru/atlas/overviews/social_sphere/kris.shtml.

Maleva T.M., Zubarevich N.V., Ibragimova D.H. et al. (eds) (2007) Survey of social policy in Russia: Beginning of the 21 century. Moscow: Independent Institute for Social Policy.

Ovcharova, L.N., Byuryukova, S.S., Ter-Akopov S.A. and Vardanyan Y.G. (2014) What changed in earnings, expenses and consumption of the Russian population? Monitoring of income, expenditures and consumption of Russian households. (in Russian) Moscow: HSE.

RANEPA (2015) Social dimension of the economic crisis. In: Information and Analytical Bulletin, No. 3, September 2015 (in Russian). <http://new.ranepa.ru/sobytiya/novosti/vyshel-v-svet-3-j-vypusk-byulletenya-ekonomicheskij-krizis-socialnoe-izmerenie>

Zubarevich, N. (ed.) (2005) Russian regions: In what kind of social space do we live? (in Russian) Moscow: Independent Institute for Social Policy.

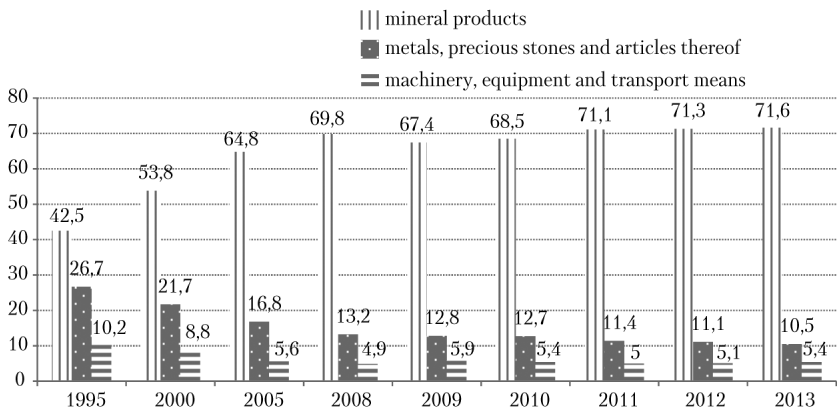
ECONOMIC CRISIS, REINDUSTRIALIZATION, AND THE ECONOMIC ROLE OF THE STATE

David M. Kotz

1. Introduction

Russia's economy has continued to be highly dependent on mineral exports, especially oil and gas, since the demise of the Soviet Union. Figure 1 shows the commodity structure of Russian exports since 1995. It shows that more than 70% of exports derive from mineral products, with another 10% from metals and precious stones.

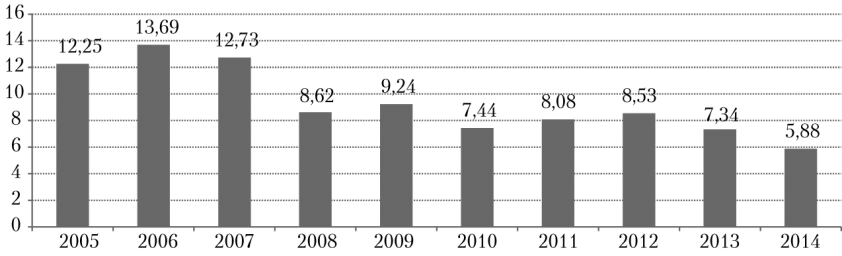
Figure 1. Commodity Structure of Exports of Russia
(% total exports)



Source: Russian State Statistics Service, 2015.

Russia's economic dependence on resource exports has led to very large export surpluses, as figure 2 shows. Such export surpluses mean Russia is producing more than it is consuming and investing. That is, Russia does not get the full benefit of its own economic output but sends a significant surplus to other countries.

Figure 2. Net Exports of Goods and Services (% total exports)



Source: Russian State Statistics Service, 2015.

There is widespread agreement that this economic model is harmful for Russia. When post-Soviet Russia fully plunged into the world market in 1992, the result was huge economic pressure to shift in the direction of energy and mineral exports. Energy and metals are what the global market wanted from Russia, and they were the most profitable economic activities in the short-run. While natural resource exports soared, most of Russia's industry withered.¹

The resource export dependent model has had several negative effects on the Russian economy and society. First, it inevitably encourages a high level of corruption. The export of valuable resources generates a large revenue flow with low costs. This is an invitation for corruption, as various groups compete to get hold of part of that revenue flow. Almost all resource export economies have this problem.

Second, it retards the development of industry. Analysts often point to the famous Dutch disease associated with an overvalued currency. The export of valuable natural resources tends to increase a country's exchange rate, which makes it difficult for agricultural or industrial products to succeed in export markets or to compete with imports. Hence, domestic production tends to decline over time.

However, Dutch disease is not the only problem that results from a natural resource export model. The profit motive, which is the driving force in a capitalist system, steers effort and energy toward whatever activity is most profitable and in Russia that is resource development and export. Manufactured goods have some limit on profitability since the cost of production is always a substantial portion of the selling price. However, the cost of obtaining and selling resources, which are a gift of nature, can be a

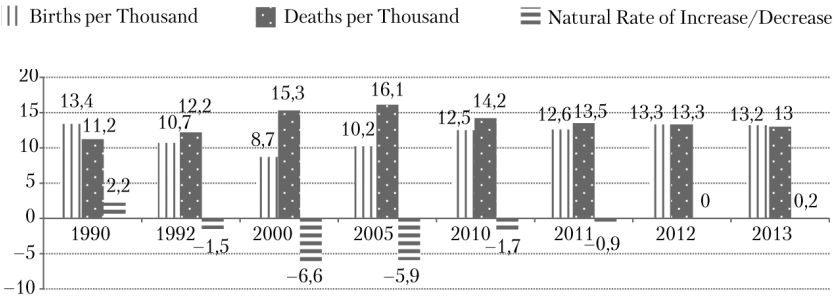
¹ See Kotz (2007: chapter 9) for an analysis of this process.

small part of the selling price. The profit from sale of resources is largely a rent due to nature's gifts. This distorts Russia's economy. If available resources are used for domestic development, they are a blessing, but if they are used mainly for export to finance consumption and to enrich those who own and control the resources, this gives rise to the "resource curse."

Third, a resource export economy in Russia creates a mismatch between the population and the economy. Resource extraction and export are the central economic activities in Russia. However, relatively few people are required to develop and export natural resources. Russia has a large population that is urbanized and well educated. The resource export economy offers no place for most of Russia's people.

Starting in 1992 Russia's population began to decline, largely due to deaths exceeding births (see figure 3). While the decline in Russia's population since 1992 has several causes, it can also be seen as a response to the mismatch between people and economy. If people are not needed in this economy, they tend to decrease in numbers through a low birth rate and high death rate. Only in 2012 did births finally recover sufficiently to equal the number of deaths, and 2013 registered a slight excess of births over deaths (0.2 per thousand). However, the death rate is still above the level of 1990.

Figure 3. Vital Statistics of Russia



Source: Russian State Statistics Service, 2015.

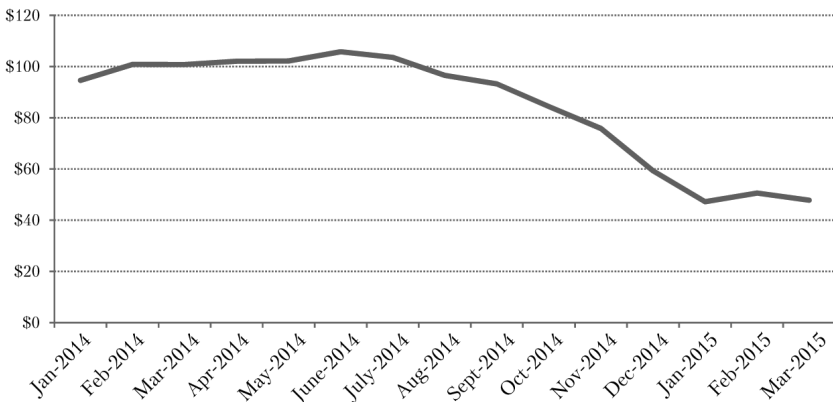
Fourth, the resource export economy will eventually weaken Russia's position in the world system. Russia has historically been a great power. To remain a great power in the contemporary world system, a country must have a strong industrial base as well as a sizeable population. That is an essential underpinning of the economic and political strength required to function as a world power. However, Russia's current world power sta-

tus rests upon its past industrial achievements, a situation that cannot last indefinitely.

2. Challenges to Russia's Resource Export Model

Recent developments have been challenging the continued viability of Russia's current economic model. These developments interacted to drive down the price of oil starting in mid 2014 (see figure 4). If oil prices remain low for some time, as seems likely at this time, Russia's resource export model may become unviable.

Figure 4. Monthly Crude Petroleum Price (USD per Barrel)



Source: U.S. Energy Information Administration, 2015.

Three developments have been responsible for the crisis of Russia's resource dependent model. The first is the severe economic and financial crisis that broke out in 2008 and its aftermath of continuing stagnation in much of the world economy. The 2008 economic and financial crisis originated in the USA and rapidly spread to the global economy. In 2009 Russia had the largest decline in GDP of the major economies, a decline of 7.8% in that year (International Monetary Fund 2013).

Rapidly falling demand in the global economy in 2009 led to declines in both the price and quantity of trade in oil and other natural resources. The global recession was followed by recovery in many countries in 2010. As global demand for natural resources bounced back, the price of oil went back up above \$100 per barrel by March 2011. In 2010 Russia's economy began growing again, relatively rapidly at about 4.5% that year.

However, 2008-09 was only the first round of this economic crisis. The global recovery from the initial shock in the global economy has been

sluggish. A Great Stagnation has followed the Great Recession, for two reasons. First, the 2008 crisis stemmed from long-term problems in the form of capitalism that has prevailed since around 1980, known as neo-liberal capitalism. Those problems remain unresolved, and without major restructuring of capitalism, stagnation will continue and might well last for some time (Kotz 2015: 175-180; Kotz and Basu 2015).

A turn toward austerity policy started in 2010 in Europe and the US. Reductions in public spending, along with tight monetary policy in Europe, have intensified the stagnation and brought a return to recession in Europe in some periods since 2010. The stagnant global economy eventually caused China's growth to slow down. In 2012 China's GDP growth slowed to below 8% per year from its previous double digit rate and has continued to decline. China's resource-hungry double digit growth had become the main driver of global economic growth and also had been a major factor sustaining a high price of oil and other resources.

A second factor explaining the collapse of oil prices has been the development of new technologies in oil and gas extraction. The steady reduction in cost of hydraulic fracturing («fracking») technology spurred a big increase in oil supply from North America. The long decline in US oil production was reversed. By end of 2014 US oil production had risen by 80% over that of 2008 (US Energy Information Administration 2015). That is more than the output of all OPEC members except Saudi Arabia.

The rapid rise in US oil production, combined with increasing output from Canadian oil sands and from other parts of the world, propelled an increasing world supply of oil, which had stagnated during 2005-09. From 2008 to 2014 the increase in US oil production accounted for 84% of the global increase in oil production during that period. At first continuing rapid growth in China and other emerging economies kept demand high, which maintained stable and high oil prices. However, in 2014 slumping global demand due to the economic slowdown met the rising supply. The result was a collapse in the global oil price in 2014.

These developments are probably not short-run factors. While various events will cause fluctuations in oil prices in the coming years, it appears unlikely that oil prices will return to the high levels of the 2000s in the near future. This spells serious trouble for Russia's resource export model. Furthermore, there is one more factor that is undermining the viability of Russia's resource export model.

Since March 2014 the US and NATO have imposed sanctions against Russia over the developments in Ukraine. This creates additional problems for Russia's resource export model. There are plans to shift away from Russian natural gas in Europe.

This reflects more than Western concern over Ukraine. The experience of recent years shows that the US government regards Russia as a rival power. Since a separate Russian state emerged from the demise of the Soviet Union in 1992, the US government has tried to control Russia aiming to turn it into a subordinate state. This met some success in the early post-Soviet years. However, that could not last. As Russia established a more independent position in global affairs, the US government shifted to a strategy of containment of Russia.

Although this U.S. strategy toward Russia has stirred some dissention in Europe, so far the major European powers have gone along with the strategy. Even if the Ukraine problem is resolved, Russia is likely to face a determined Western effort to contain its development. This is another factor that makes the resource export model problematic for Russia. It is difficult to stand up to Western pressure if Russia has a resource export economy.

One possible way to get around Western pressure while clinging to the current economic model would be to forge a close economic relationship with China. Perhaps Russia could export energy and other resources to China in return for China's manufactured goods, thereby evading Western pressure. China, which is experiencing similar Western efforts to contain its role in the world, might find such a relationship attractive. However, it seems unlikely that the Chinese leadership would shift from its current successful insertion into the world market to a new economic integration with Russia. Such a shift by China might lead to confrontation with the US, which China seems unlikely to risk.

3. An Alternative Direction?

An alternative direction for Russia to its resource export model is the adoption of a developmental state model. For years there has been widespread agreement that Russia ought to overcome its dependence on resource exports, that is, that Russia must reindustrialize. Given the above recent developments, Russia's current resource export model may no longer be viable, which could generate a push toward an alternative model. If the state continues to allow market forces to direct Russia's economic development, no escape from the resource export model is possible. Market forces only reinforce the current structure, since they magnify whatever is most profitable in the short-run. A reorientation of Russia's economy would require a shift to a developmental state model.

Developmental state models have played a key role in bringing economic progress in many countries in various historical periods. In a devel-

opmental state model, the state regulates the economy aimed at moving it up the economic ladder toward a more technologically advanced, more diversified economy. The state can resist short-run profitability incentives and aim for long-run economic development. Past examples include the USA in the nineteenth century, Japan in the nineteenth century and again after World War II, South Korea after World War II, and China since 1978.

A developmental state strategy in Russia today might entail several policies. One is an industrial policy aimed at promoting the long-run development of key industries. A second is a financial policy aimed at directing cheap credit toward productive purposes rather than speculative activities. A third would be a high level of state investment in infrastructure (transportation, communication, power, sanitary facilities), science and technology, and education. A fourth is state direction of the use of Russia's natural resources to promote domestic development rather than generate export revenues. Finally, a fifth would be regulation of Russia's interface with the global economy in order to protect infant industries where necessary and to encourage foreign direct investment that would contribute to development while discouraging short-term and speculative capital inflows and outflows.

A key aim of a developmental state strategy is to increase fixed investment. Fixed investment is too low in Russia, at about 20-22% of GDP. That is a reasonable percentage for a mature capitalist country. However, it is too low for a country that requires a reorganization and upgrading of its economic structure. A developmental state strategy would require an investment share of GDP of about 30%. This could be achieved by eliminating Russia's big export surplus. Most of Russia's natural resource products should go to domestic use. It makes sense to export some natural resources, but the revenue should go toward importing machinery and industrial inputs rather than enriching oligarchs. If Russia moved its trade balance to near zero, it could raise its fixed investment share to almost 30% of GDP. That would enable Russia to finance a developmental state strategy, including reserving more of its natural resources for domestic use.

A shift to a developmental state model would be a radical change for Russia. The current resource export model has strong support from Russia's oligarchic elite, which has gained great riches from it in the past. Abandoning the current model in favor of a developmental state strategy can occur only if domestic political pressures overcome the inevitable resistance of Russia's oligarchs. A continuation of economic pressure on Russia from low oil prices plus Western hostility might lead to domestic developments that would overcome the resistance. A significant part of

the post-Soviet Russian capitalist class owns industries that would benefit from a developmental state model. If the current model stops delivering a big flow of revenue, a coalition might arise among such capitalists and other sectors of society that could successfully push for a shift to a developmental state.²

However, a developmental state strategy, when tried, does not always succeed. The state must have the capacity to oversee and manage the development of the economy effectively, keeping its focus on long-run progress. The Soviet state had decades of experience managing the economy, but that state experience is now some 25 years in the past. Whether the Russian state, now riddled with corruption and facing accusations of incompetence, could quickly reform and develop the ability to carry out such a strategy remains to be seen. However, recent history is not necessarily destiny, and states do sometimes adapt quickly to a new role in society.

4. Conclusion

If the Russian state can shift from the current resource export model to a developmental state model for Russia, and if it could implement such a strategy effectively, that would bring several benefits. It would build a diversified, industrialized economy that is suitable for Russia's population. It would bring an economy with the basis for the long-term development of its people. And it would build an economy that would provide a basis for Russia to continue to play a major role in the world. If Russia stays with its current resource export dependent model, Russia's future will be one of economic and political decline.

References

- International Monetary Fund (2013) IMF World Economic Outlook Database. <http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx>
- Kotz, David M. (2015) *The Rise and Fall of Neoliberal Capitalism*. Cambridge, MA, and London: Harvard University Press.
- Kotz, David M., and Deepankar Basu. Stagnation and Institutional Structures (2015) Unpublished conference paper, available from the author upon request.

² Another alternative direction for Russia would go beyond its present capitalist system, returning to some form of socialist economy. Such a development would also likely result in a state focused on re-industrialization. However, that alternative would arise from different political forces from those discussed above, and consideration of it is beyond the scope of this paper.

Kotz, David M. and Fred Weir (2007) *Russia's Path from Gorbachev to Putin: The Demise of the Soviet System and the New Russia*. London and New York: Routledge.

U.S. Energy Information Administration (2015) <http://www.eia.gov/>

WOULD A NEW INDUSTRIALIZATION IN RUSSIA BE IN LINE WITH INTERESTS OF THE RUSSIAN ELITE?

Vladislav Inozemtsev

1. Introduction

The fact that Russia is lagging behind technologically has become almost universally accepted in recent years. Even more than that, many believe that the gap is here to stay. It is most conspicuous in the industrial sphere, which has experienced a dramatic decline since the end of the Soviet period. One may recall that, 30 years ago, the then RSFSR produced 88.7 million tonnes of steel, 79.1 million tonnes of cement, 17.7 million tonnes of mineral fertilizers and 5 million tonnes of paper. By the end of 2015, these indicators were down by 20, 19, 11 and 10 per cent, respectively.¹

Statistics for manufacturing investment goods and relatively high-tech consumer goods are even bleaker. Thus, between 1985 and 2009, the number of lorries, combine harvesters and tractors produced fell by factors of 5.87, 14.1 and 34.0, respectively, while watches and cameras fell by factors of 91 and 600 (Inozemtsev 2010a). It is noteworthy that no advanced industries have come into existence in Russia in recent years: we are not making computers, means of mobile communications or most modern medical equipment. If all this was not enough, Russia is losing ground even in the energy sector: in 2014, its global share in oil and gas production went down to 12.6 and 16.7 per cent in contrast to 17.8 and 29 per cent in 1989.² It would not be an exaggeration to say that Russia is going through a massive de-industrialization. The question of whether it can be reversed is thus as important as ever.

¹ Calculated on the basis of statistics from the National Economy of RSFSR in 1985, Moscow: Finances and Statistics Publishers, 1986 (in Russian) and Rosstat data: www.gks.ru (04.03.2016).

² Calculated on the basis of the *BP Statistical Review of World Energy 2015*, London: British Petroleum Plc., 2015.

While researchers' opinions diverge, the author tends to believe that successful industrialization in Russia is unfeasible in the coming decades. Most of the reasons may appear subjective, being linked not so much to natural constraints on the country's growth, as to the political elite's evident unwillingness to change the status quo; the Russian authorities are, by and large, content with the way things are today. In this chapter we identify five sets of factors that make the country's re-industrialization unlikely.

2. Historical and Ideological Factors

The first set of factors can be tentatively called »historical« or, perhaps more precisely, »ideological«. Russia differs fundamentally from the vast majority of countries that have industrialized successfully because it used to be a strong industrial power. Virtually everywhere (Japan, Korea, China, Malaysia), modern industrialization became a tool for overcoming the economic ways of agrarian societies and it was invariably a one-off, not a recurring process. Even in China, where one can identify several industrialization waves, the industrial revolution of the 1980–2000s started in a predominantly agrarian country, albeit with some »islands« of heavy industry. By contrast Russia, at the turn of this century, faced an extraordinarily difficult challenge: it needed to industrialize once more despite the industrialization drive of the 1920–1930s, which had destroyed its traditional society, and after the country had achieved global leadership in some industries and industrial products in the 1960–1970s. The task of a new industrialization in such a context encounters three main hurdles.

First, it runs counter to the main thrust of the public discourse, threatening to undermine the belief of most citizens that Great Russia is a mighty industrial power as it is. It is instructive to look at how much attention the government is giving, for instance, to the defence sector or local large-scale industry support. It implies that all is well with the industrial development vector and that government policy in recent years has brought about a change for the better in this sphere. Any attempt to debunk this myth cannot be welcome to the elites who are interested in the proverbial »stability« and stress continuity between Soviet and Russian societies. The task of industrializing a previously industrialized economy seems to be an oxymoron. It is to be noted that this phenomenon is not unique to Russia: there were many instances in the twentieth century when uncompleted modernization backfired, making the society in question unreceptive to new attempts at modernization (there were particularly many such instances in Latin America), thereby condemning it to either permanent stagnation (Argentina) or protracted decline (Venezuela).

Second, for the Russian public mind, industrialization is closely associated with mobilization: during each explosive period of industrial growth, the authorities broke mercilessly with prevailing social routines. From Peter the Great to the Communist leaders, industrialization caused deprivation and put the utmost strain on all of society's sinews. This is only natural: virtually all successful modernizations required curtailed current consumption and strict government regulation. It suffices to look at the Asian countries where, during the first decade of the contemporary industrial revolution, the population's real incomes showed almost no growth, and it becomes clear that such a policy will not be supported by the current Russian leadership, whose popularity is due to generous handouts and certainly not to its ability to mobilize broad masses for economic transformation, which always involves deprivation. Industrialization as a major social project in no way chimes with political »stability«; indeed, it will be recalled that all authoritarian modernizations have sooner or later ended with abrupt political change.

Third, »historical memory« plays an important role, setting parameters for Russia's potential industrialization, rendering it meaningless from the very start. In the Soviet Union, industry developed within the framework of a planned economy, which always disregarded efficiency as conventionally understood. The resulting dead-end was very much due to a desire to »conquer« nature and space, to locate the manufacturing base in barely accessible areas, where it would never have been located in a market economy (it is notable that according to K. Gaddy and B. Ickes (2013: 38 pic. 3.1), during the past hundred years the ambient temperature for the average Canadian has grown by 1.2°C, whereas for the average Russian it has fallen by 1.0°C). What is now being proposed under the guise of »industrialization« and »modernization« involves unfeasible projects similar to those of the Soviet period: from a bridge over to Sakhalin and a tunnel under the Bering Strait to an upgrade of the Baikal-Amur Railway or construction of the »Force of Siberia«. Having had one failed industrialization, we can easily repeat its errors, and the more authoritarian Russia's government is, the greater the likelihood.

Thus, the author ventures to claim that Russia is an extremely unsuitable place for industrialization: the entrenched questionable experience of industrial revolutions (none of which was organic) is combined here with nihilism due to an illusory feeling that we are well versed in all these matters, complemented by the authorities' unwillingness to shatter the social peace. For all these reasons, from the historical, ideological and worldview perspectives, Russia has none of the prerequisites needed today for a new industrialization.

3. Economic Factors

The second, fairly diverse set of hurdles is due to purely economic factors, although all of them, doubtless, are linked to political factors and to »peculiarities of the national elite«.

First, the privatization of the 1990s is, in my view, a major obstacle to a successful industrialization in Russia. Its primary outcome was that the new owners got control over enormous assets at extremely low cost (a 51 per cent stake in Norilsk Nickel was bought for \$170 million, a 51 per cent stake in Sidanko (later the Tymen Oil Company) for \$130 million, a 51 per cent stake in Sibneft for \$100 million and a 40 per cent stake in Surgutneftegaz for \$89 million, with many large industrial enterprises bought for only a few million US dollars³). The problem is not that the state received less than its due from the privatization, but that the core of the economy in the 2000s was formed by dirt-cheap assets that repaid the owner's stake within the first few years of their operation. This became a powerful disincentive for investment: each potential investor realized that he would have to spend billions of dollars to compete with those who got their assets almost for free. To survive in this situation, state-of-art management methods were needed, which were not available to everybody. In other words, the privatization carried out in the interest of the oligarchic class continues to weigh on economic strategies 20 years later, discouraging many new players from industrial investment (isn't it ironic that since the break-up of the USSR the »energy superpower« has had only one new oil refinery built?⁴). Unlike Russia, the People's Republic of China (where the new industrial revolution has been by and large successful) opted to keep its industrial giants as state-owned enterprises (Sheng, Hong and Nong, Zhao 2012), while providing incentives for setting up new firms operating within a purely market logic. The latter helped to unleash private initiative in the industrial sector rather than nip it in the bud.

Second, Russia did not come up with a strategy of accelerated industrial growth at an early stage and therefore no one was wondering what could become its basis. As a rule, various historical periods saw developing countries spurring economic growth either through massive redistribution of funds from one sector to another (as, for instance, during Stalin's industrialization, which brought the village to ruin) or by making certain resources (such as the workforce in China and other countries of South-

³ See: »Loans-for-shares auctions in Russia« (in Russian) on: www.ru.wikipedia.org/wiki/Залоговые_аукционы_в_России (04.03.2016).

⁴ See: www.oilrusi.ru/information/segodnia/ (14.04.2013).

East Asia) artificially cheap. Following the collapse of communism, Russia had two relatively cheap resources available: a skilled workforce and natural resources. This could well have been a starting point for a »new industrialization«, but the government was not going to use either resource cheaply. Providing cheap input materials could help industrial growth and attract foreign investment, but the government, on one hand, was close to the commodity oligarchs and derived its main revenues from natural resource rent redistribution, and on the other, needed popular support, buying people's loyalty by raising incomes. It is this possibility of raising the living standards of the non-producing classes through direct redistribution of revenues from the extraction and export of natural resources that has become the basis of Russia's economy. This has done nothing to encourage the development of manufacturing industry or shift the centre of gravity of taxation to the industrial sector. Simply put, instead of putting people to work using cheap Russian natural resources and available foreign technology, the Russian government deliberately opted for direct redistribution of natural resource rent. The country's authorities invariably gave the go-ahead to creating monopolies that were selling Russian commodities in the domestic market, sometimes at higher prices than outside Russia (when in 2007 the Federal Anti-Monopoly Agency allowed the creation of OJSC Rusal, one condition was that its Russian market aluminum prices not exceed LME prices by more than 5 per cent (Rybak 2007: A2). Needless to say, Russia did not repeat the Chinese economic miracle and there is no chance of that in future because, given the turbulence in the world commodity markets, the Russian government will try to raise price levels inside the country, bringing its competitiveness down even further, whereas the business environment in other countries will only improve.

Third, the Russian economy – as managed by the current government – has been developing as relatively autarkic. It is geared towards exporting primary commodities and importing finished high-tech manufactured goods. Industrialization in this setting is seen solely as a way of reducing dependence on external supply, promoting the currently popular notion of »import substitution«, but no more than that. Russia is unique also in the fact that even its so-called »free economic zones« have been created in order to increase the supply of goods to the domestic market (for example, the free economic zone in the Kaliningrad region), and not for exports, as is the case everywhere else. This creates a problem noted some time ago by Jagdish Bhagwati (2004: 180): modernization cannot succeed in closed economies because autarky reduces competition, whereas »a new industrialization« involves enhancing competitiveness. Statistics confirm his thesis that a national economy's integration into the world economy

is today a prerequisite for successful industrialization. Russia at present does not have – and is not going to have in the near future – a market sufficient to absorb industrial products in volumes able to create sufficient economies of scale (it may be recalled that at an early stage of South Korea's industrialization, a car-making plant was built that was capable of producing twice as many cars as the number of cars registered in the country at the time; Islam and Chowdhury 1997: 8). Therefore, the only way for the country to reindustrialize is to attract foreign manufacturers with extensive distribution networks and to build up exports of finished manufactured goods under major international brands. But, as we know, Russian government considers the country to be surrounded by enemies and is therefore pursuing a policy based on achieving even more autarky. Given that the domestic market is rapidly contracting and that hopes of a change of political direction are illusory, it is practically certain that attempts at industrialization are not going to succeed.

There are several other, primarily economic factors that make a successful »new industrialization« in Russia unfeasible. However, foreign policy factors are no less significant.

4. Russia's Relations with China

The third group of hurdles concerns the nature of Russia's relations with her – at present – closest ally.

Russia's current foreign policy does not lie within the scope of this analysis, although it is having a major negative – and counter-modernizing – effect. One point is worth making, though.

Every successful contemporary attempt at industrialization has involved a partner – a country that is not only politically friendly, but, much more importantly, both a major market for the other country's manufactured products and a supplier of investment and technologies needed for accelerated development. While in the United States or the EU, the share of manufactured goods exported does not exceed 8–9 per cent of GNP, in China, in the mid-1990s, this indicator was as high as 21 per cent, in Indonesia 22 per cent, in the Philippines 24 per cent, in Korea 27 per cent, in Thailand 30 per cent, in Taiwan 42.5 per cent, and in Malaysia a huge 78 per cent (Goldstein 1998: 27).

In the 1980s, the economic growth of Korea and Taiwan of 42 and 74 per cent, respectively, was driven by the purchase of those countries' manufactured goods by the United States alone (Thurow 1993: 62). In Mexico, in the same years, US imports contributed almost 85 per cent of the former's positive trade balance (Reich 1988: 56). Having such a partner is a necessary condition for a successful industrialization.

Russia, however, for purely political reasons, having »pivoted« away from Europe (a welcome market today for successfully industrializing former Warsaw Pact member states), has now turned to China, the major industrial economy least interested in Russia becoming its competitor. There is a lot of evidence of this: since the first half of the 1990s, China has consistently been reducing the share of manufactured goods in its imports from Russia, increasing the share of primary commodities (the former has now fallen below 3 per cent and the latter has reached 75 per cent, exceeding the respective indicator in Russia's trade with the European Union). China is the major potential consumer of Russian oil and gas produced in Eastern Siberia and in the Far East. However, even within the programme of cross-border cooperation adopted in 2009, the Russian side has failed to persuade its partner to build even one deep conversion refinery on Russian territory. Similarly, there has been no boom in Chinese investments in industrial assets in other regions of Russia. The conclusion, in my view, is evident: successful industrialization involves close trade and investment links on the part of an industrializing country with a country or countries of a markedly higher level of development, which perceive the industrializing economy not as a competitor, but as either complementing their own economies or as opening up significant opportunities for investment or technology transfers.

The Sino-Russian alliance – or, to be more exact, Russia's riding on China's coattails – does not involve an interaction of the kind described above. It is almost a unique case of a leading (at least, larger) economy uninterested in its satellite's development and disinclined to do anything to promote the latter's accelerated progress. The most China can do is to facilitate purely quantitative growth of Russia's economy without any structural changes, which makes one ponder whether the economy matters at all to the Russian elite in choosing a foreign policy course and allies in the world arena. Without pursuing this topic further, one may conclude that the foreign policy positioning and the choice of allies is one more obstacle in the way of Russia's »new industrialization«.

5. Russia's Political Elite and Bureaucracy

The fourth set of problems is directly related to the main characteristics of the Russian political elite and bureaucratic class.

First, the Russian elite is what one might call a »commodity« elite, focused on maintaining control over the commodity sector of the country's economy, maximizing revenues for the budget and redistributing budgetary flows. It should be noted that this is not inherent in Russia, but rather a new historical phenomenon, overlapping Putin's tenure. In my view, it

was brought about by a disastrous error made in 2002, when the Mineral Extraction Tax (MET) and a new export duty regime were introduced: a nexus began to emerge between the state bureaucracy and the commodity oligarchy, alongside the concept of a rent-based economy (for domestic consumption) and an »energy superpower« (for external use). The Putin era has seen the most dramatic rise in the share of mineral products in Russia's exports: from 53.8 per cent in 2000 to 71.5 per cent in 2013.⁵ Given complete oligarchic–bureaucratic unity, it is hard to promote ideas of industrialization that would curb the commodity oligarchs' appetite. The very idea of an »energy superpower« implies, essentially, that any policy for purported industrialization or modernization will inevitably be a sham or a cheap propaganda exercise, simply because it is impossible to industrialize the country without the interests of commodity businesses being negatively affected.

Second, the elite is bound to the former Soviet Union, not in terms of ideological preferences and quality of intellect, but in terms of the material assets on which its prosperity is based. Among the top 100 Russian companies (in terms of market capitalisation), 74 are using almost exclusively Soviet-time fixed capital assets (compared with 30 corporations included in the Dow Jones Industrial Average, while in China, among the top 100 companies by market capitalization, only four are critically dependent on production assets commissioned 25 years ago or earlier) (Inozemtsev 2015). One can therefore understand why the Russian elite is unwilling to accept any change: the more significant the changes will be, the greater the risks to be faced by old enterprises, which are bound to lose out to competition. The present-day Russian elite is not contemplating industrialization, not just because it would challenge the role of the commodity sector, but also because it would enhance competition in industry in general. This also explains a generally negative attitude to foreign investments in the industrial sector: after they provided, in the 2000s, the minimally required production quality standards in some consumer-oriented industries, their inflow virtually came to a halt.

Third, the Russian bureaucratic apparatus is operating in such a way that corruption is not a side effect, but its key motive. »Corruption vertical« is the basis of the »power vertical« effectiveness in today's Russia (Krastev and Inozemtsev 2013). However, corruption on such a scale is practically incompatible with industrial development for two reasons. On one hand, the share that government officials wish to appropriate is

⁵ Rosstat data, see: www.gks.ru/bgd/regl/b14_13/lssWWW.exe/Stg/d04/26-10.htm (in Russian) (04.03.2016).

growing as the regime strengthens, and if this money is received not via rent distribution, but via extortion of industrial firms, the latter quickly become uncompetitive (a case in point is road and infrastructure construction which has been made so costly by corruption that it has virtually stopped). Even today, the official tax burden on business in Russia is comparable with that of developed countries (47 per cent of income vs 48 per cent in Germany and 43.9 per cent in the United States⁶). If corruption is factored in, which increases the tax burden by at least one third, it becomes clear that only highly monopolized production companies can survive in such an environment, which contradicts rapid industrial development (mass establishment of state-owned corporations proves that). On the other hand, the bureaucracy should have a basis for corruption – in the Russian context this is its regulatory function: the more rules and norms there are for businesses to comply with, the easier it is to keep businesses on the hook. That is why there are still technical regulations and standards dating back to 1970s and an unwillingness to adopt regulatory norms corresponding to those used in Europe or OECD countries, while taxes have been amended or supplemented, on average, every two weeks over the past five years. The issue here is that industrial manufacturers have to renew their product lines at a fast pace and this is rendered virtually impossible by the domination of bureaucratic rules. Thus, it is the political elite, erecting its »power vertical«, that is deliberately condemning Russia to commodity supplier status.

Fourth, developed industrial production inevitably goes hand in hand with concentrations of well-organized masses of people; it is the emergence of industry that gave birth to the modern workers' and trade union movement. In Russia, however, the political elite is able to manipulate society primarily due to its fragmentation; its strategy is based, as a rule, on forceful suppression of collective action (Inozemtsev 2010b). There are many instances that show how sensitive the Russian authorities are to any activities by the independent trade union movement or anything tantamount to labour consolidation. This is another factor (not the principal, but a significant one) preventing accelerated industrialization. Historical experience, notably, shows (for example, South Korea and Taiwan) what the fate of many members of the ruling elite can be when industrialization brings about the emergence of a strong middle class, independent of government structures (which in Russia primarily consists of government employees), democratic development and the emergence not only of

⁶ Calculated using: *Paying taxes 2016* on: www.pwc.com/gx/en/services/tax/paying-taxes-2016/overall-ranking-and-data-tables (03.03.2016).

economic, but also of political competition. This is why industrialization (and more broadly, modernization) is not on Russia's agenda today.

Finally, Russia's political elite, over the past decade, has been operating by means of »negative selection«, based on a tacit loyalty-for-incompetence swap (Inozemtsev 2011). This allows the elite to feel inured to change, but at the same time, of course, drastically drags down efficiency, which is key to developing the industrial sector. It is no exaggeration to say that, politically, contemporary Russia is neglecting efficiency, while favouring stability. Such an approach, in my view, is essentially incompatible with modernization, because the latter (and industrialization as its major component) puts its prime emphasis exactly on the notion of efficiency, making all the other factors less significant. Shifting the emphasis to efficiency in contemporary Russia is taboo for politicians and officials, because none of them is used to (and most are incapable of) working in an environment in which efficiency is the main criterion for appraising the performance of government officials. Therefore, the system is most likely to sacrifice industrialization and efficiency, and opt for keeping the hierarchical governing structure unchanged.⁷

6. Alliance Against Change

The fifth and final set of factors making industrialization in Russia unlikely is the historically unique state of public consciousness in the country, precluding reform (and assiduously maintained by the government).

Historical experience shows that any successful modernization involves awareness on the part of both the elite and the citizens of the unacceptability of the status quo and the need to change it. The latter requires, on one hand, an analysis of past mistakes and, on the other, an understanding that modernization means catching up with countries that are more successful and advanced. »Modernization« can be interpreted as bringing up to date and therefore recognizing a country's somewhat deficient current condition. Without such awareness, modernization (and industrialization as its major element) cannot succeed, because it can bring about only temporary advances that can be easily dismantled if the political course changes. Russia, in this regard, is a perfect example of failures: every century, the country has made an attempt at modernization (and sometimes more than one), only to start discussing a new modernization.

⁷ Unlike most Russian liberally-minded experts, this author will not touch upon such existing issues as accountability of power, transparency of contractual relations, judicial independence from the executive power, etc. – all these factors matter, but they have been discussed for many years, and to repeat what has been said appears a mere waste of time.

The reason for this is the elites' lack of understanding of the need for modernization and the populace's lack of interest in it. Modernizations succeed where a country's authorities decide that it should do away with the past and focus on the future and are capable of getting the citizens interested in change. Lee Kuan Yew in the 1960s, Deng Xiao Ping in the 1980s and Fernando Cardozo in the 1990s implemented this very strategy.

In Russia, however, one sees a diametrically opposite approach, along both »vectors«. The authorities acting within the obvious populist paradigm can in no way admit that the situation in the country is close to being catastrophic (on the contrary, they claim that Russia has »got off her knees« and is about to surpass her main opponents). This fact alone is enough to discredit modernization (because this term has never been used with reference to countries in the vanguard of progress). Even more so, ideological elites are searching for lines of historical continuity linking them with the Soviet Union, whose heroic image is becoming the main official propaganda tool. Naturally, if the people are being convinced that they are about to achieve a perfect state, what sort of modernization could make sense to them? Besides, populism requires emphasis on wealth distribution and a patronizing role for the state, whereas modernization involves massive investment and limits on consumption growth. Thus, the authorities' unwillingness to desacralize the past and the fact that most people are not ready to limit current needs for the sake of the future appear to be the final and most important reason why a »new industrialization« is not on the cards in Russia, now or in the near future.

7. Conclusion

Unlike most Russian and international experts, this author does not consider the country's current situation as catastrophic. Although many experts say that »time is slipping away« and Russia is stuck on the sidelines of progress, one can take an optimistic view of the country's future, for one particular reason. Looking at the history of successfully modernized countries, one sees that they, as a rule, started rapid industrial development from a very low base, with both living standards and the state of government institutions really catastrophic. In the mid-1950s, South Korea was poorer, in terms of per capita GNP, than the then British Kenya; but where is Kenya now and where is Korea? Every country and every people, if they follow well-known rules and long-tested strategies, can find within themselves resources and motivation for rapid industrial (and economic) growth. Whatever alter-globalists claim, the world economy is open, and it is not those who are barred access, but those who themselves choose to be outcasts that drop out of it. Therefore, the sole significant prerequisite

for industrialization is the awareness of the vast majority of Russians that Russia needs to modernize itself, whatever the cost. Nobody can predict today when this awareness will come. But, should it come, Russia, beyond any doubt, will be capable of change, and there will be no stopping her on this road.

Literature

Bhagwati, Jagdish (2004) *In Defense of Globalization: How the New World Economy Is Helping Rich and Poor Alike*, Oxford, New York: Oxford Univ. Press
Gaddy, Clifford and Ickes, Barry (2013) *Bear Traps on Russia's Road to Modernization*, London, New York: Routledge.

Goldstein, Morris (1998) *The Asian Financial Crisis: Causes, Cures, and Systemic Implications*, Washington (DC): Institute for International Economics.

Inozemtsev, Vladislav (2010a) 1985: Looking on the Present, in: *Svobodnaya Mysl* (Free Thought), No. 9 (in Russian); English version: Inozemtsev, Vladislav. 'Nineteen Eighty-Five' in: *Russia in Global Affairs*, Vol. 8, No. 4, October–December 2010, p. 9.

Inozemtsev, Vladislav (2010b) Russie, une société libre sous contrôle autoritaire, in: *Le Monde diplomatique*, 2010, No. 10 (Octobre), pp. 4–5 (German version: Inosemzew, Wladislaw. Putins Freiheit, in: *Le Monde diplomatique*, 2010, No. 10 (Oktober), pp. 1, 16–17.

Inozemtsev, Vladislav (2011) Neo-Feudalism Explained, in: *The American Interest*, 2011, Spring (March–April), Vol. VI, No. 4, pp. 73–80.

Inozemtsev, Vladislav (2015) What pulls us back to the USSR? Not FSB or 'United Russia', in *SLON*, 20 May. Online: www.slون.ru/posts/51710 (03.03.2016).

Islam, Iyanatul and Chowdhury, Anis (1997) *Asia-Pacific Economies: A Survey*, London, New York: Routledge.

Krastev, Ivan and Inozemtsev, Vladislav (2013) Putin's Self-destruction, in: *Foreign Affairs*, June. Online: www.foreignaffairs.com/articles/139442/ivan-krastev-and-vladislav-inozemtsev/putins-self-destruction (03.03.2016).

Reich, Robert B. (1988) *Tales of a New America*, New York: Vintage Books.

Rybak, Konstantin (2007) Anti-Monopoly Agency gives go-ahead to "Rusal", (in Russian) in: *Vedomosti*, January 19.

Sheng, Hong and Nong, Zhao (2012) *China's State-Owned Enterprises: Nature, Performance and Reform*, Singapore: World Scientific Publishing Co.

Thurow, Lester (1993) *Head to Head. The Coming Economic Battle Among Japan, Europe and America*, New York: Warner Books.

THE SHIFT OF THE RUSSIAN ECONOMY TO NATIONAL CAPITALISM

David Lane

Introduction

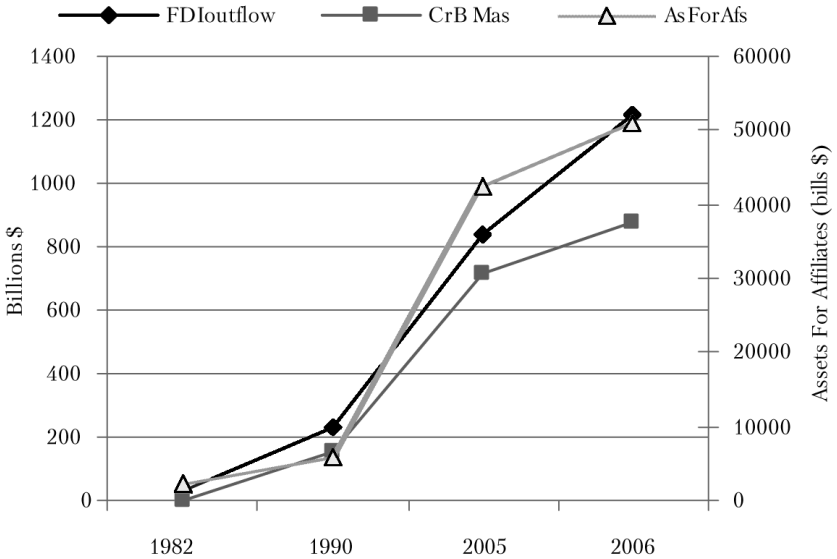
The economic driving forces of world capitalism are economic corporations. Significant differences in the geographical dispersion of multinational corporations provide a basis for the rise of neoliberal and alternative forms of capitalism. Here the composition of large multinational corporations in Russia is shown to have a different profile from those in hegemonic globalised states. Under national capitalism, the state regulates national capitalist interests and protects them from global competition, while concurrently accepting responsibility for national well-being. Based on study of company boards of directors, Russia's global companies are shown to contain powerful national constituents and companies favouring a neoliberal course have weaker domestic political backing. Nationally based business and administrative groups provide the foundation for national capitalism, while concurrently – and inconsistently – favouring elements of neoliberalism. It is contended that Russian national capitalism would be more coherent and developmental if policy prioritised public welfare, with state-sponsored and controlled investment. Changes in the existing structure of companies are suggested to promote a more developmental form of national capitalism.

1. The Uneven World System

Developments since the last quarter of the twentieth century have included a significant de-territorialisation of national capitalisms. This means that developments in the hegemonic capitalist states have shifted the ownership and location of major corporations from nation states to a transnational form. Globalisation entails a significant change in the structure and scope of the business corporation. Here I outline the significance only of the global reach of firms that »colonise« domestic companies through takeovers and mergers. They create wealth in the form of investment and employment in the host country while repatriating profits.

Foreign direct investment (FDI) is the crucial link that gives transnational corporations a multinational character. It grew exponentially between 1982 and 2006. Figure 1 shows the growth of FDI outflows, cross-border mergers and acquisitions and the consequent rise of foreign affiliates of transnational companies. The increase in the number of foreign affiliates and their contribution to company sales were of great significance.

Figure 1. FDI outflows, cross-border mergers and acquisitions, total assets of foreign affiliates, 1982–2006



Notes: FDI – Foreign Direct Investment; CrB Mas – Cross-border mergers and acquisitions; AsForAfs – total assets of foreign affiliates. Values at current prices (billion USD); left hand axis (billion USD). FDI outflows and cross-border mergers; right hand axis: total assets of foreign affiliates (billion USD).

Source: UNCTAD, World Investment Report (WIR) 2007: 9.

In the initial aftermath of the dismantling of the state socialist system in Europe and the USSR, it was expected that the post-socialist states would become part of the neoliberal world system. However, significantly different trajectories followed for those countries that joined the European Union (the New Member States) and the Commonwealth of Independent States (CIS). Of key importance as driver of globalisation is the penetration of transnational companies. The number of foreign affiliates hosted in the New Member States and CIS, and comparisons with South America, are shown in Table 1. The New Member States, with a much lower population, have thirty times more TNC affiliates than the

CIS.¹ These differences have significant implications for the class and elite structure, as well as for the kind of economic development which is possible. The countries of the »core« of the world system prevail in the ownership of TNCs.²

Table 1. Affiliates of transnational companies: South America, CIS and New Member States of the EU (2010)

Country	Number of affiliates in host countries
USA	27251
UK	45466
NMS EU	130430
South America	10349
CIS	3487

Source: UNCTAD, WIR Web table 34. Accessed January 2014.

By 2010, only 116 parent corporations and 2,139 affiliates were based in the Russian economy.³ As we see from the comparisons shown in Figure 2, the quantitative difference between levels of economic penetration in the New Member States and the countries of the CIS represents a qualitative break. Moreover, in Russia significant foreign direct investment is spatially concentrated and overwhelmingly allocated to the raw materials sector.⁴ As shown in Figure 2, very few *parent* transnational companies are found in the post-socialist states and (except for China) in the BRICS countries.

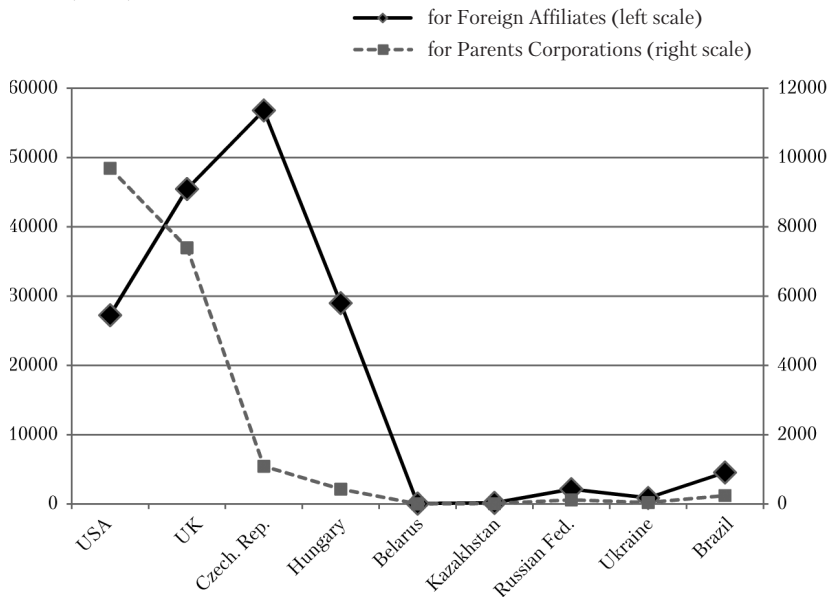
¹ In these tables 'CIS' refers to Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. New Member States here include Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, and Slovakia. Slovenia, Romania.

² Transnational corporations (TNCs) are constituted of parent enterprises and foreign affiliates. A formal definition of a transnational corporation (TNC) is that it is »an incorporated or unincorporated enterprise comprising parent enterprises and their foreign affiliates. A parent enterprise is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake.« A foreign affiliate is an incorporated or unincorporated enterprise in which an investor, who is a resident in another economy, owns a stake that permits a lasting interest in the management of that enterprise (an equity stake of 10 per cent for an incorporated enterprise, or its equivalent for an unincorporated enterprise). In World Investment Report (WIR), subsidiary enterprises, associate enterprises and branches are all referred to as foreign affiliates or affiliates. World Investment Report 2005 (WIR 2005), UNCTAD, Geneva 2005: 297.

³ These are data taken from UNCTAD. Such data are incomplete but they are sufficient to show general trends.

⁴ For data on destinations of foreign investment see: Fed Sluzhba gos statistiki, Rossiyski Statisticheski Ezhegodnik 2011. Moscow, 2011 Table 23.21.

Figure 2. Number of parent corporations and foreign affiliates, selected countries (2010)



Source: For 2010, UNCTAD, Webtable 34. [unctad.org.wir. \(Annex tables\). http://unctad.org/Sections/dite_dir/docs/WIR11_web%20tab%2034.pdf](http://unctad.org/Sections/dite_dir/docs/WIR11_web%20tab%2034.pdf)
 For earlier years see: World Investment Report 2007. UNCTAD, United Nations, New York, Geneva, 2007: 217–218.

Another indicator of a country’s transnational standing is the number of companies listed on the stock exchange, which allows takeovers and mergers to take place. Compared with neoliberal economies such as the United Kingdom and United States, Russia comes well down the list. When valuation is expressed as a percentage of GDP, the ratio for Russia was 43.4 (the same as Germany) and China was 44.9, compared with the United States’ 114.9 and the United Kingdom’s 122.7 (data average 2009–2013).⁵

A third measure is the economic transnationality index (TNI), which measures the contribution of foreign corporations to the national economy. It has four components: FDI inflows; FDI stocks; value added by foreign companies; and employment of foreign affiliates. The New Member States, consequent on the conditionality imposed by the European Union,

⁵ <http://data.worldbank.org>. Table market capitalisation of listed companies as a percentage of GDP.

have all become highly integrated into the world economy: the Czech Republic's TNI was 33 and Hungary's 33.5, while Estonia registered a massive 49.5. In these countries, political power no longer resides in the nation state and they have very little political room to manoeuvre. The members of the EU have quite a different legal and political constitution compared with sovereign states: they are member states of the European Union. By comparison, the BRIC countries and Belarus had much lower levels of dependency (between 3 and 13, Russia 11.5) and below the levels of globalised economies such as the United Kingdom (with a TNI of 22).⁶

The term »semi-core« better captures the economic and political status of countries such as Russia, China, India and Brazil. Semi-core countries have formed their own transnational corporations that have outgrown, and should not be conflated with, their own national companies. They are also host to the affiliates of transnational corporations. In the semi-core countries, this three-sided economic conflict leads to contradictory economic dynamics and also to shifting allegiances between political elites.

The upshot of developments is that some countries are much more open to foreign investors than others. For those that are open, the consequence is that transnational companies capture the economic assets of nation states. Privately owned assets within a state remain the property of state nationals and are subject to state laws, whereas globalised companies transfer ownership rights outside the nation state. Control of national assets then passes to foreigners whose interests are global, not national. Hence decisions about investment, employment and so on are made in quite a different context for transnational compared with national corporations.

The accumulation of capital in the host country declines. Other things being equal the surplus available for investment falls within the country as it is exported. The global company can use the surplus for profit in the most profitable place and in practice there is a shift in the value chain. Global companies are also subject to the influences of the governments of countries in which they are registered, and less so where they have affiliates. Earnings from exports are channelled offshore and distributed by the parent corporations; in some cases, profits are used for speculation or for conspicuous consumption. Between 1990 and 2010, 798 billion USD was transferred from Russia to foreign tax havens, as against a total national debt of 489 billion USD in 2010.⁷ Countries with low foreign penetration are more likely to have conditions enabling national capitalism to develop.

⁶ http://unctad.org/Sections/dite_dir/docs/wir2008_transnationality_chart_en.xls

⁷ Data cited in David Lane, *The Capitalist Transformation of State Socialism*, London: Routledge 2014: 238.

Ruling elites in Russia have to be more responsive to domestic constituencies and less to globalising ones that lack veto power over the domestic political elite.

The role of the media is also crucially different. In the West, the globalisation of communications and the growing monopolisation of channels by multi-media corporations that are global in scope and able to exercise control over information have reinforced neoliberal ways of thinking and behaving. Whereas the major media channels in Russia have to contend with global TV transmissions from outside, Russia's mass media are predominantly domestically owned and the state is able to exert significant control. Neoliberal academic, cultural, political and economic values remain part of a counter elite culture. These have been rather weakly articulated around Dmitri Medvedev.⁸ In Russia, the liberal globalising counter elite – which looks to, and has received support from, Western neoliberals – is limited by the constraints imposed by the political administrative elite and the national capitalist class. Russia under Putin has moved out of the sphere of domination by the hegemonic Western core and is entering into a social formation with significant state involvement in the economy. As we have seen, the presence of Western multinational corporations is relatively weak, which is further demonstrated by the membership of boards of major Russian companies.

In Russia, the political administrative elite has a significant influence over the economy, giving rise to a quite different nexus between the economic and political elites than the one found in Western hegemonic countries. A key measure of these differences is the composition of the boards of transnational companies.

2. National and Global Leadership of Global Corporations

In the core Western industrialised countries, the social composition of the boards of directors of transnational companies has become multinational. In 2004, out of 42 important TNCs surveyed by UNCTAD, it was found that the percentage of non-home national directors was 33 per cent for EU parent companies and 18 per cent for US based corporations. Germany retained a significant national composition, with only 8 per cent of board members being non-nationals, whereas for UK-based multinationals, out of a total of 102 directors 53 were foreign, with some 20 per cent coming from the EU and the same proportion from the United States; total US participation in EU companies was 11 per cent (includ-

⁸ Such interests are defined in David Lane, *The Capitalist Transformation of State Socialism*, London: Routledge 2014: 307ff.

ing those in UK companies). In Japan, as one might expect, out of a total of 123 directors, only three were foreign.⁹

The move to multi-national or transnational capitalism has involved a shift away from national solidarity and a national political focus. Except for Japan, Western multinational corporations have become decoupled from the countries in which their affiliates and even their headquarters are located. Their boards are multinational; direct links with domestic politics, which was a feature of national companies, have been broken; and influence has shifted from domestic to international politics. These structures reinforce neoliberal ideologies and effectively preclude national capitalism in countries that are highly integrated into the global economic system.

3. Russian Transnational Companies

Russia is different. In 2013, Russia had 30 companies in the Forbes list of 2,000 global companies (measured by sales, profits, assets and market value).¹⁰ Seven of these are in oil and gas, ten are other primary sector producers, four are in energy/electricity, three are in retail (including Aeroflot), two are media and one (Sistema) is a conglomerate. The top company was Gazprom (ranked seventeenth by Forbes), followed by Rosneft (59), Sberbank (61) and Lukoil (64). Study of the composition of the boards of these companies gives significant insights into their divergence from Western ones (as noted above). Here we consider the composition of the boards of fourteen Russian companies in the Forbes list.¹¹ Though the information is not systematic, it is possible to outline the nationality and educational background of the directors and their directorships in other companies. The objective is not to study ownership and control but to estimate the source of recruitment, the social composition and national identity of the corporate elite, noting any overlap between political and economic elites.

The results show that some companies are more open to domestic political control than others. Unlike Western based transnationals, Russian companies provide a basis for a national capitalism. One may demarcate two major trends: the major one being the development of home-based transnationals and the minor one that of cosmopolitan based transnationals.

⁹ Annex Table A.I.28. UNCTAD, World Investment Report 2004: 38.

¹⁰ Forbes Top 2000 global companies May 2013 available at: <http://www.forbes.com/global2000>. Accessed 2 January 2014.

¹¹ Gazprom, Sberbank, Rosneft, LUKOIL, TNK-BP (to 2013), VTB bank, NOMOS-BANK, Inter Rao, Aeroflot, Mechel, X5 Retail, Severstal, Rostelecom and Sistema.

4. Home-based Transnationals

Despite the attempts by Dmitry Medvedev in 2011 to reduce the representation of *chinovniki* on the boards of Russian companies, many Russian transnationals are heavily penetrated by directors who have (or had) significant positions in public administration. Russian transnationals are strongly linked to domestic politics.

Consider the following examples.

LUKOIL is the fourth largest Russian global company, ranked 64th by Forbes. It is a vertically integrated company ranging from oil production and refining to petrochemicals and electricity generation. The company retails many of its products. Unlike Gazprom, *LUKOIL* has significant private ownership. Vagit Alekperov owns 20.87 per cent of the shares (Annual Report 2012: 99), though other directors individually own less than 1 per cent.¹² (Brief biographies of some leading directors have been placed in footnotes¹³.) Pipelines and railroads used to transport oil products are state-owned; gas is transported by Gazprom, which also sells *LUKOIL* gas production. In its Annual Report for 2012, very close links are shown between its board members, the Russian government and other institutions.¹⁴

Of the twelve directors listed in the 2012 annual report eight are Russians and educated in Russia. The company is Russian but with

¹² Major owners are ING Bank (Eurasia) (75.94 per cent on 1 January 2012), Depository-clearing company 8.47 per cent, National depository centre, 5.52 per cent, SDK Garant 3.93 % and OJSC URALSIB 1.42 per cent; Lukoil claims that it has more than 50,000 individual and legal entities owning its shares. The discrepancy in the total number of shares (which sum to greater than 100) is due to the fact that directors' holdings include shares directly owned and also held through beneficiaries.

¹³ Vagit Alekperov, the President of *LUKOIL*, is one of the world's richest men. He graduated in 1974 from Azizbekov Institute of Oil and Chemistry in Azerbaijan after having worked in the oil industry in Azerbaijan and Western Siberia from 1968. He became a CEO of the production association Kogalymneftegaz of Glavtyumenneftegaz of the USSR Ministry of Oil and Gaskogalymneftegaz. He served as deputy, then first deputy of the USSR Oil and Gas Ministry (1990–1991). He became president of Langepasuraykogalymneft in 1992–1993 and chairman of the board of directors of Lukoil in 1993–2000. He has been president of Lukoil since 1993. No other directorships are shown in his biography (or for any other director) in the *LUKOIL* annual report.

¹⁴ Valery Grayfer, chairman of *LUKOIL*, was Deputy to the USSR Oil Industry Minister and head of the Tyumen main office. He graduated from the Moscow Gubkin Oil Institute. The Vice President for sales, Vadim Vorobyov, was also educated in Russia in economics; and was a Komsomol and Party worker between 1981 and 1992. Notable is German Gref who is also the Chairman of the Executive Board of Sberbank. Igor Ivanov has served in government as First Deputy Minister of Foreign Affairs of the Russian Federation (1993–1998). He is also a Plenipotentiary Ambassador of the Russian Federation.

global pretensions. It is noteworthy that the Annual Report lists the state honours bestowed on the directors, thus emphasising their national identification. Its chairman, Valery Grayfer, is a Lenin Prize (among others) winner; Alekperov has two state prizes in science and technology; Igor Ivanov has received Russian (state) prizes; Ravil Maganov has received three orders and three medals; Sergei Mikhailov has four state medals. Alexander Shokhin has been awarded an honour for »services to Russia« and a medal of the Russian Security Council for »Services to National Security«. He is one of the directors with the most significant participation in Russian politics. He was Deputy Chairman of the government of the Russian Federation, Minister of the Economy and Minister for Labour and Employment (1991–1994). He was elected to three State Dumas of the Russian Federation and was Chairman of the Duma faction »Our Home Is Russia«. He has also been President of the Russian Union of Industrialists and Entrepreneurs. Sergei Mikhailov is a director of five other companies, mainly in the banking sector.

There are also foreigners on the board. One director formerly served as director and CEO of international auditing firm KPMG; Richard Matzke is one of two Americans and was previously President of Chevron Corporation. Another American is Mark Mobius. The one Italian is also a director of TREVI SpA, and the Canadian Oil Co. A Swiss national, Ivan Pictet, is managing director of Pictet and Cie and President of the Geneva Chamber of Trade and Industry, as well as being President of Geneve Place Financiere.

Sperbank is third in Forbes's Russian top companies, just behind Rosneft in 61st place. Sperbank is majority owned by the Central Bank of Russia. It has a 100 million individual customers and 1 million business subscribers. The Board of Sperbank¹⁵ had 17 directors in 2013: six representatives of the Central Bank of Russia, two representatives from Sberbank, one external and eight independent directors. They include two elected members of its management (Herman Gref, Chairman and CEO, and Bella Zlatkis, Deputy Chairman). The independent and external directors include five academics, including Segei Guriev (Rector of the New Economic School); Vladimir Mau (Rector of the Russian Presidential Academy of National Economics and Public Administration); and a representative from Rosneft. There was only one foreign adviser: Alessandro Profumo, Chairman of the Banca Monte Dei Paschi Di Siena,

¹⁵ Data derived from: <http://report-sberbank.ru/en/ar/bank-profile/bank-profile/>. Accessed January 2014.

Italy. The remaining members of the Board are Russians, educated in Russia.

VTB bank is the former Vneshtorgbank (Foreign Trade bank)¹⁶ and is seventh in the Forbes Russian list. It is currently 75.5 per cent owned by the Russian Federation and none of its shareholders holds more than 1 per cent of its shares. It has fifteen subsidiaries in the CIS and world wide. Expansion to the CIS and previous Soviet space is a »key priority« of strategy (Annual Report 2012). Its fifteen Supervisory Board members include only two foreigners: David Bonderman, President of Texas Pacific Group Investment Fund, who also holds directorships in Armstrong Worldwide Industries and Ryanair; and Mathias Warnig, managing director of Nord-Stream AG of Switzerland, and a director on the boards of Rusal, and Bank Rossiya, Rostneft and Gasprom Schweiz. He is a previous chairman of Dresdner Bank. Other board members have strong links with other Russian banks and government institutions.¹⁷

Some of the board members are (or were) concurrently *chinovniki* holding positions in the government of the Russian Federation. Alexey Uvarov, for example, is director of the Department of Industry and Infrastructure under the government and was previously deputy Head of Division of the Ministry of Property Relations. Alexey Ulyukaev

¹⁶ Data derived from Annual Report for 2012. http://www.vtb.com/upload/iblock/87a/VTB_Annual_Report_2012_20130930_1635.pdf. Accessed January 2014.

¹⁷ Sergey Dubinin, for example, is a member of the board of directors of Otkritie Financial Group and a member of the advisory council on monetary policy of the Bank of Russia. He was formerly on the board of UES and deputy chairman of Gazprom. He has also been a first deputy minister of finance in the Russian Federation. Leonid Kazinets is chairman of the board of directors of CJSC Barkli, chairman of the Expert Council for pricing of construction under the government of the Russian Federation. He has been chairman of the Board of the Ministry of Regional Development. Andrey Kostin is its president and chairman and is also chairman of the Bank of Moscow; he is on the Council of Russian Banks and on the Board of the Institute of Directors of the Russian Union of Industrialists and Entrepreneurs. He is a previous chairman of Vneshecombank. In the USSR he was in the diplomatic service. He has a small number of shares. Other directors are on the boards of Sistema, Rosneft, ROSNO Insurance, the Bank of Russia, Avtotor and Sberbank.

Gennadiy Melikyan has held political positions as member of the Duma of the Russian Federation. He has served on the Committee of Economic Reform, as well as having positions in the USSR Council of Ministers. Ivan Oskolkov has been director of the Innovation Department and Corporate Governance department of the Ministry for Economic Development of the RF. Alex Savatyugin has been Deputy Finance Minister of the Russian Federation and a director of the Department of Financial Policy. Pavel Teplukhin is a chief officer of Deutsche Bank and a member of the Board of the Russian Managers Association. He has been managing director of Troika Dialogue, head of the Moscow office of the London School of Economics and an adviser to Jeffrey Sachs's Task Force.

is deputy chairman of the Central Bank of the Russian Federation and holds the same position in Sberbank. He is also chairman of the Russian Direct Investment Trust. He was previously First Deputy Minister of Finance of the Russian Federation. He has been a member of Moscow City Duma. Muhadin Eskindarov is principal of the Federal Institute of Higher Professional Education in the Financial University of the Russian Federation; he is on the board of TMK, the Moscow Industrial Bank, Bank Vozrozhdenie and the Russian Agricultural Bank.

As in other Russian companies, a significant proportion of the directors have higher degrees in economics and many have held positions in Russian higher educational institutions. With a leadership having overlapping members of crucial government committees, experience in the state apparatus as well as participation in other state-owned companies, the bank can be relied on to support a statist policy.

Under the post-2012 Presidency of Putin, the tide of state appointments to company boards is likely to strengthen.¹⁸ With some important exceptions, the presence of foreign directors is rare. Russian transnationals share many directors with other Russian companies. One feature which marks them out from Western companies is the greater participation of directors in other sectors, especially in higher education. Vladimir Mau, for example, is on two multinational boards, as well as being (or having been) a rector of two higher educational institutions. Others participate in the Executive Board of the Russian Union of Industrialists and Entrepreneurs, facilitating participation between state companies, state apparatuses and private companies. Overall, the Russian transnationals are not just »state« companies, but 'national' ones even under private ownership. They are subject to state leadership and predisposed to conform to the interests of the state as well as being profit making entities. In return, their directors receive honours from, and social recognition by, the President.

5. Cosmopolitan Transnationals

However, there are a number of companies, such as TNK-BP, Severstal, X5 and Sistema, which are more like Western globalising companies in composition and recruitment. Such companies have multinational boards and many of their Russian members have been educated at Western business schools. Consider the following three companies.

¹⁸ On 27 January 2014, proposals were made for the return of state officials to the boards of RusHydro, Transneft, Rosneftegaz, Russian Grids, VTB Bank, Rosselkhozbank and Russian Railways (RIA Novosti, 27 January 2014).

TNK-BP was the fifth largest Russian company in the Forbes list in 2013, though (and of symbolic significance) it was bought by Rosneft in that year. It was one of the largest non-state owned companies with significant reserves, refineries and a network of retail outlets. The board of *TNK-BP*¹⁹ had more of the characteristics of Western transnationals. Of nine directors, four were Russian and five foreign (four Americans). All had been educated in their own countries. Between them, in addition to membership of the Board of *TNK-BP*, they were members of fourteen Russian companies and twenty-four foreign ones. One non-executive director, Pavel Viktorovich Nazaryan, accounted for eleven of the foreign directorships which included companies in Belarus, Kazakhstan, the Netherlands, the United States and Cyprus. Most of the directors had worked for BP (or affiliates of BP) in previous years. In terms of education, most had pursued master's degrees in business administration. One American non-executive director (Peter Charow) had been a Fulbright scholar at Leningrad state university and had founded the US Chamber of Commerce in Russia.

X5 Retail is a retailer owning supermarkets and convenience stores. There are seven directors.²⁰ Three are Russian, one American and three West Europeans. All were educated in their own countries. They collectively have five directorships of Russian companies and four of foreign ones. Herve Defforey, the chairman, had been managing director of Carrefour and a member of its board; he also had had senior positions at Chase Manhattan Bank, EBRO Agricolos and Nestlé. Mikhail Fridman, a founder of Alfa Bank and chairman of its board of directors, is also a board member of the Council of Foreign Relations of the USA. There are no *chinovniki* on the board.

The *Severstal group* of companies is an integrated steel manufacturer and is listed on several stock exchanges. In recent years it has grown enormously and has two modern facilities in the United States. Its goal is to expand internationally; currently 35 per cent of its production from Russia is exported. The board reflects its international character. Of its ten board members in 2011, only five are Russian nationals: there are two Englishmen, one American, one German and one Serb. Alexey Mordashov is CEO of Severstal and chairman of World Steel Association (Belgium); he is head of the Russian Union of Industrialists and Entrepreneurs,

¹⁹ TNK BP Board 2011. From the *TNK-BP Holding annual report for 2011*, www.tnk-bp.ru an *repar-tbh-2011*. Biographies include directors appointed at the 2011 AGM.

²⁰ Data from Annual Report for 2012. *X5 Retail Group website*. Accessed January 2014.

serves on the Entrepreneurs council of the Government of the Russian Federation and is a member of the EU-Russian Business cooperation council as well as the Atlantic Council President's International Advisory Board. The American member, Ronald Freeman, has (at least) six directorships of foreign companies and two Russian ones; he is a member of the executive committee of the Atlantic Council. Collectively, the members mention 21 directorships of foreign companies and eleven Russian ones, though this undoubtedly is an underestimate as many »other companies« are not listed. Two of the Russian directors, in addition to their Russian education, attended business schools in Britain and the United States; many also had managerial positions in Western firms, such as Coca Cola and Sun Interbrew. This is clearly a company which sees the way ahead through global exposure.

Such differences in social and economic interests prescribe national and global legitimating ideologies. The more globalised corporations can be expected to support a neoliberal economic and political agenda. They provide a counterpoint to the statist leadership. Their presence may also explain the neoliberal thinking of some in the economic and political elites. The conflict is reflected in foreign affairs (which cannot be considered here): in Ukraine there are significant differences between globalised versus national economic interests, with the latter having greater affinity with Russia.

Elites influence rulers and their interests reflect their different sources of power: moral, economic, political and administrative. President Putin is backed by administrative control of many major companies, as well as security organisations. Concurrently, he protects the interests of the Russian bourgeoisie by not threatening the legitimacy of private property. (His conflict with Berezovsky over Yukos was not about the legitimacy of property rights, but the misuse of property rights). By adopting Eurasianism, he appeals to the moral authority of Russian civilisation, thereby procuring a popular electoral base. He presides over a developing form of national capitalism. The Russian ruling elite structure is characterised by a growing consensus around a ruling class composed of the upper state bureaucracy (*chinovniki*) and nationally-based state and private business groups.

6. The Political Elites' Dilemma

Russia's leadership faces a number of dilemmas. To move into the world economy would weaken the nation state, which is the support base of national capitalists, and concurrently neoliberal foreign inter-

ests would be strengthened. President Putin has secured limitations on foreign ownership (the seizure of Yukos is an example) making the state a major stakeholder in many – but not all – Russian global companies.

However, the globalising domestic economic elites and home-based privately-owned globalising companies (such as Mechel) seek a larger global market, which would be facilitated by neoliberal policies. Currently, this group has a much weaker political and social base and has insufficient political leverage to legitimate their interests. They provide a source of neoliberal opposition. Such groups still have influence in the political elites and account for the continuation of neoliberal policies and attitudes. For example, the basic economic presuppositions of the Eurasian Union, like those of the European Union, are free mobility of labour, capital, goods and services. This is in contradiction to the political claims of the Eurasianists for sovereignty of the nation state. It also severely limits state planning of investment and labour location. In explicitly copying the European Union, it adopts neoliberal policies, while concurrently proclaiming the virtues of national collectivism.

The current Russian ruling elite has to accommodate challenges from three counter-forces, interests located both domestically and abroad. First, foreign globalising companies which, to further their profitability, seek to take over companies in host countries; second, domestic national globalising companies with a neoliberal outlook; and third, a liberal democratic intelligentsia.

President Putin not only responds to, but regulates the national capitalist interests that retain strategic powers in the economy. Russia is moving towards an administratively coordinated state-led economy. In a global context, the country is establishing a regional economic and political bloc expressed in the BRICS, which is breaking away from the hegemonic world system. Here is an economic challenge, not to capitalism but to its neoliberal form. Unlike other states locked into a globalised economic system, Russia has the means to establish a form of national capitalism. This is an alternative form *of* capitalism, rather than an alternative *to* capitalism. It is an advance over neoliberal capitalism because it is amenable to challenge and replacement through electoral procedures. As the state has more ownership and control of the economy (than its Western counterparts) the legislature can exercise significant power over business interests.

7. National Capitalism with Developmental Characteristics

Is national capitalism amenable to challenge by a more developmentalist state policy?

Rather than to supplant the movement to national capitalism, the strategy should be to move it in a more developmental direction. This might be defined as national capitalism with developmental characteristics. The objective here would be to provide greater economic stability and development and to utilise profits for public use rather than private gain. Unlike the national form of capitalism, which prioritises production for profit, a developmental policy would put in first place full employment and social security of citizens. This might involve more public ownership, leading to longer supply chains of domestic value production. A key to further development is the level and type of investment. As the market may not find it profitable to invest at all – as returns are low and long term – the state needs to direct investment in terms of a coherent plan. Policy has to take account of geographical location to spread employment. A developmental policy could revive the practice of directive planning of major economic objectives, as well as indicative planning as the responsibility of private and state-private enterprises. The public sector would have an important and legitimate place in the economy. However, a return to a Soviet planned economy is not envisaged. Change takes place within the parameters of a market society and the retail market would continue.

Corporations would be required to fulfil obligations of social responsibility to their stakeholders unrestrained by the need to give priority to profits for shareholders. Not all private corporations could or should be brought into public ownership. But the government as a stakeholder would secure representation on the boards of large companies. Other stakeholders would include representatives of the workforce, local authorities, suppliers and retailers.

Company law should and could be amended to specify the legal obligations to the community of privately and jointly owned companies. Their economic activities would be defined in their charter. Companies do not exist only to provide profits for shareholders and rents to management. They promote economic objectives to fulfil the needs of the population. Companies would lose their charter to trade and produce if they did not fulfil their legal obligations. The legal responsibilities of company boards would enable stakeholders to monitor and, if necessary, prevent takeovers for speculative purposes.

There would be a return to greater regional self-sufficiency for many supplies of non-capital goods and services – food, repairs, clothing, build-

ing materials, and personal services – and the objective of planning would be to provide a variety and dispersion of economic activities within each economic region.

8. Conclusions

National capitalism ideologically legitimates the state with a national capitalist form of ownership; it preserves capitalism in a nationalist shell. Politically, it is elite-led and in Russia is already in place. Economically, it secures private corporations and lowers risk. Governments socialise risks and companies receive profits. Politically, national capitalism furthers social stability.

National capitalism with a developmental strategy is also an alternative form of capitalism. It enlarges the sphere of state ownership and control. By law, company charters would define the activity of companies as a responsibility to the community. »Stakeholders« are added to company boards: representation of labour, suppliers, customers, local government. The state would play a significant role in directing investment.

Is such a scenario politically feasible?

The political thrust for a move to national capitalism comes from established national economic and state interests that seek to preserve national assets from foreign control. Support for a more developmental policy comes from those negatively affected by transformation: public employees (in education, health, culture, police and military), pensioners, underpaid members of the intelligentsia, the under-employed and the unemployed. Many business groups would find it in their interest to support such a policy as they would be protected from foreign competition and would find credit through state sponsored banks. These groups would provide the ballast for a more developmental policy.

There are crucial problems that may be noted here. First, how to achieve political power? Potential support has to be translated into a social movement. The example I would use here is the success of the Scottish National Party, which combined national interest with anti-austerity policies. Second, how to address problems that were present under statist forms of socialism. Notably, how does society formulate an economic plan to promote full employment and direct investment? Third, how does one devise an economic policy and remain competitive in the international economy? State-led development is a necessary but not sufficient con-

dition for development; it is also dependent on a society's political and economic culture. However, it needs more than a plan, it requires a developmental paradigm (a theory of state, economy and society) on which policy can be built.

THE AUTOMOTIVE SECTOR IN RUSSIA – BETWEEN GROWTH AND DECLINE

Rudolf Traub-Merz

1. Introduction

Russia's automobile industry has been something of a rollercoaster ride from the very outset. Four major phases can be distinguished. In the Soviet Union the branch developed in a protected niche within a command economy, although it never came close to fulfilling its growth potential. With the end of controlled resource allocation it was plunged into the muddy waters of market competition which resulted in a deep transformation crisis. A policy of import substitution opened the door to investments by global automobile companies and set the sector on a growth path, sustained by the oil boom. Russia became one of the world's most thriving markets. The collapse of the oil price in 2014–2015 again changed the signal and wrenched the sector into a profound crisis. Russia's automobile sector is now fighting for its life with uncertain prospects.

2. The History of the Russian Automobile Branch¹

2.1. 1931–1990: *Car Production in the Soviet Union*

Russia's automobile industry had its beginning in the early years of the Soviet Union. The first cars were foreign reproductions. Primarily, small numbers of Ford Model A cars and trucks were assembled at a plant in Moscow. The first Five-Year Plan for 1928–1932 gave impetus to domestic automobile production. The Soviet government concluded an agreement with Ford to build an assembly plant in Nizhniy Novgorod. The new plant opened in early 1931, but struggled from the beginning. The production plant, renamed the GorkovskiAvtomobilnyZavod (GAZ),

¹ For a more detailed study see Traub-Merz (2015).

produced fewer »than 24,000 models [in 1932] as against a production target of 140,000« (Serious Wheels n.d.). The cooperation with Ford was discontinued in 1935 and GAZ continued production without a foreign partner.

Even before the Second World War the focus was on lorries and tractors. During the War only utility vehicles were made for the army and the Soviet Union rose to become the second largest truck producer in the world, behind the United States.

Up until the 1970s vehicle production was geared towards the needs of national defence and large state enterprises. Private demand for passenger cars very much played second fiddle. Truck building was oriented towards strength, reliability and simple technologies to meet the requirements arising from bad roads, huge distances and harsh climatic conditions. In many regards they were built for self-repair by professional drivers.

It needed the ousting of Nikita Khrushchev in 1964 and the rise of Leonid Brezhnev to bring passenger cars into the focus of national planners. Russian car production at that time was characterised by the absence of fancy designs, technical devices unchanged over decades and safety and emissions standards far behind those of Western cars. But in particular, Soviet factories found it difficult to set up mass serial production and much of manufacturing remained bound to manual fabrication.

A huge project intended to modernise production methods and target private households as customers was launched in the mid-1960s. On the basis of a cooperation agreement with FIAT an auto-city was constructed from scratch in Togliatti – named after the leader of the Italian Communist Party for his efforts to get FIAT on board – on the Volga. The production halls of the new manufacturer AvtoVaz (Volga Automobile Plant) were designed for an annual production volume of 700,000 cars. The Lada, a modified FIAT 124 model (known in many countries as the Zhiguli), became the flagship project of the Soviet automobile sector. Subsequently, sales figures soared, AvtoVaz overtook GAZ and became the largest manufacturer by some distance. With market shares of 70–80 per cent AvtoVaz vehicles attained an almost monopoly position.

The socialist state-owned enterprise found itself at the centre of a competition-free production environment. It was protected against Western manufacturers by insuperable import barriers and, domestically, allocation was dictated by annual plans. A total of 30–40 per cent of annual car production went for export to other Soviet republics and central and eastern Europe, while tens of thousands of the Lada Niva model were sold on Western markets. Given accumulated savings and lack of alternatives sales were virtually guaranteed. Soviet automobile production was afflicted only by supply bottlenecks – lack of quality or price were no obstacle

to sales. By 1985 around 15 per cent of all private households owned a car, while millions hoped to be allocated one (Gatejel 2012).

The FIAT license to manufacture the Lada was a quantum leap for Soviet automobile production. But it remained a one-off investment. Even though demand for cars surpassed supply by at least three times and waiting lists were from three to six years, no further projects were initiated. AvtoVaz stagnated at around 800,000 cars annually, while total supplies from all Soviet factories stood at around 1.3 million. Building cars on license allowed the Soviet Union to close technological gaps with Western industries. But innovation was not forthcoming thereafter. By sticking to what they knew the quality gap in relation to Western car makes in terms of manufacturing and facilities opened up again and increased constantly. In 1991, when the Soviet Union collapsed, the domestic automobile industry was characterised by substantial underdevelopment.

2.2. 1990–2005: Transition Crisis – Privatisation – Renationalisation

The transition crisis from 1990 plunged the automobile industry – like all other branches of manufacturing industry – into a profound sales crisis (Traub-Merz 2015). Car exports to other former Soviet republics collapsed because of the newly established customs and currency barriers; on the domestic market Russian companies cut back on commercial vehicles for their vehicle fleets; and private households had to cope with real wage reductions of over 50 per cent. Despite opening up to automobile imports Russian manufacturers remained the main suppliers on the sharply contracted market. The low wage costs were the main protection factor and ensured Russian suppliers price advantages in most market segments. Vehicle purchases abroad were available only to the rich.

The transition crisis ended in 1999–2000 with the onset of the oil price boom. The automobile branch's production figures began to rise again due to mounting demand. However, because real wages climbed more rapidly from this point on than gross national product and also the rouble dramatically appreciated, domestic producers lost their cost advantages. By 2005 automobile imports claimed a market share of 30 per cent with a clear tendency to eclipse domestic models. Largely stuck at the technological level of 1990, which in turn scarcely surpassed the level of 1975, Russian models were no longer competitive and the domestic automobile industry faced oblivion amidst the oil price boom.

The macroeconomic circumstances of the transition crisis were only one aspect of the automobile sector's adjustment difficulties. The other aspect emerged from »internal« enterprise policy problems. Privatisation

from 1992 in the form of voucher distribution largely benefited managements and workers. Supported by the trade unions, who did not recognise the potential of company codetermination via workers' shareholdings and shunned business decision-making, managers and former party cadres were able to accumulate the shares and began to loot their own companies. AvtoVaz supplied cars to private trading companies controlled by their managers and received payment only later, massively devalued by inflation. The company produced billionaires, while its balance sheets were deeply in the red. Investment funds were not available, taxes could not be paid and the Russian state, which had only just privatised AvtoVaz, had no other option than to acquire a majority shareholding again in a debt-equity swap and to renationalise the manufacturing giant.

What is notable about this is that the state acquisition of the majority shareholding and its resumption of influence over decision-making did not change much. The management, which had not proved up to the job, was not dismissed and the company was not adapted to the needs of a market economy. One explanation for this is the Soviet concept of regional industrial development, which created several hundreds of so-called »mono-cities« (*monogorod*). AvtoVaz itself formed the economic centre of a »mono-city« and with a total workforce of 150,000 was the only major employer in the Samara region; employment policy and the prevention of social protests in the event of possible job cuts were the government's main concern. Thus while subsidies continued to flow to maintain jobs, investment for modernisation was not forthcoming.

In the end, external intervention was called for to turn the sector's fate around. Two »interventions« were intended to tackle the sector's backwardness and the long-term subsidisation of jobs from 2005. The new policy of import substitution brought foreign manufacturers to Russia; furthermore, AvtoVaz was offered for sale to foreign investors.

2.3. 2005–2014: Import Substitution and the Car Sales Boom

Decrees No. 166 (29 March 2005) and No. 566 (16 September 2006), tightened with subsequent amendments, are classic instruments of import substitutional protection and expansion policy. Foreign carmakers obtained incentives such as reduced customs duties for production equipment and car components, tax rebates on profits and discounted prices for local inputs such as plant plots, water and electricity and other resources, if they gave up the importation of fully built-up vehicles and instead opted to establish assembly plants on Russian soil.

To avoid opening the domestic market only for CKD and SKD assembling, local content clauses were added. The share of imported vehicle

components in local assembly had to be reduced and automotive production to be localised within 5–7 years to not less than 30 per cent. Later decrees raised this to 60 per cent.

Furthermore, a minimum of 25,000 cars annually was set to qualify for the tax and duty concessions. This threshold was augmented substantially by later decrees in 2010/2011 to 300,000 units.

Interestingly, Russia did not follow the principles of import substitution adhered to by China or other countries. The decrees contained no requirements on the need for foreign investors to enter into joint ventures with local producers; nor did they request in any form the transfer of technology. The import substitution regime followed liberal principles, discriminating only between importers and local producers and providing no protection to the Russian car industry.

The import substitution regime was established amidst a demand boom for passenger cars. Russia then possessed one of the fastest growing car markets worldwide, largely financed from growing revenues from energy exports, which through various mechanisms were translated into growing per capita income. All major international car makers responded to this improved market situation with FDI (more details in following section). The global financial crisis of 2008–2009 halted this growth but it proved to be a short intermezzo and thereafter the demand for cars returned to pre-crisis levels, making the Russian market the second largest in Europe, just behind Germany.

3. Structure of the Automotive Industry in Russia

3.1. Foreign Carmakers Take Over

By introducing an import substitution policy the government conceded the failure of previous efforts to increase production and satisfy domestic demand for automobiles with a purely Russian industry. Table 1 lists the international manufacturers that have invested in Russia. Not all of them are related to the import substitution decrees. Renault built a plant as early as 1998 as the first foreign investor in a joint venture with the City of Moscow, Ford (with Sollers) and GM (with AvtoVaz) followed in 2002. All later FDI, however, was enticed to the country by the import substitution decrees. There is no requirement to operate only within the framework of the import substitution decrees. Several foreign manufacturers, including BMW, have invested in CKD or SKD plants and have imported components assembled locally by a Russian firm. Straightforward licensed manufacturing is not listed in the table.

Table 1. International auto companies' manufacturing capacities in Russia

Company	Location	Since	Ownership	Capacity 2007	Capacity 2010	Capacity 2015
Renault-Avtoframos	Moscow	1998/2012	JV/ 100% FDI	80,000	100,000	160,000
Ford-Sollers	St. Petersb.	2002	JV	72,000	100,000	125,000
GM-Avtovaz	Togliatti	2002	JV	60,000	60,000	110,000
VW	Kaluga	2007	100% FDI		115,000	300,000
Toyota	St. Petersb.	2007	100% FDI		50,000	200,000
Nissan	St. Petersb.	2007	100% FDI		50,000	100,000
GM	St. Petersb.	2008	100% FDI		70,000	Closed
PSA	Kaluga	2010	100% FDI		100,000	125,000
Hyundai-KIA	St. Petersb.	2010	100% FDI		100,000	100,000
Ford-Sollers	Yelabuga	2011	JV			200,000
Ford-Sollers	Chelny	2011	JV			200,000
VW-GAZ	Nizhny Nov.	2013	JV			110,000
Renault-Niss.-Avtovaz	Togliatti	1966/2013	Russian / JV	800,000	800,000	1,150,000
Great Wall	Mos.-Tula	2017	100% FDI			(150,000)
Total capacity				932,000	1,445,000	2,880,000

Note: St. Petersb. is St. Petersburg; JV is Joint Venture; PSA is PSA Peugeot-Mitsubishi; Yelabuga is Yelabuga (Tatarstan); Chelny is Naberezhnye Chelny (Tatarstan); Nizhny-Nov. is Nizhny-Novgorod; Renault-Niss.-Avtovaz is Renault-Nissan-Avtovaz; Mos.-Tula is Moscow-Tula.

Capacity figures given by companies are calculated differently. By running a second or third shift, it may be possible to increase the production of a firm beyond the figure stated for capacity.

Source: EBRD 2012; media reports; company websites.

Figure 1 summarises the key development features of the Russian automotive market during the period 2005–2014:

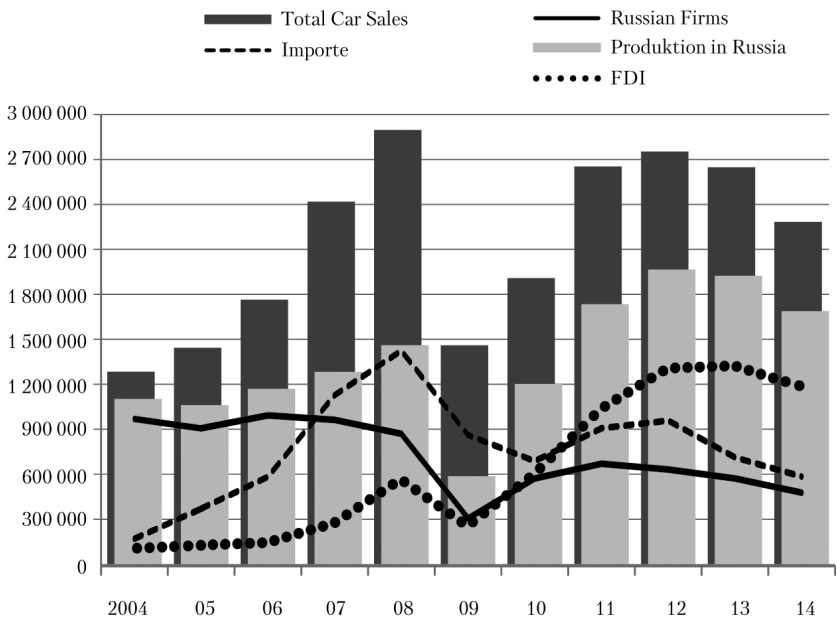
- The total market doubled in the period 2005–2008 from 1.5 million cars to just under 3 million. After the enormous sales losses in the 2009 financial and economic crisis the market picked up again and growth returned to its pre-crisis level. Since 2013 low economic growth has also dampened automobile demand.
- The fluctuations in automobile demand are very volatile and are much sharper than changes in GDP.

- The share of imports, which by 2009 had leapt to 59 per cent, receded sharply within a few years (2013: 25.4 per cent).
- The share of vehicles from Russian manufacturers, still at 60 per cent in 2005, has also fallen sharply and in 2014 was only 18.5 per cent.
- The largest suppliers are now foreign firms with production plants in Russia. Their share rose from 12 per cent in 2004 to 71.2 per cent in 2014.

Three crowding-out processes are discernible:

- (i) Imports are crowded out by local manufacturing. Import substitution functions to localise production. This process is still a long way from completion, however. In 2014 imports still had a market share of 26 per cent, so that there is still room to take import substitution further.

Figure 1. Russian car market, 2004–2014 (total sales, imports, domestic production; in units)



Note: Figures from various sources differ, partly due to different consideration of stocks. In some years, figures differ by nearly 15 per cent. However, the overall trend of the five categories is not affected and all sources agree on the general course of the trend shown in the graphic.

Source: www.OICA.net; Ernst & Young 2013; Litvinenko 2015; author's calculations.

- (ii) Foreign manufacturers are crowding out Russian companies. Import substitution favours only foreign car makers. This process has not yet reached completion, either. Russian firms supplied 487,000 vehicles in 2014 as against 1,205,000 by FDI firms.
- (iii) AvtoVaz's previous monopoly has been eliminated and the market has taken on a competitive structure. The market is fragmented, overall, so that AvtoVaz, despite a slump in production figures, remains the principal manufacturer on the market.

Unfortunately, no similarly clear-cut statistics are available on the development of the supply industry. It is clear that with the relocation of final assembly to Russia initially the import of components rose substantially.² Many international suppliers maintain long-term relationships with automobile companies and have held back from establishing their own production plants in Russia until market development for the relevant model became clearer. Under pressure to localise production automobile companies, for their part, are interested in the arrival (»family reunion«) of international suppliers with whom they maintain globally well-established relations. In this second investment wave the major component producers, such as Magna, Siemens, Bosch and Schäffler, are building up their local affiliates. In individual cases they enter into joint ventures with Russian suppliers, but often they continue to go it alone. The growth in local content is now leading to a crowding-out process also among suppliers. Foreign firms are taking parts of the market away from domestic suppliers. Localisation brings growth to the market here, too, but only with the advance of foreign capital.³

² A study on the CIS overall asserts that the »Commonwealth of Independent States ... is marked by a very impressive progression of the far-distance share. Situated in 2000 at an intermediate level of 57%, it goes up to 94.5% in 2012. This sharp increase reflects the fact that carmakers from the »historical core« set up assembly plants in this zone, whose auto parts procurements are essentially provided by far-distant located mega-suppliers« (Frigant und Zumpe 2014: 23). Ditto a statement for 2008: »the value of the market for auto components for the assembly of foreign brand vehicles in Russia in 2008 was 7.18 billion roubles (estimated). Only 10 per cent of this originated from Russian production, while the bulk of it was imported« (GTAI 2010: 20).

³ »Local firms are seemingly caught by the fact that to become a supplier to Volkswagen Group, Renault-Nissan or PSA Peugeot Citroën, a long and expensive process of certification needs to take place. The problem for many Russian vendors is that they lack a strong track record of delivering high quality components in large volumes to existing foreign customers. To gain even a handful of such contracts takes years and requires very deep pockets« (Brooks 2013).

3.2. Survival Strategies of Russian Car Makers

AvtoVaz

The government only exacerbated AvtoVaz's sales crisis with its import substitution intervention. However, it did not want to stand by and watch while the jewel of Soviet industry was finally driven into insolvency and sought a foreign partner. A first attempt to prop up AvtoVaz with foreign investors foundered in 2001 when the US automobile company GM rejected an offer of direct entry, although it was willing to agree to a separate joint venture. GM has since manufactured the new Chevrolet-Lada on a parallel production line in Togliatti.

During the boom years interest in the Russian market grew and Fiat, GM and Renault sought direct entry with AvtoVaz. The French company was awarded the contract and in 2008 came up with a capital contribution of 1 billion USD and acquired a shareholding of 25 per cent. When the global economic crisis hit shortly afterwards AvtoVaz was on the verge of collapse. Lada sales collapsed by 50 per cent to only 350,000 vehicles and over 150,000 were stockpiled.

The government, AvtoVaz's management, the municipal authorities in Samara and Renault wrangled over a rescue package. After heated arguments the parties agreed on a restructuring plan (Renault Press 2010):

- the government paid a crisis contribution of 1.67 billion euros;
- the provincial government of Samara bore the wage costs of 14,600 employees, who were outsourced to two AvtoVaz affiliates;
- social amenities that had been linked to the company since the Soviet period were transferred to the central and municipal authorities;
- Renault provided, free of charge, technology, machinery and a production platform for its cheap Romanian model the Dacia at a value of 240 million euros.

Renault emerged the winner from this dispute. In light of what followed afterwards the 2009 rescue strategy can be considered a paradigm change.

- The company has been managed on commercial principles since that time and employment policy has been solely the management's concern.⁴ Already in 2009 AvtoVaz axed around 30,000 jobs, primarily in

⁴ The government backed the restructuring package, however, by boosting sales of Russian vehicles through a scrappage premium in 2010. Russia was still not a member of the WTO at this time and thus did not violate any WTO trade conditions.

administration; further job cuts have been implemented in the meantime, in smaller increments;

- Renault has assumed the technological lead and is driving modernisation with the preparation of production plans for the B0 platform of the Dacia. This has expanded capacity at AvtoVaz by 350,000 to over 1 million cars a year. Of this production 70 per cent will benefit AvtoVaz and 30 per cent Renault-Nissan, whose own models also roll off the production line;
- Renault has assumed a majority shareholding with its Japanese partner Nissan. The Russian management is appointed under Franco-Japanese control.

A restructuring of interests took place in 2012. The newly established Alliance Rostec Auto (ARA), made up of Renault, Nissan and the Russian state received 74.51 per cent of the share capital. Renault, with a further capital injection of 742 million USD, increased its holding in ARA to 48.20 per cent, while Nissan invested 376 million USD and acquired 17.44 per cent; 36.36 per cent remain with ROSTEC, the collection point for state shareholdings (AvtoVaz Annual Report 2013: 9). The remaining 25.49 per cent held externally to ARA remain free float shares. With the alteration of the ownership structure Renault acquired a majority and was granted the right to occupy eight of the 15 seats on the supervisory board.

The acquisition of ownership control gave Renault-Nissan the right to appoint top management. Although the Russian state has a veto right it largely steers clear of enterprise management. Business policy is now determined abroad and AvtoVaz has become a regional affiliate of an international company. Integration also concerns purchasing and coordination with suppliers. AvtoVaz is part of the Renault-Nissan Purchasing Organisation (RNPO). By 2016, 80 per cent of purchases are to be effected via RNPO.

The direction that AvtoVaz was set to take was discernible as early as 2014 when the Russian automobile market collapsed again. There were another 14,000 job cuts. In an interview Bo Andersson, the first foreigner in the company's 48 year history to be appointed CEO (on 1 January 2014), set out developments for the coming years:

Productivity was 20 cars per employee per year in 2013. We should double it to 40 by year-end and 60 is our next target. (Interview Bo Anderson in Automotive News Europe, Oct. 7, 2014)

AvtoVaz is not Renault-Nissan's only foothold in Russia. Since the late 1990s Renault has had a joint venture with Avtoframos, within the framework of which various models such as the Logan and the Megane are assembled. Nissan has been in St Petersburg since 2009 where its own models, such as the Teano and the X-Trail, roll off the production lines. Taking all the production plants together the aim is to capture 40 per cent of the Russian market. Renault-Nissan seeks to use its expansion strategy on the Russian market to climb from fourth to third largest automobile company in the world.

Russia is becoming a key strategic pillar in a global marketing strategy. In this way Renault-Nissan is going well beyond the commitment of other foreign manufacturers, which to date have planned output in the range of 250,000–350,000. For them the Russian market is less important in the parent company's scheme of things. With the acquisition of Lada and its expansion strategy Renault-Nissan is now trying to raise productivity in the main plant in Russia to the international level.

GAZ

The Gorky Automobile Works has pursued a different path. The first Russian car maker – and long the second Russian producer in terms of volume – struggled after 1990 and never managed to return even close to the production figures it used to deliver under the national development plans. In 2000 it produced just 116,000 cars, which dropped to just 39,000 vehicles in 2007. In May 2009, the GAZ management tried to break out of this tailspin by hooking up with a consortium comprising the Canadian-Austrian component supplier MAGNA International and the major Russian state-owned bank Sberbank. It presented General Motors with a takeover bid for its German affiliate Opel. It was hoped that up to 1 million Opel vehicles could be built for the Russian and foreign markets. In November 2009 GM decided against bringing into being another competitor and rejected the sale of Opel.

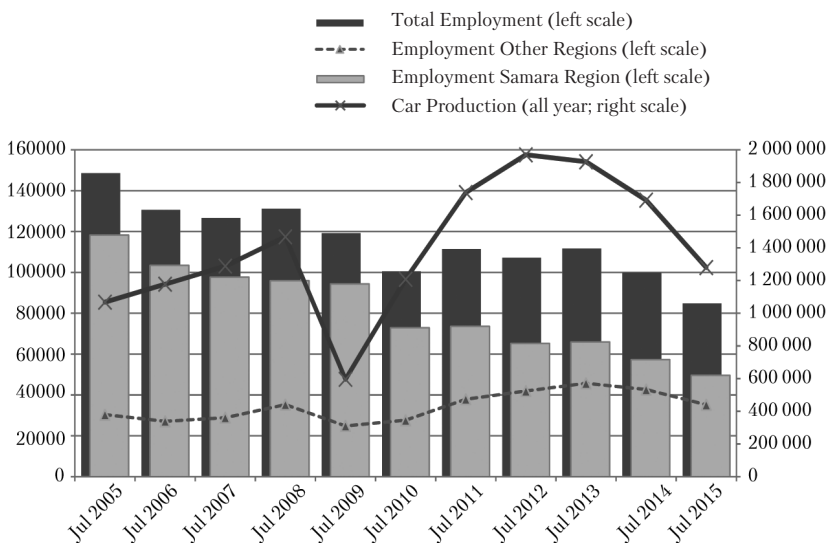
GAZ now changed tack completely. Instead of relaunching in a big way via access to foreign technology GAZ got out of manufacturing its own passenger cars completely and instead concentrated on vans. In 2012 it commenced cooperation with Mercedes-Benz at the plant in Nizhny Novgorod, where the Sprinter is assembled. Furthermore, GAZ leased free capacity to VW on license. These models are manufactured using the CKD process; the manufacture of Russian cars is not on the agenda. Although it cannot be ruled out that GAZ will get back into car produc-

tion, in the current market situation planning is concentrated on the van segment.

3.3. Employment and Car Production (2005–2015)

The import substitution–induced switch of automobile production from Russian to foreign firms went hand in hand with job cuts and productivity increases. Figure 2 shows the situation of the branch as a whole in the period 2005–2015. Although we have no separate figures for employment development in the different vehicle segments – lorries, vans, cars – lorry manufacturing in Russia is strictly subordinate and does not play much of a role here.

Figure 2. Automotive industry – employment and production, Russia, 2005–2015



Source: www.Oica.net; Spark-Interfax system; author's calculations.

Between 2005 and 2012 – the previous peak year for passenger car production – the Russian market registered production growth from 1,068,000 vehicles to 1,979,000, while total employment fell from 149,000 to 107,000. Productivity during this period rose from 7.17 vehicles per worker to 18.5 or an enormous 158 per cent. This figure is a little too high because the import substitution policy replaces Russian cars with a high local content (80–90 per cent) with foreign models with a local content below 50 per cent, on average. But even if we count only half the calculated productivity increase it is still enormous.

The enormous productivity reserves – the »labour hoarding« familiar from the Soviet Union – can be seen from a look at the production and employment situation in the Samara region. Here we have to do only with AvtoVaz as sole vendor. The job cuts more or less went hand in hand with declining sales, while productivity increases remained marginal overall. The high productivity increases in the sector were due almost exclusively to FDI.

Table 2. Avtovaz – Employment and car sales, 2005–2015

Year	Car Production	Employment	Cars / Employment
2005	721492	118283	6.10
2006	765627	103489	7.40
2007	735897	97710	7.53
2008	801563	95930	8.36
2009	294737	94343	3.12
2010	545767	72931	7.48
2011	562347	73574	7.64
2012	553232	65212	8.48
2013	495013	65946	7.51
2014	381964	57264	6.67
2015	269100	44000	6.12

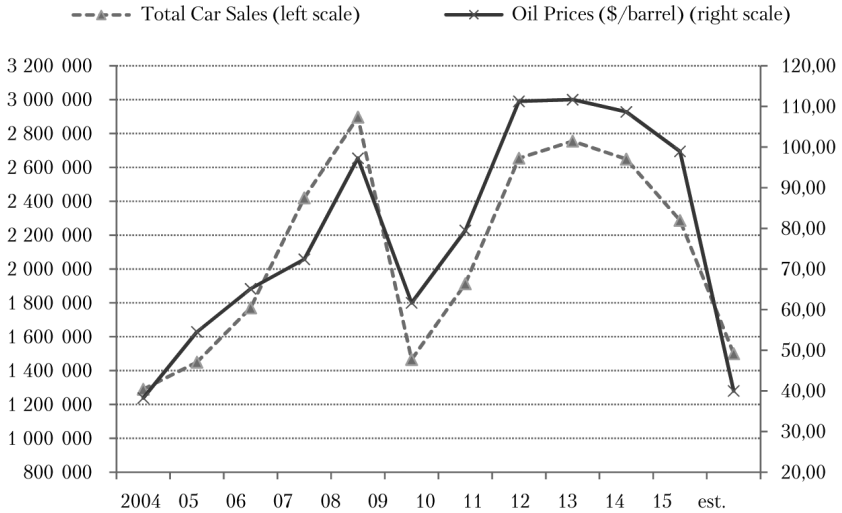
Source: www.Oica.net; Spark-Interfax system; media reports for 2015.

4. Into a Crisis, Again

The new crisis came unexpectedly and its magnitude is such as to challenge the very foundations of the automotive industry. It started slowly in 2013, when economic growth fell to a mere 1.3 per cent. This slow growth indicated an exhaustion of the growth factors of earlier years and the beginning of a period of stagnation. Forecast by no one, not even by doom-sayers, the oil price in mid-2014 started its nosedive, gradually pulling down the demand for vehicles. It made clear to everybody once again that the Russian car miracle had been served on the platter of high oil prices and that as the latter fell demand for cars would follow suit (Figure 3).

Some of the shrinking car sales were shifted to imports but it was domestic production that had to bear the brunt. In 2015, sales of domestically produced cars fell to around 1.45 million, 25 per cent below the peak of 2012. In the expectation of increasing sales, total production capacity in the sector had been raised to nearly 3 million cars a year and the sector now suffers from unused capacity of 50 per cent or more.

Figure 3. Car sales and oil prices, Russia, 2004–2015



Source: www.Oica.net; BP 2015.

While at the beginning of the new crisis, hopes were raised that the decline of commodity prices in global markets would be short-lived and would rise again to previous levels, in the second year of low oil prices a majority of analysts believe that the low commodity price slump is here to stay for some time and car manufacturers must pursue survival strategies.

4.1. Strategies for Survival

Car manufacturers in this demand crisis have to pick from one of three choices:

(i) Cutting costs and waiting for a market rebound

Current annual losses for many foreign car manufacturers are in the range of 100–200 million euros, if not higher. They are all cutting costs by reducing production and staff. This includes reductions in the number of shifts, temporary closures, monetary packages for voluntary termination of employment, short-time working and forced dismissals. Reductions, however, in many cases entail negative economies of scale, which eat up some of the costs saved elsewhere.

Going one step further could include cost cutting by more localisation. The rouble has depreciated substantially since 2014 and relative prices have turned in favour of local purchases. Replacing imported components

with local ones could help to save costs, although it could also impact negatively on product quality. New foreign component suppliers are not likely to invest in Russia during a period of crisis and additional components may only be available from Russian suppliers. Calls on the government by VW, PSA and others to extend the running time on local content clauses and thereby reduce pressure to continue localisation during sluggish demand are indicators that going forward with more localisation may not be a favourable option for many.

In the end, this strategy entails waiting for the market to rebound and to be among those who can take advantage of rising demand.

(ii) Withdrawal from Russia

In 2015 GM shut down its factory in St Petersburg and ended the production of Opel cars. By holding on to its joint venture with AvtoVaz in Togliatti, however, it maintains a foothold in the Russian market.

There are good arguments for leaving. Russia signed a special WTO agreement for its automotive industry in 2012 that allows the application of a special import substitution regime only till 2018. Thereafter, customs duties have to be reduced⁵ and local content clauses abolished. The end of this regime will certainly reduce the comparative advantages of maintaining a presence in Russia. Withdrawing investment and supplying the Russian market from abroad and from international locations where productivity is higher is certainly an option most foreign car manufacturers are considering.

Withdrawal during the current crisis, however, might be seen by the Russian government as a breach if not of the legal then of the moral terms of the import substitution contract foreign companies signed. If the market subsequently recovers, the government may find ways to punish early withdrawers and prevent them from gaining a stake again.

(iii) Add turnover from exports

The significant depreciation of the Russian currency has reduced local production costs substantially and opened up opportunities for automobile exports. This reduction, however, applies only to that part of the value chain arising from local production. Companies that have localised rapidly possess an additional option to boost sales in the export sector.

⁵ Import tariffs for built-up passenger cars in Russia: 2011: 30 per cent; 2012 (WTO entry): 25 per cent; 2015: 22.5 per cent; 2018: 15 per cent.

However, foreign car manufacturers originally did not select the Russian market as a location for exports. Some maintain production capacities in neighbouring countries and exporting from Russia may entail competing with their own models.

4.2. AvtoVaz – Forward with an Export Strategy or a Return to Employment Policies and Subsidies?

Domestically, the battle is over shares of a shrinking market and here AvtoVaz may appear to be on a winning path. The falling rouble entails punitive costs for importers and, with the exception of the high-priced segments for the rich, who care more for status loss than cost, the market seems to be assured for producers with high local content.

However, as the largest car manufacturer, AvtoVaz has been hardest hit by the crisis. Since 2011, its output has declined continuously, from 578,400 units to a mere 269,100 (2015), bringing its market share down from 22 per cent to 17 per cent. In 2014, its losses amounted to 25.4 billion roubles (686 million USD), rising steeply to 74 billion roubles (1 billion USD) in 2015. Dissatisfied with the financial results, the CEO of state-owned conglomerate ROSTEC, Sergei Chemezov – the main Russian shareholder in AvtoVaz and a close friend of Russian president Putin – announced the dismissal of Bo Andersson, who had taken up the position of AvtoVaz CEO just two years earlier, in March 2016.

The termination of the contract is an indicator of internal battles and the unclear direction of future company policy. Nobody appears to have challenged Andersson's success in bringing to the market new models such as the Vesta and X-ray and in putting »a system in place that made it possible to go from concept car to assembly line production in only 1.5–2 years – the world standard« (Moscow Times, 10 March 2016). Vehicle quality has improved substantially and the current range of models has been certified in accordance with European emissions standards and are intended to be sold in central and eastern Europe, but also in Germany and Austria. Export volume is set to rise from 97,000 (2015) to 150,000–200,000 by the end of 2016 (Russia beyond the Headlines, 29 February 2016).

Opposition to the new management approach stemmed largely from its radical personnel policy: during his two years at the helm, Andersson cut the number of employees from 70,000 to just 44,000 and »he gave walking papers to three company vice presidents and two dozen top managers last year alone« (Moscow Times, 10 March 2016). Above all, by linking AvtoVaz to RNPO (Renault-Nissan Purchasing Organisation) and signing contracts with foreign component producers, he reduced the level of

local content and found himself locked into a war with Russian suppliers, many of which belong to United Automotive Technologies, itself a subsidiary of ROSTEC.

The fact that the CEO of ROSTEC and not Renault, the majority owner, announced the dismissal gives cause for speculation about whether Kremlin politics have returned and where the French concern stands. The replacement of the top management may be seen as prioritising social concerns about jobs and localisation interests over prices and quality considerations. This intervention may lead to an early exit for AvtoVaz's new export strategy. AvtoVaz needs a bail-out and while the Russian state may come in with a debt-for-equity swap, the French have to provide new capital. Making a success of exports with a high local content depends on Russian component manufacturers improving quality and productivity. If the Russian state-owned shareholder⁶ has its way and lower quality standards prevail for the sake of employment gains, AvtoVaz's future may be bleak.

Summary

The current sales crisis is the second major existential threat to the Russian automobile sector. Just as AvtoVaz, the pride of the Soviet Union, survived the collapse at the end of the 1990s only through renationalisation, so today the whole branch is in a fight for its life on a market shrunk by half in the absence of oil rents.

What are Russia's prospects as a location for international automobile companies? Russia's domestic market does not have the sheer volume of either China or India and thus does not have the option of imposing an industrial policy on foreign investors with the prospect of high volumes. And the economic crisis only makes its prospects more remote.

Russia is insular both technologically and economically. Manufacturing plants for 100,000–200,000 vehicles – currently operating at barely half capacity – are not suitable for the high development costs of new platforms and models. Production remains oriented primarily towards local sales and does not use the latest technology. Neither political guidelines – for example, emissions limits – nor consumer wishes exert much pressure towards modernisation. Low energy prices also reduce the incentive to introduce fuel-saving innovations. Technical changes looming in the

⁶ The Russian Industry and Trade Minister Denis Manturov made clear the expectation of the government when he reminded the new head of AvtoVaz, Renault executive Nicolas Maire – who previously headed Romanian carmaker Dacia – that the key task for him should be to focus on domestic car part suppliers (Reuters, 15 March 2016).

global market, such as the electrification of drivetrains or the development of networked cars, are happening elsewhere and enter Russia only as imports, if at all.

Car makers have to orient their sales strategies to several variables, of which only one parameter is known. The dismantling of trade barriers and the elimination of localisation requirements open up the market and from 2018 will make it more attractive to service Russian demand from abroad. Exchange rates and demand trends are uncertain, but are strongly influenced by crude oil prices and the government's approach to industrial policy. If the crude oil price remains depressed – in the region of 50 USD a barrel or less – the market is unlikely to recover much. Although most foreign car manufacturers can bear to finance Russian losses there is little reason to hold out in view of liberalisation in a few years' time. In light of this a substantial capacity reduction and the withdrawal of some foreign companies from manufacturing in Russia in the coming years are possible.

Renault-Nissan-AvtoVaz has not been swayed by these considerations. The French-Japanese company has invested four to five times as much as other automobile manufacturers. It regards AvtoVaz as a geo-strategic pillar that will help it to climb further up the global rankings. With production capacities of over 1 million vehicles and value added of 70 per cent the local commitment is much deeper. If the oil price remains in the doldrums and the government gives the Russian automobile sector an added boost by actively keeping the rouble low then there are good prospects that the plant will export substantially more than the 100,000 vehicles already exported. Renault can already point to the successful transformation of a former socialist manufacturer in Dacia. Rostec, the voice of the Russian state at the shareholders' meeting, designated the goal as exporting 50 per cent of production in the future. As in Soviet times Russian vehicle production would thus again be dominated by one major plant. But it would not be an independent national plant with a local monopoly, but the regional pillar of a global company whose headquarters are abroad. If, however, the Russian state were to put its stamp on the company once again and prioritise employment policy the export strategy may come to an early end and Renault would have to shelve its plans for AvtoVaz.

Bibliography

BP (2015) Statistical Review of World Energy. June. Online at: <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf> (accessed on 16.01.2016).

Brooks, G. (2013) Localising production in Russia, in: *Automotive Manufacturing Solutions*, 1.7.2013.

EBRD (2012) Diversifying Russia. Harnessing Regional Diversity. Online at: <http://www.ebrd.com/news/publications/special-reports/diversifying-russia.html> (accessed on 7.12.2014).

Ernst & Young (2013) An Overview of the Russian and CIS Automotive Industry, March.

Frigant, V., Zumpe, M. (2014) Are automotive global production networks becoming more global? Comparison of regional and global integration processes based on auto parts trade data. MPRA Paper, No. 55727, May. Online at: <http://mpra.ub.uni-muenchen.de/55727> (accessed on 14.12.2014).

Gatejel, L. (2013) Die Hassliebe zum sozialistischen Automobil. Zur Alltagsbewältigung in Planwirtschaften, in: Tilly, S., Triebel, F. (eds), *Automobilindustrie 1945–2000: Eine Schlüsselindustrie zwischen Boom und Krise*. München, Oldenburg, pp. 408–428.

GTAI (2010) Rahmenbedingungen für Kfz-Zulieferer in Russland. ACOD Kongress 2010, 18.2.2010. Online at: kooperation-international.de/fileadmin/public/cluster/samara/Rahmenbedingungen_fuer_Kfz-Zulieferer_in_Russland.pdf (accessed on 7.12.2014).

Litvinenko Sergey (2015) Russia's automotive market: 2014 results and outlook. PwC, February. Online at: www.pwc.ru/automotive (accessed 16.01.2016).

Renault Press (2010) Renault, Russian Technologies and Troika Dialogue agree on Avtovaz Restructuring Measures, March.

Serious Wheels (n.d.) Ford in Europe: The First Hundred Years. Online at: [www.http://www.seriouswheels.com/art-Ford-Europe.htm](http://www.seriouswheels.com/art-Ford-Europe.htm).

Spark-Interfax system. Online at: <http://www.spark-interfax.ru/Front/Index.aspx>

Traub-Merz Rudolf (2015) Oil or Cars. The Prospects of Russia's Reindustrialisation. Friedrich-Ebert-Stiftung: April.

INDUSTRIALISATION AND THE GROWTH MODEL IN BRAZIL: A HISTORICAL OVERVIEW

Pedro Rossi and Marco Antonio Rocha

1. Introduction

Brazil had one of the highest growth rates in the world between 1930 and 1980. The share of manufacturing in GDP nearly doubled in one of the largest late industrialisation processes in the twentieth century. Industrialisation happened inside the model of developing domestic markets and was boosted with import substitution policies. In recent decades, however, Brazilian industry has lost dynamism due to the debt crisis of the 1980s, followed by the implementation of neoliberal policies in the 1990s. Despite the return of industrial policy in the Workers' Party administrations since 2002, the country is still losing ground in manufacturing development.

This chapter offers a brief historical overview of Brazilian industrialisation, based on the understanding that industrialisation should be embedded in an institutional environment propitious to technological catch up. Industrial policies have to be part of a broader strategy, whose internal coherence is essential to achieve the expected results. We believe that the ongoing deindustrialisation in Brazil is associated with the dismantling of the institutional apparatus that promoted industrial orientation and its replacement by another, oriented primarily towards short-term macroeconomic stabilisation.

In Section 2 we discuss the constrained industrialisation period (from 1930 to 1954), which was marked by the breakdown of the agro-export model, the formation of a domestic market capable of sustaining growth and the unleashing of industrial development in Brazil. In Section 3 we analyse the »heavy industrialisation phase« (1955–1979) and highlight the role of government planning, the implementation of policies via state-owned enterprises and the relevance of a developmentalist ideology, which contributed to the construction of an extremely diversified industrial landscape in Brazil.

The catch-up process ended in the 1980s when the country experienced a debt crisis, as discussed in Section 4. Economic policy efforts were reoriented to the repayment of foreign debt and anti-inflation policies, while industrial policy was no longer a priority. In a closed economy with low growth, Brazilian industry gradually increased its technological gap.

Section 5 addresses the neoliberal growth model (1990–2002), which introduced a productivity shock to deal with an outdated production structure. This increased consumption and led to modernisation in some manufacturing branches but in general reduced the role of industry in generating income and employment.

In 2003, a new growth model was put in place when the Labour Party came to power. In Section 6, we discuss the return of industrial policies, as well as credit policies and the increasing role of public banks in financing industry and exports. We will also show that exchange rate appreciation harmed industrial competitiveness and resulted in a growing import dependence on the part of the manufacturing sector. Despite the policy efforts and the good performance of manufacturing between 2003 and 2008, the industrial sector is characterised by fragilities, exacerbated by the international financial crisis.

2. Constrained Industrialisation (1930–1954)

Manufacturing in Brazil is something of a late-comer. While the processing of goods accelerated somewhat after 1880, its general level remained extremely low until 1930, even compared with other Latin American countries, such as Argentina, Chile and Uruguay (ECLAC 1969). The country experienced agrarian export-led growth and its economy largely depended on foreign demand and international commodities prices, especially for coffee and rubber. Exports left Brazil mostly unprocessed, but some investment in manufacturing linked parts of agriculture and mining deeper into the local economy. Foods and beverages, textiles and some metal-processing were pre-dominant activities in manufacturing, with many of its products going into regional markets (Suzigan 1986).

The significance of these regional industrial complexes was not only the formation of a material base for further industrialisation expansion; it also provided a platform for political representation and promoted the institutionalisation of a lobby that pushed for further industrialisation. During the crisis in the agro-export sector after 1929 calls for incentives to deepen industrialisation gained momentum. Interest associations such as the Federation of Industries of São Paulo (FIESP, in Portuguese) and the National Confederation of Industries (CNI, in Portuguese) were es-

tablished in 1930. Cooperation between these representative institutions and state bodies constituted the basis for industrial planning throughout the National Development period.

After the 1930s, Brazilian industry strongly supported policies for industrial development, known in the literature as import substitution (PSI, in Portuguese). Although the name may imply autarchy, aimed at reducing international trade, the specific import substitution pattern was applied to branches with large trade deficits. Local manufacturing would start with non-durable and semi-durable goods, followed later by the processing of durable consumer goods. At the same time, the import structure would shift from its concentration on consumer goods to one on capital goods (Tavares 1979). From the late 1930s, the main instrument to support import substitution was the introduction of a two-tier exchange rate regime which discriminated between the coffee sector and industry. In practice, it meant the expropriation of foreign currency obtained in coffee exports to pay for industrial imports. Until the 1950s, the cross-sector subsidy remained the main industrial policy development instrument, although some manufacturing activities benefitted additionally from other policies and financial support.¹

Growing foreign currency demand for the import of machinery and equipment during a time when coffee prices continued their downward trend² resulted in severe balance of payments problems. Growing scarcity of foreign exchange led to the introduction of new import channels for industrial equipment. Owners of foreign currency – in particular, multinational companies – received permission to import machinery without participating in foreign exchange auctions.³ These imports and curren-

¹ In January 1953, the government established a multiple exchange rate regime and months later established a monopoly on the foreign exchange market by the Superintendency of Currency and Credit (SUMOC, in Portuguese), which at the time was the monetary authority controlled by Banco do Brasil. Through SUMOC Instruction 70, an exchange rate regime was established in Brazil that defined a bonus system for exports (official rate + CR\$10.00/US\$ bonus for manufactured goods and CR\$ 5.00/US\$ for coffee) and a more depreciated exchange rate for imports (official rate plus taxes on purchase of dollars in foreign exchange auctions). As only essential imports, such as wheat, paper and pharmaceuticals, had access to the official exchange rate, in practice, the exchange rate regime first imposed a »confiscation« of dollars obtained by the coffee complex and favored manufactured exports through subsidies and in parallel, a financing mechanism for the public deficit and trade protectionism through import surcharging.

² The international policy of abandoning controls on coffee prices occurred in 1956, consolidated with Brazil's entry in the International Coffee Agreement of 1962, and the adoption of a new exchange rate policy. Symbolically, the year also marks the recognition of the country's inability to reverse the declining trend in the terms of trade of the agro-export complex.

³ Basically, SUMOC Instruction 113 allowed the entry of machinery and equipment without the internalisation of payments in foreign exchange. This mechanism enabled

cy arrangements expanded the scope of foreign capital participation in Brazilian industry and from that moment on defined the division of labour between foreign and local capital.

3. Heavy Industrialisation (1955–1979)

The second half of the 1950s saw the beginning of accelerated foreign investment. Brazil, like other countries in Latin America, adopted policies to further stimulate FDI. In addition, the state took centre-stage in investing in infrastructure and heavy industries, thereby promoting the transition from the import substitution of consumer goods to the domestic production of capital goods. However, the world economy witnessed falling commodity prices, and possibilities for subsidising import substitution were shrinking.

With the inflow of foreign capital in the post-war period, industrialisation accelerated and embraced sectors that had hitherto not been included – such as automotive, petrochemicals and electrical equipment. In these new branches, a new division of labour emerged that linked foreign and local capital in covering different segments of the same production chain. This new pattern allowed, on one hand, the rapid growth of industrial production, but resulted, on the other hand, in weak national control over the use of technologies. As few of these products went to export, foreign capital penetration increased pressure on the balance of payments, in particular by the growth of profit remittances.

Some relief came from the fact that much of the industrial equipment brought into the country had already been amortised by its use in developed countries and could be imported without a need for foreign currency. Profit remittances sent to foreign headquarters remained, however (Oliveira and Mazzuchelli 1977), which in the early 1960s gave rise to an intense debate on the possibility of restricting such currency outflows and led to criticism of the future role of foreign capital in the Brazilian industrialisation process.

This was particularly the case with the automotive industry. Up to the 1950s, except for the fabrication of some spare parts, there was virtually no automotive industry in Brazil. In 1956 the Brazilian company ROMI negotiated a technology transfer agreement with the Italian automotive company ISETA for establishing the first local car factory, in the state of

large multinationals to bring in physical capital without hedging; that is, without having to declare the entry of funds for the purchase of imported capital goods. This mechanism allowed multinationals to bring equipment without participating in foreign exchange auctions and without paying surcharges on imports.

São Paulo. In granting privileges to imported equipment by the beginning of the 1960s Mercedes-Benz, Ford, Volkswagen, General Motors, Renault, Willys-Overland, Scania and DKW established subsidiaries for the production of automobiles, SUVs and trucks. To reduce the mounting demand for foreign currency, policies were enacted to increase the local suppliers' content in the assembly of their products.⁴ Brazil's automotive sector emerged in a product cycle that saw foreign car assemblers linked to a large number of Brazilian auto component enterprises.

The intensification of industrialisation created bottlenecks in the supply of basic industrial inputs and infrastructure. This marked the beginning of the period of heavy industrialisation (Cardoso de Mello 1982). State policies sought mainly to integrate industrial demand into a domestically created capital goods sector.

A key feature of this period was the establishment of state-owned enterprises, even though the reasons were initially more political – resulting from pressures from nationalist movements – than economic. In creating large public enterprises which operated in the provision of industrial infrastructure (for example, energy, logistics) and basic inputs such as steel and petrochemical products, the state changed the balance of forces and maintained national control over key sectors of the economy. The new state policy favoured increases in the production of basic industries and, together with investment of foreign capital in some industries – such as automotive – dramatically changed the Brazilian industrial structure over the 1950s. While public enterprises improved domestic supply they also, in some cases, provided subsidies to certain basic inputs and worked on technology transfer processes.

The changes on the supply side were complemented by transformation policies for the main components of aggregate demand. Public investment took on a defining role for industrial growth. State participation in industry occurred through large state-owned holding enterprises – *Eletronbras*, *Petrobras*, *Siderbrás*, *Telebrás* – which became dominant actors in electricity, petroleum, steel and telecommunications. Through them, the state defined sectoral prices and determined the composition of investments. In addition, a number of public enterprises were created to internalise technologies considered strategic, such as *Fábrica Nacional de Motores*, *Nuclebrás* and *Embraer*.

Large state-owned enterprises have largely acted within the framework set by various industrial development investment plans of the 1970s –

⁴ Instruction 70 established the multiple exchange rate rules for purchase, according to import priority. Instructions 127 and 128 included automotive and agricultural machinery industries between sectors with advantages in access to foreign exchange markets, as the enterprises increased the local suppliers' content in the assembly of their products.

National Development Plans I, II and III (NDP I, NDP II and NDP III). These plans set parameters to expand national participation in heavy industry, particularly for sectors with high trade deficits and major domestic supply constraints. Industrial development during the 1970s alleviated pressures on payment balance; it also made Brazilian industry use mature technology and reduce demand in the world market.⁵

The 1970s policies, on the other hand, also reinforced the existing division of labour in Brazilian industrialisation since the 1950s between the state, foreign capital and national capital (Evans 1979). The beginning of heavy industrialisation consolidated the institutional role of the state: it acted as the financier of long-term investments and through a set of state-owned enterprises provided the economy with basic inputs and industrial infrastructure, which multinational enterprises could use in producing manufactured goods.

Multinational corporations, through their subsidiaries or licensed national enterprises, were linked to local supply chains and constituted the main connection for technology transfers. Legislation discriminated between national and foreign capital and in restricting foreign capital's operating areas, created niches for national capital expansion. In some cases, large state-owned enterprises increased the market role of local capital by supporting the transfer of foreign technologies. This pattern was particularly characteristic in energy, petrochemical and metallurgy. State-owned holding enterprises controlled main sectoral research centres – CEPTEL, linked to Eletrobras; CPQD, linked to Telebras; and CENPES, linked to Petrobras – which could be used in organising technology transfer agreements for national innovation in Brazil.

The first attempts to establish a domestic automotive industry occurred during the 1970s. After Romi's attempt, from the late 1960s a series of projects were geared towards the assembly of vehicles by Brazilian firms. The four largest – GURGEL MOTORES S.A., PUMA, BESSON GOBBI S.A. and AGRALE S.A. – established automobile production lines, utilities, motorcycles and small trucks, although most of them remained within the use of licenses for components of higher technological content. FDI was not barred from entry and expanded production lines – especially FIAT, which concentrated 80 per cent of all its foreign investments in the Brazilian automotive industry in the decade.

In the 1970s a new stage of industrialisation began, when priority sectors and institutional forms of long-term financing were modified. The most striking cases were the creation of FINEP (Funding Authority

⁵ With the notable exceptions of aviation, petroleum exploration in deep waters and software policy.

for Studies and Projects) in 1967 to finance investments in innovation or acquisition of technology and the expansion of the National Bank for Economic and Social Development (BNDES, in Portuguese) in 1974 through the use of the Support Fund for Workers (FAT, in Portuguese), making it the largest long-term financing institution in Brazil.

Table 1. Share of fixed assets according to capital composition (1972)^a

Sectors	National private	Multinational	State owned
Mining	3.1	16.9	79.9
Non-metallic mineral	43.2	56.8	–
Metallurgy	14.9	15.4	69.7
Mechanical	24.8	75.2	–
Electrical appliances and communication	9.9	90.1	–
Transport material	5.6	94.4	–
Wood	75.8	24.2	–
Paper and Cardboard	50.1	49.9	–
Furniture	100.0	–	–
Rubber	29.1	70.9	–
Leather and Skin	70.9	29.1	–
Chemical	50.8	39.6	9.6
Plastic	33.6	66.4	–
Petroleum	5.4	11.9	82.7
Pharmaceutical	6.6	93.4	–
Perfumery	64.8	35.2	–
Textile	58.6	41.4	–
Clothing	48.1	51.9	–
Food	27.8	72.2	–
Beverage	83.5	16.5	–
Tobacco	0.3	99.7	–
Publishing and printing	98.2	1.8	–
Diverse	50.7	49.4	–
Total	24.5	40.3	35.2

Note: ^a Sample considers the 10 largest enterprises in each sector.

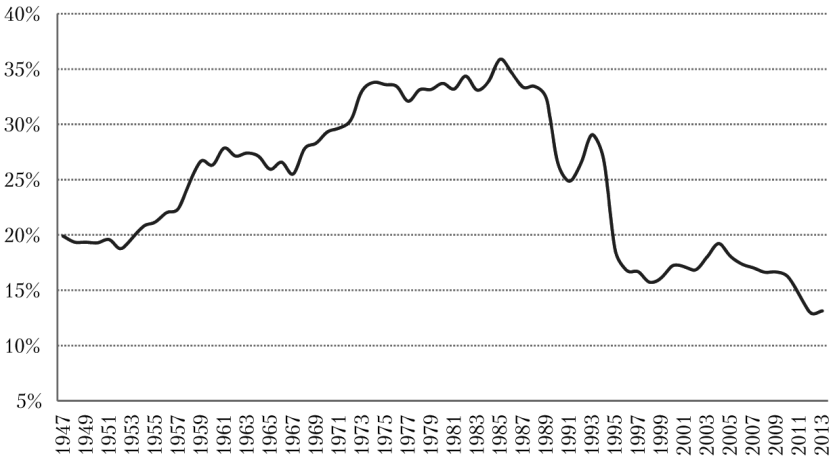
Source: Von Doellinger and Cavalcanti (1975).

When the oil price shocks hit (first round in 1972–1974; second round 1978–1979) and international liquidity was available in abundance, the Brazilian government's choice, contemplated in the second NDP, was to accelerate the catching up process of capital goods and basic inputs. This

included the aim of achieving energy sufficiency by expanding the supply of hydropower, investment in petroleum exploration in deep waters (through Petrobras) and the biofuels industry development programme. Furthermore, steps were undertaken to decentralise Brazilian industry geographically. The main examples were the creation of the Manaus Free Trade Zone and the expansion of regional development banks, especially in the north and midwest regions.⁶

Overall, state policies, the creation of a supportive infrastructure and direct investments gave manufacturing a great push. By the late 1970s, the manufacturing share in Brazilian GDP reached 34 per cent (see Figure 1). At the beginning of the 1980s Brazil had a high industrialisation rate, although heavily concentrated in the southeast region of the country.

Figure 1. Share of manufacturing in GDP, 1947–2013



Source: IBGE. Prepared by the authors.

4. Crisis of the 1980s and the Decline of Manufacturing

Strong Brazilian growth in the 1970s was accompanied by high external indebtedness of the state and the private economy. External funds to serve foreign debt were easily available as OPEC’s currency surplus

⁶ As a consequence, São Paulo’s share in total manufacturing fell from 58 per cent to 53 per cent in the 1970s (CANO 2007). In the automotive industry, the formation of producer clusters in Rio de Janeiro, the Resende region and the FIAT facility in Belo Horizonte metropolitan region, in Minas Gerais, contributed to a decrease of about 10 per cent in São Paulo’s share in national production.

kept international interest rates low, international creditors were eager to borrow huge sums of money and the Eurodollar markets expanded. In 1979, when oil prices skyrocketed and the US Fed increased interest rates to fight energy-induced inflation, the scenario changed radically. Brazil witnessed a deterioration in its terms of trade and financing conditions. In the early 1980s, the Brazilian state reacted to the worsening economic and financial scenario by nationalising parts of private debt and changing its macroeconomic policy. Cutting public expenditure severely affected sectors that almost exclusively depended on state demand. Access to foreign currency was impeded, bringing down the output of enterprises dependent on foreign currency. State-owned companies were used as an inflation control mechanism and keeping their output prices down throughout the 1980s served to subsidise prices to the private sector. In the end, they were undercapitalised with no ability to invest. This in many cases damaged their capacity to provide quality products and services.

The foreign debt crisis and the macroeconomic response pushed the economy into a recession and ended the developmental hegemony in public policy. The overall result was a growing technological gap in Brazilian industry throughout the 1980s and reduced international competitiveness in many sectors. For Brazil's industrialisation, the 1980s can definitely be referred to as a lost decade.

5. The Neoliberal Model (1990–2002)

The 1990s again represented a drastic change in the Brazilian business environment, this time featuring trade liberalisation and privatisation. Privatisation involved the full or partial dismantling of state-owned holding companies, leaving only Petrobras and Eletrobras under public control. In addition, sectoral policy guidelines were abandoned. The new economic model dissolved the institutional framework that served to support industrialisation, stopped industrial and commercial discretionary policies and ended with discrimination in the treatment of domestic and foreign capital.

Trade liberalisation and the new economic policy were felt particularly in the emerging technology intensive industry, where the sale of domestic enterprises to foreigners was more pronounced. In sectors in which ownership remained national, a few major Brazilian business groups managed to take the opportunity created by privatisation.

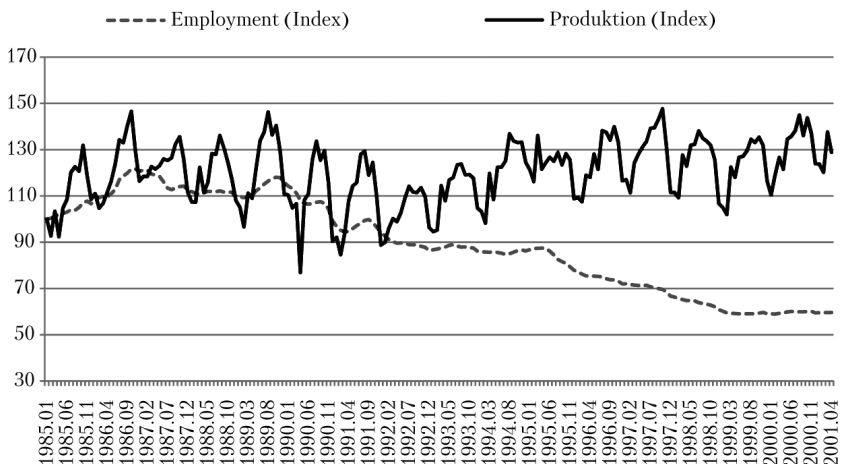
Trade liberalisation ended market advantages built on technology licensing. Foreign enterprises began to cancel such contracts and expanded direct sales in the Brazilian market through imports. The reorganisation of local supply chains, coupled with the maintenance of an appreciated

exchange rate in the second half of the 1990s, contributed to the displacement of Brazilian enterprises from international production cycles.

The automotive industry is a case in point. The liberal policies of the 1990s ended the agreement between Ford and Volkswagen – AUTOLINA – on sharing technologies and jointly developing domestic vehicles. The industry had spent the previous decade with virtually no investments and had survived only on the base of high tariff protection. When trade was liberalised the sector accumulated large trade deficits which in 1996 led to a new policy to attract investment and expand domestic production. Taxes on vehicles were reduced, special trade agreements with Mercosur were established – to reduce the deficit with Argentina and strengthen the integration of the regional automotive industry – some import tariffs on capital goods and automotive parts were reduced and tax incentives were given for new plants facilities. It was only with the return of import substitution policies that, by the second half of the decade, investments began to grow considerably and at the end of the decade over 14 production plants had been established.

The overvalued exchange rate during the second half of the 1990s also contributed to foreign investment and helped to maintain small modernisation cycles by increased production efficiency, even though it contributed little to the expansion of aggregate industrial supply (Bielschowsky 1999). (See Figure 2)

Figure 2. Production and number of people employed in manufacturing industry, 1985–2000 (monthly chained series – 01.1985=100)



Source: IBGE.

Overall, the 1990s saw a massive decline in manufacturing and of its share in the GDP. In an environment of uncertainty created by institutional changes, with lower trade protection and an overvalued exchange rate, a defensive adjustment prevailed, which favoured large enterprises. It also resulted in increased foreign control of the Brazilian industrial structure.

6. Redistribution of Income and the Return of Developmentalist Policies (2003–present)

The electoral victory of the Workers' Party in 2002 ended neoliberal policies and brought to the forefront an economic development approach based on the expansion of the domestic market. Private demand for mass consumption was created with various policies for income redistribution, provision of consumer credit and wage increases (Rossi and Biancarelli 2013).

Increasing wages beyond productivity growth lifted demand for investment goods and allowed some sectors to simultaneously expand production and increase productivity, particularly between 2005 and 2011. The new development model partially resumed a pro-industry agenda. However, the comeback of industrial policy had limited effect against an overvalued exchange rate, high interest rates and high profitability in extractive sectors. Despite this negative environment, the state invested through large capitalisation from BNDES and PETROBRAS in heavy industries such as petrochemicals, steel and shipbuilding, which had been left unstructured since privatisation took effect. Industrial policies in the 2000s stimulated the diversification of Brazilian economic groups, even though this remained restricted mostly to traditional, not technology-intensive sectors (Hiratuka and Rocha 2015).

However, much of the internal market dynamism leaked out, when more demand for components from various industrial sectors was satisfied from imports and Brazilian industry continued to lose out on domestic value added. The rise of import coefficients in almost every sector points to the fact that large Brazilian enterprises adapted to increased economic growth in the 2000s by expanding their imports and reducing their domestic assembly lines (see Table 2).

This regressive development worsened substantially after the international crisis of 2008, when industrial production and domestic consumption became detached. Since then, large-sale imports from China have introduced new challenges for domestic industry. Brazilian companies

are apparently adapting to a new division of labour based on increasing imported inputs and lowering domestic value added.

Table 2. Indices of intra-industrial imports penetration, manufactured, 2007–2013 (%)

	2007	2008	2009	2010	2011	2012	2013
Share of retail revenue in total revenues	7.4	8.2	9.0	9.7	11.7	12.3	11.9
Penetration Coefficient of Imports	–	18.3	16.6	20.4	21.9	22.3	23.7

Source: IBGE/FIESP.

In some cases they practically become resellers of foreign products, being responsible for only the final stages of assembly to make products comply with local trading standards. This type of adjustment is caused by changes in the international environment and the intensification of competition from Asia. But it is also caused by the reduction of domestic incentives for industrialisation and an adverse macroeconomic environment, with long cycles of currency appreciation and high interest rates.

Conclusions

This chapter provides a brief overview of the Brazilian industrialisation process and its associated growth models. Five distinct phases have been identified (Table 3): Phase 1 from 1930 to 1954 marks the beginning of industrialisation in Brazil. During this period of international economic crisis Brazil transited from an export growth model based on agricultural commodities to a model that included import substitution manufacturing of consumer goods for the domestic market. The years 1955–1979 were the height of the Brazilian industrialisation process. The state took centre-stage, established state-owned companies to provide for industrial infrastructure and heavy industries and moved import substitution from durable consumer goods into capital goods. Brazil's march into a fully industrialised economy ended abruptly in the foreign debt crisis of the 1980s. Foreign currency shortages and budget savings drove the economy into a long-lasting recession and increased the country's technological gap again.

The neoliberal model implemented in the 1990s led to profound changes. Trade liberalisation finally led to the abandonment of the state's economic dirigisme. While modernisation investment occurred in some branches, foreign capital encroached on national capital, resulting in

large-scale deindustrialisation and the re-emergence of dependency on industrial imports.

Table 3. Development stages in Brazil

1930–1954	1955–1979	1980s	1990–2002	2003–present
Internal market-led growth	State-led growth	Debt crisis	Neoliberal model	Income distribution model
Constrained industrialisation	Heavy industrialisation	Obsolescence of domestic industry	Modernisation and deindustrialisation	Industrial policies and deindustrialisation

The year 2003 marked the beginning of a growth model based on income distribution. It resumed aspects of developmentalism in bringing back active industrial and credit policies. In this new context, the Brazilian industry performed reasonably well up to the end of the 2000s; since the global finance crisis in 2008–2009, Brazil has again experienced deindustrialisation, suffering from both increased competition in the international market and its own currency appreciation.

The long period of building an industrial economy, as well as rapid deindustrialisation shows the relevance of state intervention in the economy and the effects of dismantling the set of institutions and economic policy interventions. Even the attempt to recreate some industrial policies in recent years lacks coherence as institutions have not been re-established to define a long-term development path for domestic manufacturing with protection and incentive policies. With the lack of a proper policy framework, two trends may continue unabated: large enterprises will prevail over small and medium-sized companies and the ownership of Brazilian enterprises may continue to be transferred to foreign economic groups.

References

- Bielschowsky, R. (1999) Investimentos na indústria brasileira depois da abertura e do Real: o mini-ciclo de modernizações, 1995–1997. *Serie Reformas Económicas No. 44*, CEPAL, Santiago.
- Cano, W. (2007) *Desconcentração produtiva regional no Brasil: 1970–2005*. São Paulo: Unesp.
- Cardoso de Mello, J. M. (1982) *O Capitalismo Tardio: contribuição crítica da formação e desenvolvimento da economia brasileira*. São Paulo: Brasiliense.
- ECLAC (1969) *El desarrollo industrial de America Latina*. Lima: ECLAC.
- Evans, P. (1979) *Dependent Development: the alliance of multinational, state and local capital in Brazil*. New Jersey: Princeton University.
- Hiratuka, C. and Rocha, M. A. (2015) *Grandes grupos no Brasil: estratégias e desempenho nos anos 2000*. *Texto de Discussão*, Ipea: Brasília

Oliveira, F. and Mazzuchelli, F. (1977) Padrões de acumulação, oligopólios e Estado no Brasil: 1950–1976. In: MARTINS, C. E. (1977). *Estado e capitalismo no Brasil*. São Paulo: HUCITEC.

Rossi, P. and Biancarelli, A. M. (2013) The macroeconomic policy in a social-developmental strategy. In: *Development Strategies: Country Studies and International Comparisons, 2013*, Shanghai. Development Strategies: Country Studies and International Comparisons.

Suzigan, W. (1986) *Indústria brasileira: origem e desenvolvimento*. São Paulo: Brasiliense.

Tavares, M. C. (1979) *Da substituição de importações ao capitalismo financeiro: ensaios sobre economia brasileira*. Rio de Janeiro: Zahar.

Von Doellinger, C. and Cavalcanti, L. (1975). *Empresas multinacionais na indústria brasileira*. Rio de Janeiro: IPEA/INPES.

ABOUT THE AUTHORS

Afontsev Sergey: Head of the Economic Theory Dept., Institute of World Economy and International Relations of the Russian Academy of Sciences (IMEMO RAS); Professor at the Moscow State Institute for International Relations (MGIMO) of Russian Ministry of Foreign Affairs.

Bodrunov Sergey: Professor, Director of the S. Witte Institute of New Industrial development, St. Petersburg; Editor in-chief of the academic periodical «Economic Revival of Russia».

Herr Hansjoerg: Professor for supra-national economic integration, Higher School for Economics and Law, Berlin.

Inozemtsev Vladislav: Director of the Moscow-based Centre for Post-Industrial Studies; fellow of the Austrian Marshall Plan Foundation, School of Advanced International Studies, Johns Hopkins University, Washington, DC.

Kotz David M.: Professor, Department of Economics, University of Massachusetts.

Lane David: Fellow of the Academy of Social Sciences, University of Cambridge; (former) Professor of Sociology at the University of Birmingham.

Polunin Yuri: Chief analyst of the journal “Expert”, Moscow.

Rocha Marco Antonio: Professor at the Institute of Economics, University of Campinas, Brazil.

Rossi Pedro: Professor at the Institute of Economics, University of Campinas, Brazil.

Traub-Merz Rudolf: Consultant, (former) Director of Friedrich-Ebert-Stiftung, Moscow office.

Vasileva Alexandra: PhD candidate in the programme group Political Economy and Transnational Governance (PETGOV), Amsterdam Institute for Social Science Research (AISSR).

Yudanov Andrey: Professor, Financial University under the Government of the Russian Federation, Moscow.

Zubarevich Natalia: Professor, Department of Geography at Moscow State University; Director of the regional program at the Independent Institute for Social Policy.

Scientific edition

**Economic Crisis and Industrial Policies –
Policy Options for a Return to Growth in Russia**

Leading editor *N. A. Volynchik*

Graphics editor *A. K. Sorokin*

Design *A. Yu. Nikulin*

Technical editor *M. M. Vetrova*

Computer Layout *M. M. Vetrova*

L. R. № 066009 from 22.07.1998. Went to print on 27.02.2016. Format 60x90/16. Offset.
Conventional printed sheet 12,5. Edition 170. Order №

Publishing house „Politicheskaya ehnciklopediya“
40, bil. 1, 3rd proezd Mařinoj Roschi, Moscow 127018, Russian Federation
Tel.: +7 (499) 685-15-75 (general, fax), +7 (499) 709-72-95 (selling department)



**FRIEDRICH
EBERT** 
STIFTUNG