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On 16 May 2007, the OECD Council decided to open discussions with the Russian Federation on accession to the Organisation and, on 30 November 2007, an Accession Roadmap, setting out the terms, conditions and process for accession was adopted [C(2007)103/FINAL]. In the Roadmap, the OECD Council requested a number of OECD Committees to provide it with a formal opinion. The Economic and Development Review Committee was requested to review overall economic policies of the Russian Federation in order to provide a formal opinion on the degree of coherence of policies of the Russian Federation with those of OECD member countries. In light of the formal opinions received from OECD Committees and other relevant information, the OECD Council will decide whether to invite the Russian Federation to become a member of the Organisation.

The present Economic Survey of the Russian Federation *was prepared for the purposes of the accession review of the Russian Federation. The draft report was discussed by the Economic and Development Review Committee on 18 October 2011, revised in the light of the discussions and finalised on 28 November 2011. The draft report was prepared for the Committee by Geoff Barnard and Tatiana Lysenko under the supervision of Andreas Wörgötter. Research assistance was provided by Corinne Chanteloup. Background research on the annex table on Progress in Structural Reform was provided by Yana Vaziakova, and on the chapter on energy efficiency by Igor Bashmakov. Secretarial support was provided by Josiane Gutierrez and Pascal Halim.*

This is the eighth OECD Economic Survey of the Russian Federation. *The previous one was issued in July 2009.*

Information about the latest as well as previous Surveys and more information about how Surveys *are prepared is available at* www.oecd.org/eco/surveys.

This Survey is published on the responsibility of the Secretary-General of the OECD.

BASIC STATISTICS OF THE RUSSIAN FEDERATION

(2010, unless otherwise noted)

THE LAND	
Area (thousand sq. km)	17 098
Agricultural area (thousand sq. km)	2 223
THE PEOPLE	
Population (millions, beginning year)	143.0
Inhabitants per sq. km (beginning year)	8.4
Average annual population growth (per cent, 2000-2010)	–0.3
Employment (millions)	67.6
By sector (per cent of total)	
State and municipal enterprises and organisations	30.9
Private sector	58.4
Mixed form of ownership	10.7
By branch (per cent of total)	
Industry	19.7
Agriculture and forestry	9.8
Construction	7.8
Services	62.7
Unemployment rate (per cent of labour force, end-year)	7.2
Inhabitants in major cities (millions)	
Moscow	11.5
St. Petersburg	4.8
Novosibirsk	1.4
Yekaterinburg	1.3
GOVERNMENT/ADMINISTRATION	
Bicameral Parliamentary system (The Federal Assembly)	
Council of the Federation (upper house)	169 seats
State Duma (lower house)	450 seats
Number of registered political groups in the State Duma	4
Regional government	
Subjects of the Federation, *of which:*	83
Republics	21
Krais (territories)	9
Oblasts (regions)	46
Autonomous *oblast*	1
Autonomous *okrugs* (areas)	4
City of Moscow	
City of St. Petersburg	
PRODUCTION	
GDP (RUB billion, current prices)	44 939
GDP per capita (USD, market exchange rate)	10 395
PUBLIC FINANCE	
General government revenue (per cent of GDP)	35.0
General government expenditure (per cent of GDP)	38.5
Domestic public debt (per cent of GDP, end-year)	5.5
FOREIGN TRADE AND FINANCE	
Exports of goods and services (USD billion)	445.5
Imports of goods and services (USD billion)	323.1
Central bank gross foreign exchange reserves (USD billion, end-year)	479.4
Gross external public debt (per cent of GDP, end-year)	3.1
THE CURRENCY	
Monetary unit: Rouble	
Currency units per USD (period average):	
Year 2010	30.2
December 2010	30.9

Executive summary

The Russian economy is recovering from the severe 2008/9 recession, *but has not yet reached pre-crisis peak activity levels. Inflation is high, although again on a declining path, not least because of the excellent harvest this year. Trend growth of around 4% is not fully exploiting opportunities provided by Russia's rich endowment of natural resources and the high skill level of its population. This* OECD Economic Survey *makes recommendations for a well balanced combination of further strengthened macroeconomic policy settings, decisive improvements in the business environment, including determined efforts to reduce corruption and strengthen the rule of law, and increasing energy efficiency. Such a combination could generate synergies which will help to accelerate overall convergence and improve living standards for the Russian population.*

In recent years Russian leaders have increasingly emphasised the importance of modernising the economy, *stressing the need to reduce the dependence on oil revenues and diversify the economy. The process of accession to the OECD dovetails closely with this agenda. The accession process provides a useful opportunity to take stock of the evolution of convergence, identifying both progress and areas where the gaps are still large and thus where peer review and drawing on OECD experience may be particularly useful.*

One area where the gap with OECD countries has remained very wide is the business climate. *Russia scores poorly on a range of indicators of the business environment. State involvement in the economy is pervasive, corruption endemic, the rule of law weak, and the foreign trade and investment regimes relatively restrictive. These deficiencies are reflected in low levels of competition, sluggish innovation, low investment and a greater dependence on natural resource extraction than would otherwise be the case. Although on a number of fronts improvements can be discerned, there is a need for further policy action and reinforced implementation efforts in many areas, including cutting red tape, privatisation, judicial reforms, eliminating corporate subsidies and liberalising the international trade and investment regimes.*

Another area where Russia lags the most advanced countries is energy efficiency, *and this has been a major factor in poor environmental outcomes and the high carbon-intensity of the economy. The energy-intensiveness of GDP in Russia is among the highest in the world. The main imperative is to ensure that the price of energy reflects marginal social costs, which means removing subsidies and export taxes on energy and introducing mechanisms to price in the negative externalities of fossil-fuel use. The installation of meters for all energy use should also be sped up, and measurement of energy consumption improved. Especially in the interim, while many energy users do not face prices reflecting marginal social costs, there is also a role for other measures to improve energy efficiency, such as standards for housing and transport and the provision of information to firms and households.*

As regards outcomes in most other areas, Russia is within the range of OECD countries, not an outlier. *Labour markets are relatively flexible, although more could be done to bring social protection up to the standards of more advanced countries. The population is well educated, with exceptionally high rates of tertiary enrolment, even if educational performance as*

measured by PISA scores ranks below most OECD countries and some other measures of academic output lag. In some policy domains Russia has lagged behind, but has recently intensified efforts to catch up. For example, in the environmental policy area the government has become increasingly active in setting objectives and designing policy instruments, although so far little can be said about implementation, which has been a weak point in the past.

Moreover, in some respects Russia exhibits relative strengths. *For example, it has negative net public debt (that is, public financial assets exceed gross public debt), an attribute shared by very few OECD economies. This reflects prudent policies that saved a large share of the oil price windfalls over the past decade. Also, while Russia remains a relatively high-inflation economy, monetary policy has delivered a gradual decline in inflation over the past 12 years, and the policy framework is being adjusted to the new lower-inflation environment to which the country is moving. Financial depth remains limited, with some remaining weaknesses in regulation. However, in part because of the authorities' decisive policy response, the banking sector withstood the global crisis surprisingly well, even though the economic impact of the crisis on Russia, with a massive decline in oil prices, was relatively severe.*

Scope remains for improvements to the macroeconomic policy framework, *however. The budget has become increasingly vulnerable to a correction in oil prices, with the non-oil deficit expanding rapidly in 2008-09 and remaining above 10% of GDP in 2010-11. Moreover, fiscal policy has proved to be insufficiently countercyclical. The prompt reinstatement of a fiscal rule limiting the non-oil deficit is called for, perhaps supported by binding ceilings on annual expenditure growth, and a rule-based framework could be strengthened by setting up an independent fiscal council to provide advice on technical issues. Long-term threats to fiscal sustainability could be mitigated by equalising the pension ages for men and women and gradually raising them in line with increases in longevity. Concerning monetary policy, as the conditions for successful inflation targeting fall into place, exchange rate flexibility should be further increased, together with a clearer central bank mandate to pursue price stability as the primary objective and increased transparency as regards policy decisions and economic analysis.*

Assessment and recommendations

Russia is rightly focussed on modernising its economy…

In recent years Russian top policy-makers have increasingly emphasised that joining the ranks of the most advanced market-oriented countries requires modernisation of the economy. There is a broad consensus that it will not be possible in the long run to rely on continuous improvements in the terms of trade and the mobilisation of idle resources to sustain rapid economic growth. Increases in output will need increasingly to come from making better use of the available factors of production as well as new ways of producing goods and services. This means creating an environment in which innovation and investment, including in human capital, can flourish, something which will require further reforms in many areas. The current initiative to modernise the Russian economy marks a break with the past, with the approach being to achieve modernisation by making it attractive to live, study, work and innovate in Russia, with the development of democracy, including stronger participation of civil society, and a cleaner environment.

… and gaps vis-à-vis OECD countries in macroeconomic and social outcomes have been narrowing considerably

Across a range of macroeconomic and social indicators there has been clear improvement in recent years, and in general, Russia is within the range of OECD countries, not an outlier. Moreover, in some respects Russia exhibits relative strengths. For example, it has very little public debt, and ran a sizeable budget surplus in the first nine months of 2011, with only moderate deficits projected in coming years. Labour force participation rates are high, and a larger proportion of Russian high-school students go on to tertiary education than in any OECD economy. Nonetheless, Russia's economy is still relatively backward, exhibiting low productivity and per capita incomes, high inflation, extreme inequality, poor outcomes as regards health and the environment, low access to and use of information and communication technologies, and mixed educational outcomes, with a tendency for relative performance to worsen the further students go through the system.

… while progress with structural reform in many areas has also contributed to moving Russia towards OECD standards and practices

The 1990s in Russia were characterised by important changes in the legislative and regulatory framework to create the basis for a market-oriented economy, but the chaotic

economic environment and lack of public resources often prevented effective implementation of reforms. The strong economic growth and establishment of healthy public finances since 2000 have allowed more solid advances to be made in a range of areas. Thus, for example, improvements in pay and increased resources for the educational, health and judicial systems have helped address some problems, even though others remain. Again, less constrained public finances allowed the creation in 2002 of a three-pillar pension system, and, while pension reform is again under discussion, increases in the basic state pension component have greatly reduced old-age poverty rates. Although the legacy of the Soviet era, including overregulation, overlapping responsibilities and a disregard for economic incentives, has proved hard to overcome in many domains, clear progress can nonetheless be discerned virtually everywhere. Engagement with advanced countries and international organisations has been of great value in advancing well designed structural reforms.

Banking regulation has come a long way since the beginning of transition, with particularly important advances in the wake of the 1998 financial crisis. Pursuant to a 2002 strategy for the banking sector banks were required to submit financial statements under International Financial Reporting Standards, deposit insurance for household deposits was introduced, prudential supervision was strengthened and a system of credit bureaus was created. Although banks were hit by increased bad loan rates and losses on securities holdings in the 2008-09 global crisis, the authorities reacted quickly and the system remained stable. Nonetheless, little has been done to address vulnerabilities revealed by the crisis, and the need remains for further improvements in prudential supervision, notably as regards the introduction of consolidated supervision. As is true elsewhere, financial markets remain volatile, but progress has been made at building the regulatory framework and removing obstacles to the development of markets, and equity and corporate bond markets have grown rapidly over the past decade and more. One element of the authorities' economic modernisation objectives is to develop Moscow as an international financial centre, and this has given impetus to some important regulatory initiatives such as legislation on insider trading. The gains from the international financial centre initiative will be greatest if it is used as a means of leveraging necessary regulatory changes rather just being than a magnet for subsidies and tax advantages.

Labour markets are *de facto* flexible, despite high unionisation rates and fairly extensive labour regulation, since compared to most OECD countries there is little collective bargaining over wages and enforcement of regulations is weak. This has helped keep unemployment rates relatively low, even through the global crisis when the peak-to-trough contraction in Russian output was some 11%, but has also contributed to labour market segmentation and high income inequality. Support for the unemployed, both as regards the generosity of unemployment insurance and activation policies, is low compared to the OECD. A key challenge for labour market policies will be to retain the advantages of flexibility while providing for consistent enforcement of labour regulation and strengthening social protection.

As regards environmental policies, for many years Russia made relatively little progress, but has become increasingly active in setting objectives and designing policy instruments. Not much can be said so far about implementation, however, and the initial situation is highly unfavourable. Russia still lags in the use of financial incentives such as carbon taxation, cap-and-trade schemes for emissions, or green taxes to influence consumer

behaviour. It is therefore not yet clear to what extent Russia is closing the gap with OECD countries as regards effective environmental measures.

The poor business climate is holding Russia back

A glaring and persistent handicap for the Russian economy is the poor business environment. A range of indicators suggest that doing business in Russia is perceived as difficult and risky, and this impression is confirmed by the tendency of Russian firms to locate, list, issue bonds and conclude legal agreements abroad. The implications of this pathology are wide-ranging and serious: entry barriers that weaken competitive pressures on firms, sluggish innovation, low investment, heavy dependence on oil and gas extraction and slower convergence to advanced country living standards than would otherwise be the case. Although on a number of fronts significant improvements can be discerned, the business climate is one of the areas where the gap between Russia and most OECD economies is still very wide, and it is holding Russia back from becoming the modern, diversified, innovative economy that it aspires to be.

In particular, the scourge of corruption should be decisively addressed…

One critical dimension of the business climate is corruption, which various indicators confirm to be a serious burden on business in Russia. For example, Transparency International's Corruption Perception Index scores suggest that Russia is perceived to be far more corrupt than any OECD country. The burden of corruption on business has long been acknowledged by Russia's political leaders, and much has been done to address the problem, although so far with little visible progress, as has been admitted by President Medvedev.

One problem in this respect may have been that one key aspect of the opportunity for corruption, the availability of natural resource rents, has expanded sharply in the last dozen years. This is a reminder that administrative reforms to improve public integrity, while necessary to lighten the burden of corruption on businesses and citizens, may not be sufficient. A broader set of policies to limit the scope for corruption is needed as well. Some of these policy measures would also contribute to other goals: for example, less restrictive product market regulation will tend to reduce product market rents and limit the scope for rent-sharing between incumbent firms and public officials, while also spurring innovation and growth. Effective rules governing the taxation of oil and gas rents and the use to which the revenues are put will again hamper rent-seeking behaviour, while also helping to insulate the economy from oil price shocks. A reduction in the number of government employees, together with increased pay for those who are retained, will reduce the motivation to seek bribes while also helping to lighten the burden on business of state intervention in the economy.

There is also a need, however, for further measures targeted more narrowly at the corruption problem. Among the specific actions which would be useful are the following:

- The authorities should continue to try to strengthen judicial independence, with better training and pay for judges.
- Measures to strengthen protection for whistleblowers should be adopted.

- To prevent misconduct in the public procurement system, the government should identify risks to integrity for particular positions, activities and projects and set up specific mechanisms to minimise those risks.

In addition, top-down anti-corruption measures are likely to stand a better chance of success if they are complemented by reforms favouring political openness, transparency and civil society participation.

… and the rule of law strengthened

A closely related pillar of the business climate is the rule of law, an area in which international comparisons again suggest that Russia lags on several dimensions, including limitations on government powers, regulatory enforcement and open government. The rule of law is a many-faceted issue, and, as with combating corruption, a range of complementary measures will need to be implemented over an extended period to transform the situation for the better. Notably, *the quality and consistency of laws and regulations needs to be improved and their quantity reduced. Public institutions should be made more transparent and accountable, media freedom increased and enforcement of laws strengthened*. Improved judicial independence is also critical. Among the actions that could be helpful in that regard are the following:

- Judges could be regularly rotated among courts to prevent long-term informal relationships influencing legal decisions.
- Tribunal presidents' scope for discretion could be limited in order to reduce the degree of influence that can be exerted on judges and prevent the selection of compliant judges for particular cases; case assignments could even be randomised.
- Even the appearance of political interference in law enforcement or court cases should be avoided.

Reforms in other areas are also needed to improve the business climate

A range of quantitative indicators points to other areas of weakness in Russia's business climate. Notably, the OECD's product market regulation (PMR) indicators, which measure the extent to which policy settings promote competition in markets for goods and services where competition is viable, suggest that such policy settings remain relatively anti-competitive in Russia. As of 2008, Russia's PMR was found to be more restrictive than any OECD economy as well as all other countries for which the indicators have been calculated except China. In particular, the PMR indicators reveal that state involvement in the economy is especially pervasive in Russia. Administrative barriers to the development of new enterprises are relatively high in Russia, while quantitative comparative indicators suggest that competition policy in Russia is also relatively weak, despite the vigorous enforcement efforts of the Federal Antimonopoly Service. Russia also rates poorly as regards the international trade regime and the climate for foreign direct investment. All these problems are reflected in indicators that suggest a relatively low degree of competition in Russia and an underdeveloped small and medium-sized enterprise (SME) sector.

Pursuing a number of avenues would be important to improve the situation. Careful consideration should be given, in particular, to the following recommendations:

- Given the current context of Russia's negotiations to accede to the OECD, the authorities should use the opportunity offered by the accession reviews conducted by various OECD committees to bring policy settings fully into line with OECD legal instruments and policy guidelines which are linked to the investment climate.
- To reduce the role of the state as an owner of productive assets, the government should implement and go beyond its privatisation programme for 2011-13, with a view to giving up government control of enterprises in sectors where competition is viable, while ensuring that privatisation is well managed and that remaining state-owned firms have good governance and are run efficiently.
- Measures to lighten the administrative burdens for firms should include efforts to ensure that legislative or regulatory changes are preceded by sufficient consultation with affected firms, and provide for adequate transition periods to allow businesses to adjust. The government should also introduce a "deemed clearance" regime under which licenses are issued automatically if the licensing office does not act by the end of the statutory response period.
- Competition policy could be improved by developing a clear and economically sound interpretation of abuse of dominance and co-ordination, as provisions are applied too broadly and create significant uncertainty for businesses. Also, the authorities should eschew seeking to control inflation via *ad hoc* enforcement of the competition law.
- Competition would be strengthened by eliminating all remaining subsidies to large firms introduced or expanded during the global crisis.
- Trade liberalisation should be pursued. All restrictive trade measures adopted during the global economic crisis should be unwound, and both the average and the dispersion of tariff rates should be reduced, with the medium-term aim of achieving a low uniform rate. Also, following approval by the WTO Ministerial Conference, Russia should quickly ratify the WTO accession protocol and implement the accession package.
- In the area of foreign investment, a level playing field between domestic and foreign investors should be ensured as regards government procurement, access to subsidies, law enforcement and dispute resolution. Also, federal and regional regulation should be co-ordinated to minimise burdens for foreign investors and best practice as regards attracting foreign investment should be disseminated to the regions.

Fiscal policy has been mostly prudent and Russia's budgeting procedures are relatively advanced…

In the past dozen years Russia has ridden its luck but has also shown considerable restraint to establish and maintain sound public finances. A long rise in international oil prices from a low of about USD 10 a barrel in early 1999 to a peak of over USD 140 a barrel in July 2008 generated a growing stream of windfall revenues from oil and gas taxation, while also boosting overall economic activity and tax receipts. Much of the windfall was saved, however, and a Stabilisation Fund was created (and later split into two, a Reserve Fund and a National Welfare Fund) to institutionalise the setting aside of excess oil and gas revenues. Part of the reason for this prudence was the chastening experience of the partial

government default in 1998, which also ushered in other important fiscal initiatives, including wide-ranging tax reforms and reforms of the fiscal framework. The string of budget surpluses which resulted from the combination of rising oil prices, rapid growth and fiscal prudence lasted almost a decade and was interrupted only by the onset of the global crisis. Net government debt turned negative in 2006 and remains so even after budget deficits averaging 5% of GDP in 2009-10. In addition, going back even further, to the beginning of the transition process, Russia has progressively built modern fiscal institutions and fundamentally reformed its budgetary practices. In most areas, including medium-term budgeting, fiscal reporting and macroeconomic forecasting underpinning the budget, Russia's budgeting procedures are quite advanced, and comparable with those in many OECD countries.

… but a reduction in the non-oil deficit is needed, along with a framework that better protects against pro-cyclical policy

Although public debt is very low and the budget is expected to record a small surplus this year, there is a need for medium-term consolidation. The non-oil deficit exploded in 2008-09 and remains above 10% of GDP, with only a gradual reduction foreseen in 2012-14. Any sharp reduction in oil prices would strain the capacity of the government to finance its deficits without being forced into a pro-cyclical reduction of expenditure. Meanwhile, demographic trends will put increasing pressure on public finances. Although a fiscal rule governing overall deficits and use of oil and gas revenue was enshrined in the Budget Code, those provisions were suspended at the time of the global crisis and have not been reactivated. Notwithstanding the proven commitment of the Ministry of Finance to fiscal prudence, Russia would benefit from the prompt reinstatement of a fiscal rule along with other measures to support the durable consolidation of its budget position.

- A Budget Code rule governing the management of oil and gas revenues and limiting the non-oil deficit should be restored, along with a well defined escape clause regarding the circumstances in which the rule can be breached.
- The non-oil deficit limit should be supplemented by a rule restricting the annual increase in total expenditure in real terms to some ceiling.
- The rules-based framework could be enhanced by setting up an independent fiscal council, as has been done in several OECD countries, to perform a number of important advisory tasks such as providing estimates of short-term macroeconomic variables and trend growth. An independent panel of experts can also help build expertise on the cyclical adjustment of non-oil revenues. As such expertise develops, the authorities should publish more detailed information on the underlying fiscal position, while highlighting uncertainties.
- Pressure on future pension liabilities should be addressed in the first instance by equalising the pensionable ages for men and women and gradually raising the pensionable age in line with gains in longevity.

One aspect of the ratcheting up of expenditures in the pre-crisis years was the regular resort to supplemental budgets, sometimes even more than once a year. This tendency also exacerbated the very uneven and inefficient pattern of expenditure within the year, with large December spending peaks. One measure that could help reduce the frequency

of supplemental budgets, while imparting a pro-consolidation bias to fiscal outcomes, would be the inclusion in each annual budget of a significant contingency reserve controlled by the Ministry of Finance, to accommodate underestimated needs in some areas without having to reduce allocations in others.

Russia remains a relatively high-inflation economy…

Although consumer price inflation has been on a long downtrend since 1998, Russia still experiences inflation rates that are well above those in advanced countries and relatively high among middle-income economies. Russia has achieved single-digit annual average inflation on only three occasions in the two decades since the beginning of transition, and inflation has consistently overshot the Central Bank's own targets. Rates of inflation somewhat in excess of those in most OECD economies are to be expected, given the ongoing adjustment of relative prices characteristic of transition economies and middle-income countries catching up to advanced country income levels. In particular, the relative price of energy in Russia is still low, although it has risen considerably. Achieving relative price shifts with somewhat higher inflation can be the best solution, given the difficulty of achieving absolute price declines without significant output costs. But inflation in Russia has been higher than justified by this factor alone. The monetary policy framework in place until the onset of the global crisis combined inflation objectives with an aim of limiting real appreciation of the rouble (operationalised by foreign exchange market intervention to restrict nominal appreciation), and the tension between these goals in an environment of large current account surpluses and occasional strong private capital inflows resulted in a persistent tendency to exceed the inflation target.

… but a new framework for monetary policy in the approaching low-inflation environment is being created

The Central Bank of Russia (CBR) has for a number of years announced its intention to move towards an inflation-targeting regime for monetary policy. Since the global crisis, a new framework has emerged which can be seen as a step in that direction. In particular, more exchange rate flexibility has been allowed and increased emphasis was placed on the CBR's policy rates. Communication of policy decisions also increased, with press releases beginning to be issued on the day of Board meetings to set policy rates, with some rationale provided for decisions. As the conditions for successful inflation targeting – not least a relatively low and stable initial rate of inflation – increasingly fall into place, further moves in the direction of a flexible inflation-targeting regime would be useful.

- To begin with, price stability should be clearly spelled out as the primary objective of monetary policy by amending the Central Bank Law.
- The time horizon over which the objective should be achieved should also be specified.
- The unusually large number of credit instruments currently in use in Russia could be streamlined, with one or two policy rates serving as the main instrument(s).
- Foreign exchange interventions should be conducted only to the extent that they are consistent with the primary objective of price stability.

Another important area for improvement is monetary policy transparency, where Russia still scores poorly in international comparisons. In particular:

- The CBR could build on recent improvements in communicating policy decisions by holding press conferences following policy meetings as well as publishing minutes of the meetings and/or voting records.
- There is scope for improvement as regards trans parency concerning economic analysis. In conjunction with a move to inflation targeting, the CBR should publish its own projections of inflation and output, together with underlying assumptions, as well as information about inflation expectations, for the period over which the inflation target is to be achieved.
- An innovation that would help clarify the picture as regards inflation expectations would be the development of a market for inflation-linked bonds.

A range of policy measures should be considered in the event of a return of large private capital inflows

In the years leading up to the crisis Russia experienced large private capital inflows, as rising commodity prices, rouble appreciation and low interest rates in developed economies encouraged Russian corporations and banks to borrow abroad, while enthusiasm for emerging markets in general and commodity plays in particular generated a growing appetite for Russian assets among foreign investors. These inflows complicated the conduct of monetary policy, forcing the Central Bank to choose between allowing rapid appreciation of the rouble and having to intervene massively, straining its willingness and ability to sterilise. Although commodity prices have rebounded sharply since the crisis and interest rates in major OECD economies remain very low, net inflows to Russia have not yet resumed, in contrast to a number of other emerging market economies. In part as a result of their experience during the global crisis, Russian firms have so far been cautious about rebuilding external debt, and in many cases have been deleveraging, while political uncertainty appears to have depressed the appetite for Russian assets in 2010 and most of 2011. As confidence returns, together with a reduction in political uncertainty after the presidential election and the formation of a new government, and especially if the business climate improves, Russia may again experience large-scale private capital inflows. A framework should therefore be put in place to deal with a potential surge of large short-term capital inflows leading to excessive pressure for appreciation of the rouble. A range of policy responses should be considered, including initially fiscal tightening and macro- and micro-prudential measures. These could be supported by sterilised intervention if needed, while temporary market-based disincentives for such inflows should be turned to only as a last resort.

Greater energy efficiency would be good for the economy and the environment

Although energy use has declined substantially in absolute terms since the Soviet era, Russia still has one of the most energy-intensive economies in the world. Thus, while Russia has the sixth largest economy in the world in PPP terms, it is the fourth largest user of energy and the third largest emitter of greenhouse gases. Moreover, low energy efficiency

contributes to poor air quality, and Russia has one of the highest rates of premature mortality attributable to air pollution in the world. Raising energy efficiency is far from costless; the government's programme projects total spending, by all sectors of the economy, of more than 1% of GDP on average over the period 2011-20 to meet the goal of reducing the energy intensity of GDP by 40%. The scope for profitable energy efficiency investment in Russia is nonetheless huge, and indeed a good deal is already happening, but there is reason to believe that a number of constraints and market failures make this process slower than optimal. This means that improving energy efficiency should be a top priority for government policy in Russia. Fairly ambitious official targets for energy efficiency gains have been established, but so far the policy measures identified appear insufficient to meet them.

Energy consumers need to be faced with prices that fully reflect marginal social costs

One of the clearest imperatives to improve energy efficiency in Russia is to remove government interventions that result in below-market prices. In particular, regulation of domestic gas prices and export taxes on oil and oil products have helped keep domestic prices for electricity, fuel and heating lower than in any OECD country. Moreover, Russia has done less than most governments to price negative externalities associated with fossil fuel combustion, and many Russians do not face the right price incentives to save energy owing to relatively low levels of metering: as of 2009 metering of households' electricity consumption was above 90%, but for water this was only 60% and for heating 30%. There is also scope for greater sophistication in tariff structures to allow marginal costs to be better reflected in prices facing consumers; for example, the offering of multi-level tariffs differing by time of day has begun, but remains partial. A number of actions are called for:

- The government should both phase out all subsidies for domestic energy use and introduce mechanisms (such as a carbon tax or a cap-and-trade system for greenhouse gas emissions) to price in the negative externalities of fossil-fuel-based energy.
- Low-income households should be assisted via the tax and benefit system, perhaps in the form of energy vouchers, and not through low energy prices. The social impact of higher energy prices can also be mitigated by public investment in energy efficiency.
- The installation of meters for all forms of energy and water should be speeded up, including via the use of financial incentives.
- The offering of multi-level tariffs differing by time of day should be made universal as soon as possible. It would also be useful to introduce lower tariffs for interruptible service.

A range of other government policy actions could help raise energy efficiency

Apart from the key and multifaceted problem of ensuring that energy users face the true marginal cost of their consumption via metering and pricing, there are several other ways the government's energy efficiency strategy could be improved. Firstly, in order to assess progress and permit the sharing of gains from energy efficiency improvements, there is a need for better monitoring of energy use. This is recognised in the current strategy, but the demands for data collection appear too broad, which risks hindering the rapid development of useful indicators: government agencies involved in implementing the energy efficiency

strategy should be required to work with Rosstat and energy efficiency experts to arrive at a streamlined list of high-priority indicators of energy efficiency. In addition, the existing strategy has relatively few measures to improve energy efficiency in transport and industry. At least until energy prices adequately reflect marginal social costs, a number of measures in the transport sector should be implemented, such as mandatory fuel efficiency standards for cars and trucks, programmes for eco driving, and development of traffic management and road infrastructure. One way of reinforcing policies to improve industrial energy efficiency would be to remove obstacles to the development of energy service companies specialising in such areas as lighting systems, electric motors, and steam systems. Given that building-owners may not always have the right incentives to upgrade energy efficiency, developing instruments to mobilise financing for the renovation of housing stock and to speed up the rate of renovation could also be warranted. In general, cost-benefit analysis should be used wherever possible to evaluate and monitor different approaches and projects, including all social costs and benefits, such as the benefits of avoided greenhouse gas emissions.

Russia could reap important synergies from a well balanced combination of policies

The problems, policies and recommendations highlighted in this Economic Survey are closely intertwined, suggesting that both difficulties and solutions can be self-reinforcing. Currently, investment is hindered by widespread corruption and a weak and inconsistent application of the rule of law. That slows down the modernisation process, and also leaves Russia with a more energy-intensive economy than otherwise. Corruption also inflates the cost of public procurement, reducing the effectiveness of government spending and, other things being equal, worsening the fiscal balance. The large non-oil budget deficit reflects in part the fact that fiscal policy has not managed to sufficiently insulate the economy from swings in oil prices, which means that less diversification has been achieved than could and should have been the case.

These negative feedback mechanisms could be turned around, however. A more competition-friendly business environment would help stimulate innovation and thus contribute to economic modernisation. Modernisation would in turn raise per capita incomes, which is one factor that appears to help reduce corruption. Lower levels of corruption would increase the efficiency of public expenditure, helping to ease infrastructure bottlenecks without threatening fiscal sustainability. An optimal taxation of resource rents would reduce the scope for rent-seeking behaviour and better insulate the economy from swings in oil and gas prices. A more favourable business climate would facilitate the growth of SMEs and foster diversification of the economy, as well as making investment more attractive, and in all these respects would advance economic modernisation. A more diversified economy would make the exchange rate less sensitive to oil prices, thus facilitating the task of monetary policy. And with more investment, the faster pace of replacement of ageing capital assets would raise energy efficiency, with positive implications for environmental and health outcomes as well as the competitiveness of firms. There are thus major gains to be reaped from a broad range of complementary measures to ensure sound macroeconomic policies, an improved business climate, and greater energy efficiency. Implementing such an agenda would advance the modernisation process emphasised by Russian leaders in recent years and thereby accelerate growth and raise living standards.

Chapter 1

Modernisation of the Russian economy: how full is the glass?

By OECD standards Russia's economy is overall still relatively backward, exhibiting low productivity and per capita incomes, high inflation, extreme inequality, poor outcomes as regards health and the environment and low access to and use of information and communication technologies. Across a range of macroeconomic and social indicators there has been clear improvement in recent years, however, and in general, Russia is already within the range of OECD countries, not an outlier. Moreover, in some respects Russia exhibits relative strengths, such as its negative net public debt and high tertiary education enrolment rates. As regards structural policies, progress towards OECD standards and practices can generally be discerned, although gaps remain large in some areas, and the government's priorities for modernising the economy are for the most part well placed. The main potential pitfall in the drive for modernisation is overemphasising high-tech activities and especially in using public resources to encourage them. Modernisation should be a broad agenda linking many areas: better education, health, public administration and environmental policies are all part of creating a favourable climate for innovation, and a better business climate is also vital.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Russia has long been an important country in the global economy, given its large population, vast territory, and huge natural resource wealth. Yet along a number of dimensions it falls short of the world's top performing economies. Leaders as far back as Peter the Great have sought to modernise Russia and bring it into line with best practices elsewhere, and modernisation remains a major theme of the government today. In his 2009 article "Forward Russia!" President Medvedev set out five vectors of economic modernisation, calling for Russia: to become a leading country in terms of efficiency of production, transportation and energy use; to preserve and upgrade its nuclear technologies; innovate in the area of information technologies; to establish its own ground and space infrastructure for the transmission of information; and to become a leader in a range of medical technologies. Importantly, the authorities recognise that modernisation is not only a question of upgrading technology, but more generally of creating an economy in which use of technology and innovation flourishes, by converging on best international practice in order to make the best use of the country's resources. As President Medvedev said in St. Petersburg in June 2011: "My choice is to thoroughly overhaul not just outdated parts of our economy, but all of our public institutions."

This *OECD Economic Survey* was written as part of the process of Russia's accession to the OECD, which began in June 2007 when the Council invited Russia, along with four other countries, to begin accession negotiations. This context underlines the broad acceptance of the idea that Russia has already become a modern market-based economy, properly compared to those of the OECD, but also provides an opportunity to reflect on the size of gaps in policies and outcomes in various areas. This chapter undertakes a *tour d'horizon* of economic outcomes and policies since the early years of transition, when the OECD began to produce *OECD Economic Surveys of Russia*, in order to assess the extent to which the Russian economy now resembles those of the most advanced countries. Annex 1.A1 summarises actions taken in areas of past *Survey* recommendations. In highlighting some of the remaining gaps *vis-à-vis* OECD countries, this exercise also suggests the scope for Russia to achieve faster convergence to advanced country living standards by submitting itself to peer review and subscribing to the standards and guidelines of the OECD. It also notes policy domains where Russia performs relatively strongly, and where sharing the lessons of Russia's experience could be beneficial for other OECD members.

In 1992, the Russian authorities inherited a centrally planned economy tied into a trading system that had collapsed, and lacking modern institutions to conduct macroeconomic policies and create a market economy. In many ways, the transformation since then has been remarkable, and has borne fruit in terms of expanded consumer choice, higher living standards, a less unbalanced economy, and much greater economic freedom for individuals. Nor should it be forgotten that in some areas Russia continues to show considerable technological prowess: for example, it launches more spacecraft than any other country, and is among the world leaders in high-technology areas such as nuclear energy and lasers. Overall, across a range of indicators of advancement and quality of policies, Russia appears to lie within the range of existing members of the OECD, albeit towards the lower end. Nevertheless,

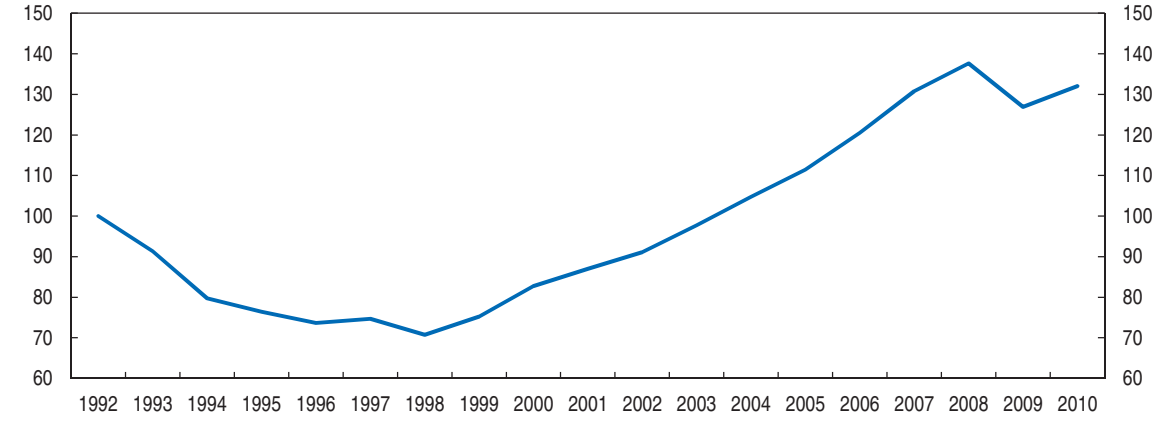
Russia's policies and institutions are still relatively weak, a point frankly acknowledged by President Medvedev in many of his public statements.[1]

Macroeconomic and social developments

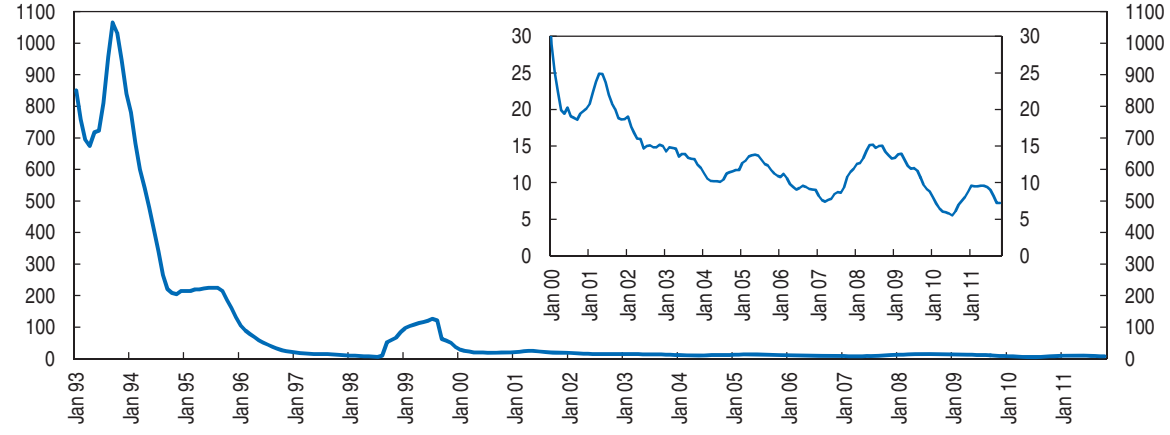
In macroeconomic terms Russia can be said to have experienced three main phases in the twenty years since it became an independent country. The first of these covered 1992-98, and was marked by a collapse in economic output and waves of very high inflation, a pattern experienced by many countries making the transition from communism to a market-oriented economy (Figure 1.1). For Russia the situation was worsened by weak oil prices. Although within this period there was some stabilisation in 1996-97 with a bottoming out of output and a sharp reduction in inflation, the 1998 financial crisis brought a final punctuation mark to this chaotic phase; there was another downward leg to output, a partial default on government debt, the collapse of the fixed exchange rate regime, a renewed burst of inflation and large-scale bank failures. Soon thereafter, however, the long boom of 1999-2008 began, with sustained rapid real GDP growth accompanying a downtrend in inflation and strong fiscal and balance of payments

Figure 1.1. **Real GDP and inflation**

A. Real GDP (1992 = 100)



B. CPI inflation, year-on-year percentage change



Source: OECD, *Main Economic Indicators Database* and Rosstat.

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positions. That second phase ended with the onset of the global financial crisis in 2008. The period of the crisis and the recovery from it can be said to constitute the final phase, echoing the longer collapse and recovery of the earlier phases. Russia experienced a sharp recession from the third quarter of 2008 through the second quarter of 2009, and growth since then has been at a slower pace than during the pre-crisis boom, notwithstanding the major increase in oil prices since early 2009. Real GDP in the third quarter of 2011 was still nearly 2% below its pre-crisis peak more than three years earlier. Inflation touched a post-Soviet-era low of 5.5% in July 2010 before moving back up, largely due to the surge in domestic food prices following record heat and wildfires in the summer of 2010, which devastated harvests. Recent economic developments and OECD projections for 2012-13 are discussed further in Box 1.1. The latest in the succession of phases in macroeconomic performance to date suggests that Russia is converging towards conditions of moderate growth and inflation, more similar to the general experience of OECD economies, especially those at similar levels of per capita income to Russia, such as Chile, Mexico and Turkey.

Box 1.1. **Recent macroeconomic developments and projections through 2013**

Since the global crisis, quarterly **growth** in Russia has been volatile, in part because of the effects of the heatwave and fires in the summer of 2010. Growth, which had resumed in the third quarter of 2009 and continued at a fast pace through the first half of 2010, halted in the third quarter of 2010 due largely to the weather-driven contraction in agricultural output, before picking up again thereafter. Some other sectors were also affected by the heat and fires. Construction has been a notable weak point, with activity remaining some 17% below the pre-crisis peak as of the second quarter of 2011, and falling in the first half of 2011 compared to the second half of 2010. Real estate has similarly been a lagging sector in most recent quarters. The most recent high-frequency indicators, though mixed, suggest that the global slowdown and weakening confidence are undermining growth momentum in Russia, although in the second half of 2011 this will have been largely offset by strong agricultural output, given favourable climatic conditions this year. Confidence weakened in August-November 2011 amid the global financial turmoil. Although this was centred on the euro zone, it provoked a flight to safe assets which affected Russia, together with other emerging markets. As a result, in a rare decoupling from oil prices the stock market declined sharply (Figure 1.2) and the rouble lost 9% against the dollar-euro reference basket between July and October, despite the central bank's interventions. Nevertheless, with the oil price still high, the projection remains one in which annual growth over the next two years is close to potential of around 4%. Clearly, an intensification of the financial tensions in OECD economies would represent a major downside risk to this scenario. In particular, Russian confidence in the banking sector is weak, and renewed runs on deposits, as seen at the outset of the global crisis in 2008, could provoke a renewed credit crunch, cutting short the recovery in credit growth which has been building in recent quarters.

Having touched a post-Soviet-era low of 5.5% in July 2010, **consumer price inflation** rose steeply in the second half of the year and into 2011. The main factor was the sharp rise in food prices, largely as a result of the blow to agricultural output from the heat and fires. The strong harvest in 2011 is now having an opposite effect, and the year-on-year inflation rate has fallen from 9.7% in May to 7.2% in October. Notwithstanding some passthrough of recent weakness of the rouble to domestic prices, year-on-year inflation is expected to decline further through the end of 2011. Disinflation is expected to continue in 2012, with a moderation in credit growth, output rising broadly in line with potential, and an easing of upward pressure on inflation from commodity prices. The recent decision to push back regulated tariff adjustments from January to July 2012 and to restrict the maximum increases at that time will exert a downward influence on inflation next year.

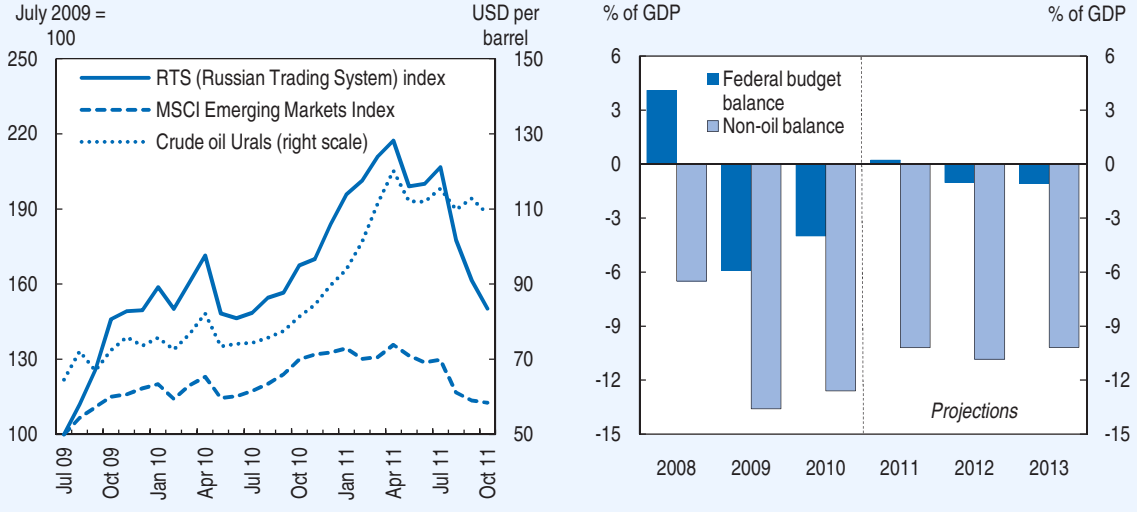
Box 1.1. **Recent macroeconomic developments and projections through 2013** *(cont.)*

As regards the **balance of payments**, high oil and gas prices in the first half of 2010 were reflected in strong growth in dollar exports and continued large trade and current account surpluses, despite rapid growth in import volumes. Unlike the pre-crisis period, however, and in contrast to the recent experience of a number of other emerging market economies, rising commodity prices were not associated with net private capital inflows. The Central Bank of Russia (CBR) estimates that net private capital outflows amounted to about USD 46 billion in the first nine months of 2011. As a result, the CBR accumulated about USD 24 billion less in reserves in the first half of 2011 than a year earlier despite a USD 16 billion increase in the current account surplus. Recent rouble weakness in the context of growing turmoil in international financial markets and a renewed flight to perceived safe-haven assets suggests a renewed episode of private capital outflows, after net movements in July-August that appear to have been close to zero.

The baseline scenario for the projections reflects an assumed oil price (Brent) of USD 110 per barrel from the fourth quarter of 2011 through 2013. On this basis the current account surplus should decline but not switch into deficit, and net private capital flows should remain small, perhaps even turning positive in 2012 as political uncertainty subsides, especially if global appetite for risk recovers. With important risks to the global growth outlook, however, much weaker oil prices are possible, in which case export values and net private capital flows would be negatively affected to a substantial degree.

Both non-oil-and-gas and, especially, oil and gas revenues have been running ahead of expectations so far in 2011, with the result that **fiscal outcomes** this year will be much better than originally budgeted, and probably slightly better even than the latest revisions adopted in October. There was a federal budget surplus for January-September amounting to about 3% of (nine-month) GDP, but the usual backloading of expenditures within the year means that much of that surplus will be unwound in the final quarter. The draft 2012-14 Budget projects deficits of 1.5% of GDP in 2012 and 1.6% of GDP in 2013, based on growth and oil price assumptions that are slightly more conservative than the baseline scenario for OECD projections. The non-oil deficit has so far fallen by only about a quarter of the amount by which it increased in 2008-09 and remains very high at more than 10% of GDP in 2011. Based on the draft 2012-14 budget, it is projected to increase slightly in 2012, driven by a rise in expenditure, before falling back in 2013 (Figure 1.2).

Figure 1.2. **Recent oil price and stock market developments and projections for the overall and non-oil budget balance**



Source: Datastream, OECD calculations and estimates based on data from Rosstat and the Economic Expert Group.

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Box 1.1. **Recent macroeconomic developments and projections through 2013** *(cont.)*

Table 1.1. **Macroeconomic indicators**

Percentage change unless otherwise indicated

	2009	2010	2011	2012	2013
Real GDP growth	–7.8	4.0	4.0	4.1	4.1
Inflation (CPI), period average	11.7	6.9	8.4	6.5	5.7
Fiscal balance (per cent of GDP)[1]	–4.3	–3.5	0.2	–0.7	–0.7
Current account balance (per cent of GDP)	3.9	4.7	5.6	4.0	3.3

1. Consolidated budget.

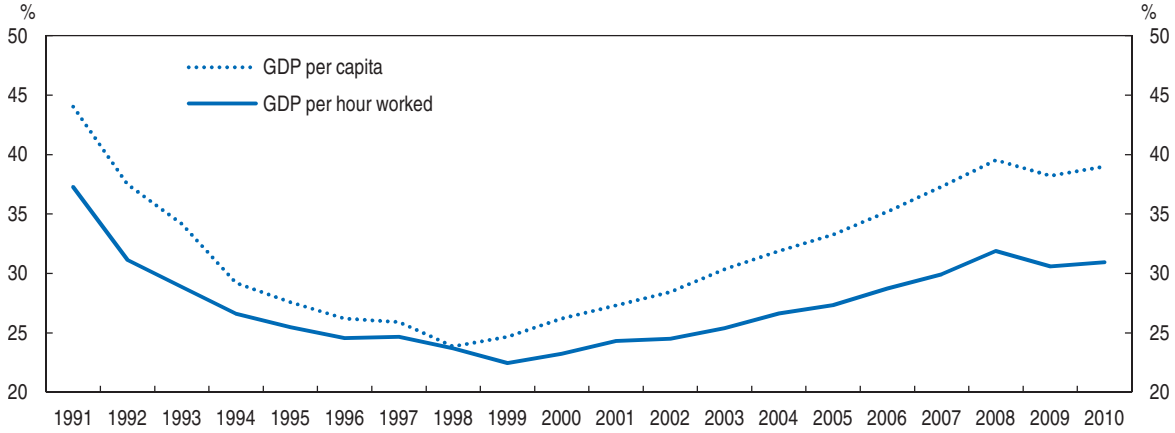
Source: OECD Economic Outlook 90 Database.

Trends in real income per capita relative to the OECD closely mirror the three growth phases to date. After a large initial widening, the income gap *vis-à-vis* the OECD average shrank rapidly over 1999-2008, before expanding in 2009 and falling back in 2010. Real income per capita at 2005 PPP exchange rates was estimated to be USD 14 183 in 2010, higher than 3 of the 34 OECD members.

Again in line with output, aggregate labour productivity fell disastrously from 1990 to 1998 and then increased rapidly until 2008. In 2010 it was a little over 30% of the upper half of the OECD countries. GDP per hour worked converged less quickly on OECD levels during the boom than income per capita as total hours worked increased rapidly (because of both rising employment and higher hours worked per worker) while the population declined. Russia's relative labour productivity dipped during the crisis, but has resumed its growth since (Figure 1.3).

Figure 1.3. **GDP per capita and labour productivity**

As a percentage of upper half of OECD countries[1]



1. Simple average of the top 17 OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2005 PPPs).

Source: OECD, *Going for Growth 2012* (forthcoming).

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The OECD has been in the forefront of international efforts to measure a wider range of indicators of well-being, as exemplified by the recent publication *How's Life?* (OECD, 2011c). In general, for those measures where data are available, Russia falls within the range of OECD member countries. For example, as regards self-assessed life satisfaction,

Russia's relative position on an index of life satisfaction appears to be similar to its ranking on income: it again places behind most OECD countries, but ahead of a few (Figure 1.4A). It is somewhat better placed on the measure of the availability of social support networks (Figure 1.4B), while in Russia the proportion of employees usually working very long hours is relatively low (Figure 1.4C).

Income inequalities remain very high in international comparison. Rosstat data indicate that inequality increased markedly in the early 1990s before stabilising, though with a shallow upward trend, since the mid-1990s. In 2009 the Gini coefficient on income disparities stood at 0.42, compared with an OECD average of 0.31. Only two OECD countries, Chile and Mexico, have higher numbers (Figure 1.5). Given in particular the difficulty of reflecting the (numerous) hyper-rich in the official data, income dispersion in Russia may be much greater than indicated by the official data, corresponding to a Gini coefficient of as much as 0.60 (Yemtsov, 2008). Wage inequality is particularly marked. The Gini coefficient of average monthly earnings declined from 0.48 in 2000 to 0.42 in 2009, but this was still higher than in any OECD country for which data are available. Much of the inequality comes from regional variation in earnings, but within-region inequality is also very high in some regions, especially the capital: the Gini coefficient for wages in Moscow was 0.56 in 2006, varying in other regions from 0.32 to 0.46 (OECD, 2011a).

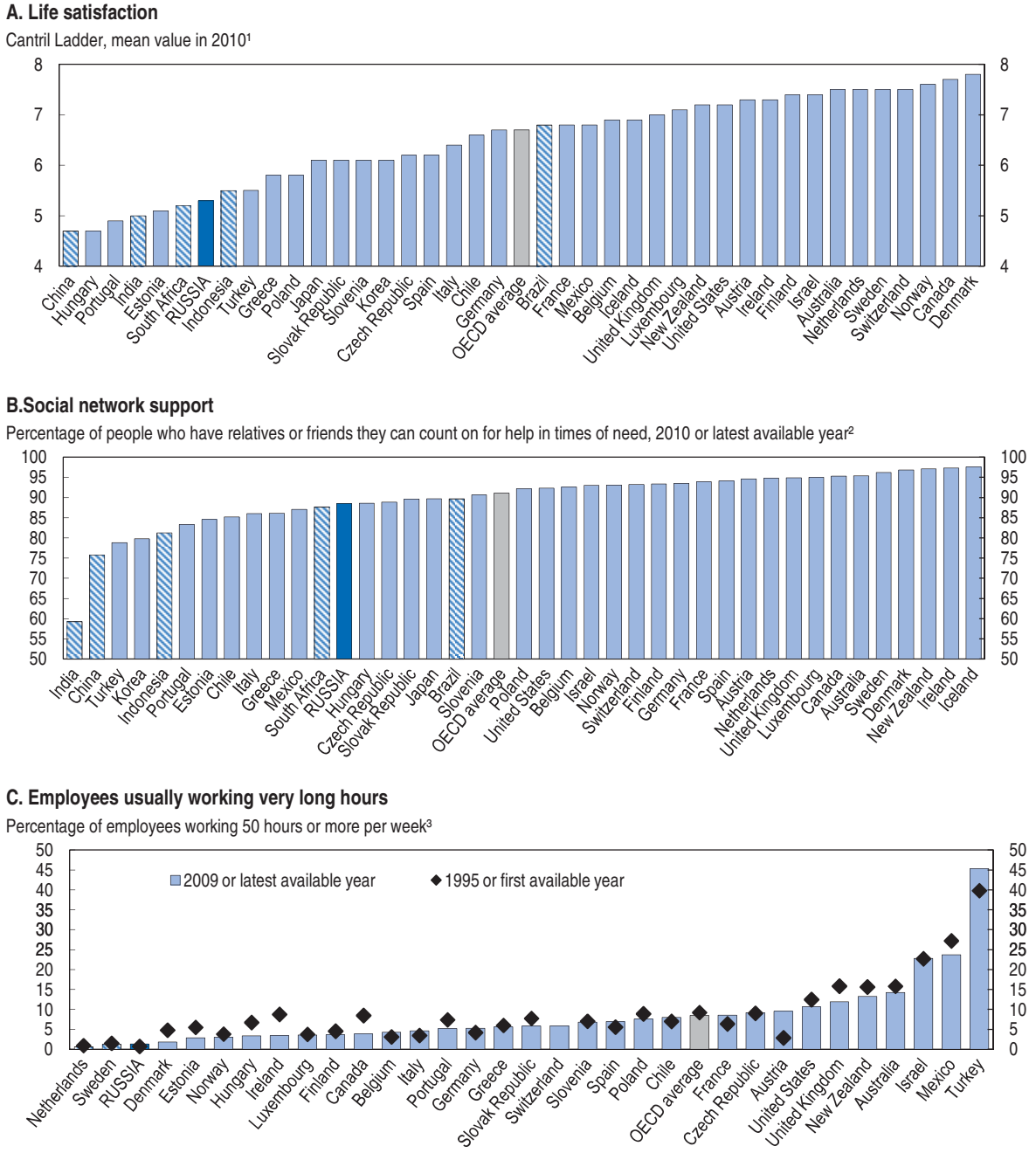
Absolute poverty rates fell sharply during the decade of strong growth from 1999, declining from 29% in 2000 to 13% in 2009 and remaining relatively stable during the crisis. Relative poverty, measured against the standard OECD benchmark of 50% of median household income, adjusted for household size, stood at 17% in 2008 (OECD, 2011a). This is at the upper end of the OECD range, comparable to rates in Chile, Mexico, Turkey and the United States.

At the beginning of the transition process Russia's economic structure was distorted toward heavy industry and thus the share of services in total GDP was much lower than in most OECD countries. Since then there has been an upward trend in the share of services in value added, although Rosstat data indicate an unusually uneven time profile (Figure 1.6). This is largely because of the large price swings for commodities like oil, gas and metals, which, given their significant share in output, make the share of services in GDP relatively volatile. Such fluctuations aside, Russia appears to be gradually converging toward the average economic structure of the OECD, in which services are dominant.

The other large shift in the composition of value added in the economy was the rise in the share of GDP generated by the private sector. With the large-scale privatisations of the 1990s, this share rose rapidly to about 70% according to EBRD estimates before declining slightly in the mid-2000s when the state increased its holdings in the energy sector (Figure 1.7).

Like a number of OECD economies, Russia faces some unfavourable demographic trends, even though the situation is less negative than it appeared a few years ago. The population in 2010 was just under 142 million, down from almost 149 million in the early 1990s, but the rate of decline has slowed sharply in recent years: the estimated population in 2010 was unchanged from 2009 and only 0.1 million less than 2008. The fertility rate has progressively declined and, despite some marginal recovery in the early years of this century and a recent boost beginning in 2007, it is still, at 1.59 in 2010, considerably below the natural replacement level of 2.14. Net immigration has been positive for most of the transition period. In 2010 there were an estimated 12.3 million residents of Russia who were born abroad, more than in any

Figure 1.4. **Selected well-being indicators**



1. The Cantril ladder is measured on a scale from 0 to 10. Data refer to 2008 for Iceland and Norway; and to 2009 for Estonia, Israel, Switzerland and South Africa.
2. Data refer to 2008 for Iceland and Norway; and to 2009 for Estonia, Israel, Switzerland and South Africa.
3. Data refer to employees usually working 50 hours or more per week, except for the Russian Federation for which data refer to people who worked 51 hours and more. Jobs covered are the main job for Austria, Canada, the Czech Republic, Finland, Hungary, Mexico, Poland, the Slovak Republic, Sweden, Turkey and the United States; and all jobs for Australia, Iceland, New Zealand and Norway. The latest available year is 2007 for Israel and the Netherlands; and 2008 for Chile and the Russian Federation. The first available year is 1996 for Chile; 1998 for Hungary; 2001 for Austria; 2002 for Estonia, Norway, Poland, Slovenia and Sweden; and 2004 for the Czech Republic and Finland. There is a break in the series in 1998/1999 for Belgium, in 2002/2003 for France and in 2004 for Austria as a continuous survey has been introduced. In the case of Austria, employees whose working time varies considerably are not included from 2004. Starting from 2002 the number of hours worked excludes the main meal breaks for the Slovak Republic.

Source: OECD (2011), *How's Life? Measuring Well-being*, Figures 12.1, 8.1 and 6.1.

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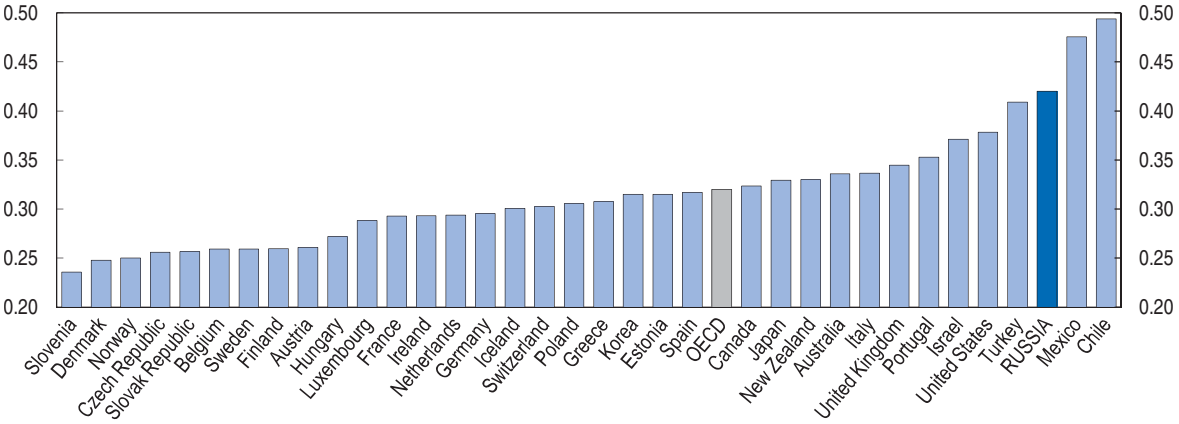
Figure 1.5. **Income inequality**

Gini index, late 2000s



Note: Data refer to mid-2000s instead of late 2000s for Greece and Switzerland. For Austria, Belgium, the Czech Republic, Estonia, Finland, Iceland, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Switzerland the values are provisional.

Source: OECD (2011), *How's Life? Measuring Well-being*, Figure 2.10 and Rosstat.

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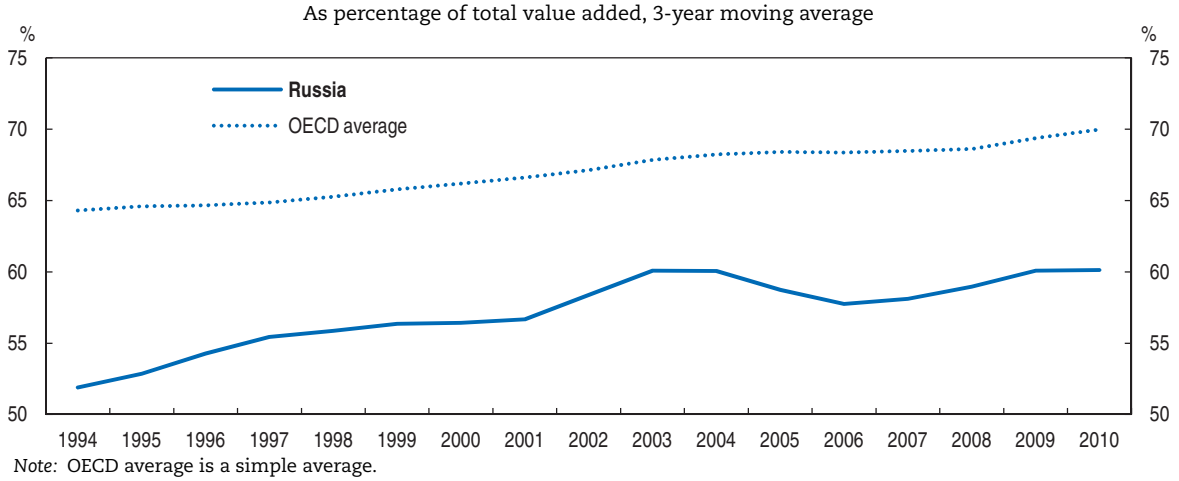
Figure 1.6. **Share of value added in services**

As percentage of total value added, 3-year moving average



Note: OECD average is a simple average.

Source: OECD, *Annual National Accounts Database* and Rosstat.

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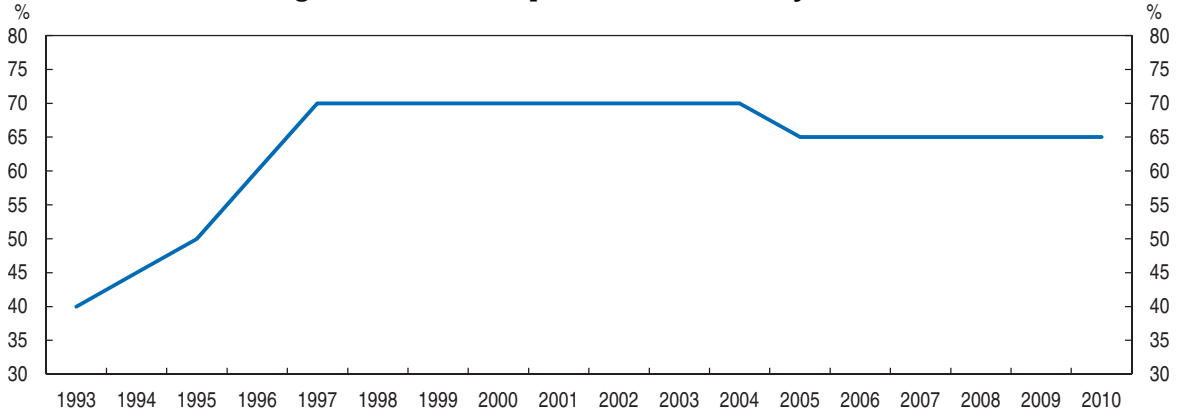
Figure 1.7. **Share of private sector activity in GDP**



Source: EBRD estimates.

OECD country except the United States, although in terms of the migrant/population ratio Russia (8.7%) is similar to the OECD average.

Labour market developments since the beginning of transition again largely tracked output, with the familiar pattern of collapse and recovery followed by a smaller version of the same pattern over 2008-11. Employment rates and labour force participation had been exceptionally high during the Soviet era. They fell sharply during the 1990s before rebounding to levels that are now again above the OECD average (Table 1.2). Only the participation rates for youth (aged 15-24) remain below the OECD average – 43.5% in 2010 compared with 47.4% in the OECD – largely due to the high rates of enrolment in education in Russia. The unemployment rate rose through the 1990s to a historical high of 13.2% in 1999, about double the OECD rate, before declining to about 6% in the latter stages of the subsequent decade-long boom (Figure 1.8). Although unemployment moved up during the global crisis, it has declined somewhat since 2009 and is now again below the OECD average.

Table 1.2. **Labour force status of the Russian population, 1992-2010**

Percentage

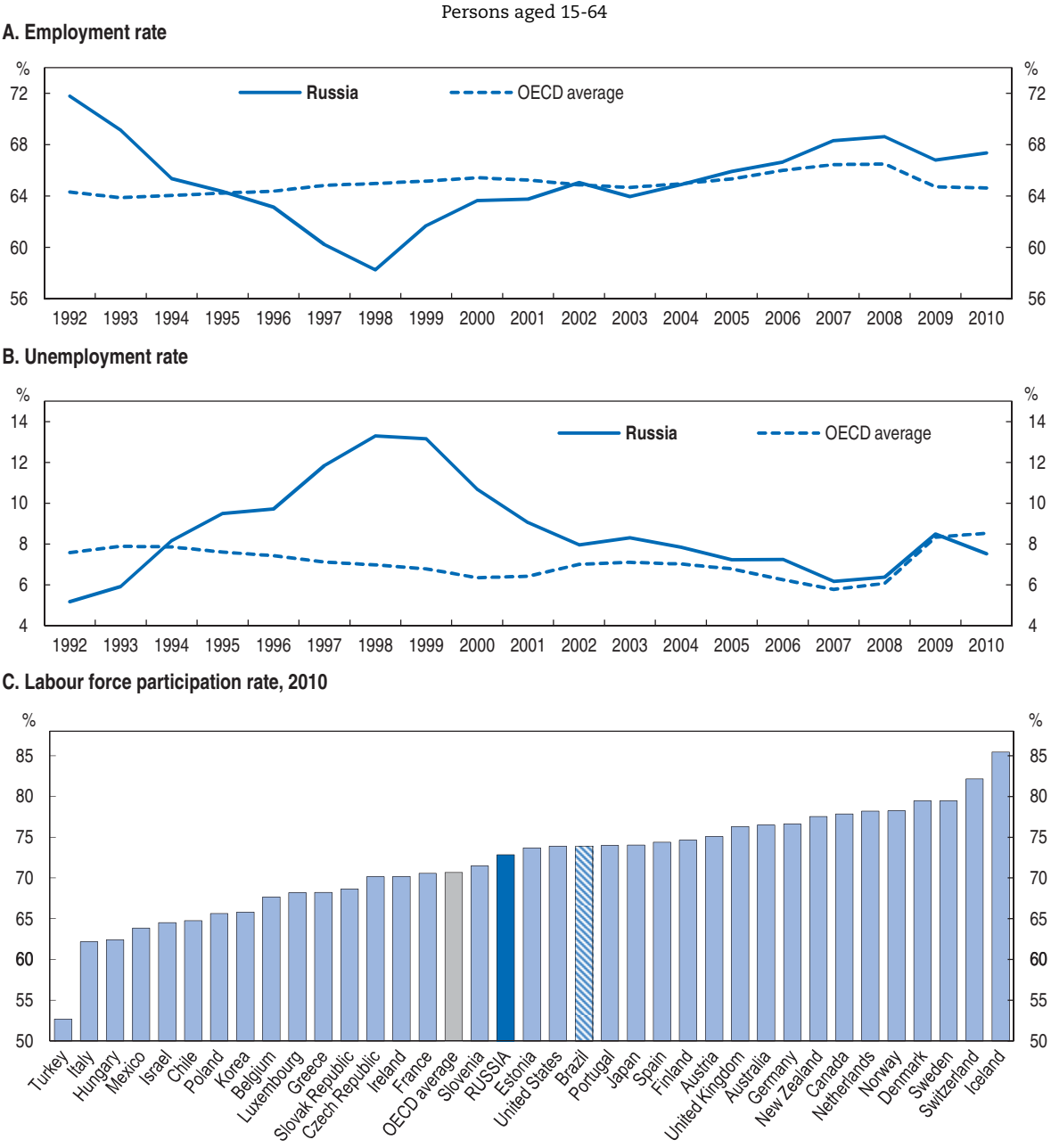
Age	Total			Men			Women		
	1992	1999	2010	1992	1999	2010	1992	1999	2010
					Labour force/population				
15-24	54.9	45.7	43.5	58.6	50.0	48.1	51.0	41.2	38.8
25-54	92.4	87.9	89.0	94.8	90.3	92.2	90.2	85.5	85.9
55-64	38.7	38.7	46.6	54.7	51.8	58.7	26.4	28.9	37.8
15-64	75.7	71.1	72.9	81.1	75.9	77.9	70.5	66.5	68.2
OECD	69.6	69.9	70.7	82.0	81.0	79.7	57.4	59.0	61.8
					Employed/population				
15-24	47.8	34.7	36.0	51.0	38.8	39.9	44.4	30.6	32.0
25-54	88.9	77.7	83.3	91.1	79.6	86.0	86.8	75.9	80.8
55-64	37.0	34.9	44.4	52.6	46.8	55.4	24.9	26.1	36.2
15-64	71.8	61.7	67.4	76.9	65.8	71.6	66.9	57.8	63.5
OECD	64.3	65.2	64.6	76.1	75.9	72.7	52.7	54.6	56.7
					Unemployed/labour force				
15-24	13.0	24.0	17.2	13.0	22.5	16.9	13.0	25.8	17.5
25-54	3.8	11.6	6.4	3.8	11.9	6.8	3.8	11.2	5.9
55-64	4.5	9.7	4.9	3.8	9.7	5.6	5.6	9.7	4.0
15-64	5.2	13.2	7.5	5.2	13.3	8.0	5.2	13.0	7.0
OECD	7.6	6.8	8.5	7.1	6.3	8.8	8.2	7.4	8.2

Source: OECD, *Labour Force Statistics Database*.

Health outcomes over the past 20 years follow the familiar pattern of collapse and recovery, although in the case of health the improvement began later and the recovery is less complete. Life expectancy fell from the mid-1980s until about 2005, before beginning to recover, reaching 63 years for men and 75 for women in 2009. In both cases this was still lower than all OECD countries, and the difference between Russia and the EU15 average remains about 14 years for men and 9 years for women. Russia's life expectancy is also low when compared with other middle-income countries, being about 9 years less than in Mexico or Poland, for example. Mortality rates, especially for adults, remain very high compared to advanced countries, having risen sharply from the beginning of transition in 1991 before beginning to fall only around 2006. Russia also has higher morbidity rates

Figure 1.8. **Labour market activity**

Persons aged 15-64



Note: The OECD average is a weighted average and does not include Israel or Slovenia. 2009 for Brazil.

Source: OECD, *Labour Force Statistics Database*.

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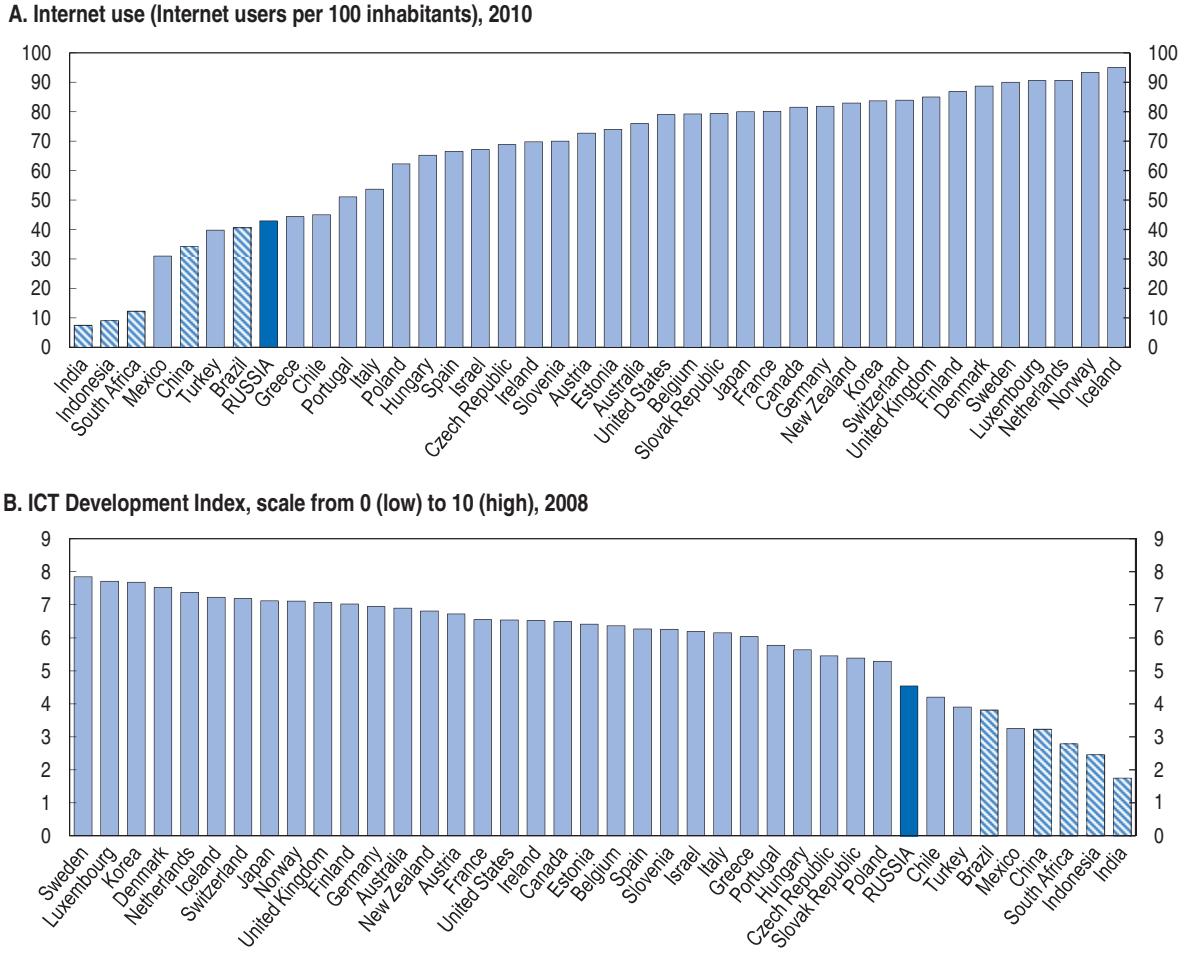
than advanced countries, with Russians spending much more of their lives in ill health than Western Europeans. A good proportion of the excess mortality and morbidity rates, especially for men, relates to excessive alcohol consumption and tobacco use (Bobak *et al.*, 2006). There has tended to be an insufficient focus on prevention, especially as regards lifestyle changes, while the balance between hospital and primary care has been excessively tilted to the former. Communicable diseases, most notably tuberculosis and AIDS, remain important challenges. Russia's unfavourable health outcomes are also linked to environmental policies and legacies.

The preliminary findings of the OECD accession review on health suggest that access to medical care in Russia is uneven. Many Russians who fall ill do not have adequate access to care for physical or geographical reasons (per capita public health budgets vary enormously across regions) or believe that they do not have the financial resources to pay for care. The cost to patients of paid services, pharmaceuticals drugs and informal payments can be prohibitively high – the private share of spending represents nearly 40% of total health care spending, compared with an average of only 27% in OECD countries. Indeed, surveys suggest that nearly half of those wishing to obtain care deny themselves care because of concern over the expected cost. Currently, there are large numbers of beds, high rates of utilisation and long lengths of stay. Every year, up to one quarter of the population spends time in a hospital and 30% of hospital stays are thought to be unnecessary.

Regarding the use of information technology, Russia has made rapid advances in recent years, with spectacular growth in internet connections and mobile phone use, for example. Nonetheless, it still lags behind nearly all OECD countries on measures of access, use and skills relating to information and communication technologies (ICT) (Figure 1.9). As regards the

Figure 1.9. **Information and communication technology (ICT) indicators**



Note: The ICT Development Index (IDI) is a composite index made up of 11 indicators covering ICT access, use and skills.

Source: International Telecommunication Union (ITU), *Measuring the Information Society 2010* and ITU World Telecommunication, *ICT Indicators Database*.

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innovation activities of firms, taking R&D spending by enterprises as a proxy for enterprise innovativeness suggests that Russian enterprises lag those of most OECD countries. Innovation survey data, which includes non-R&D innovation, also show Russian enterprises to be weak innovators compared to their international counterparts (OECD, 2011b).

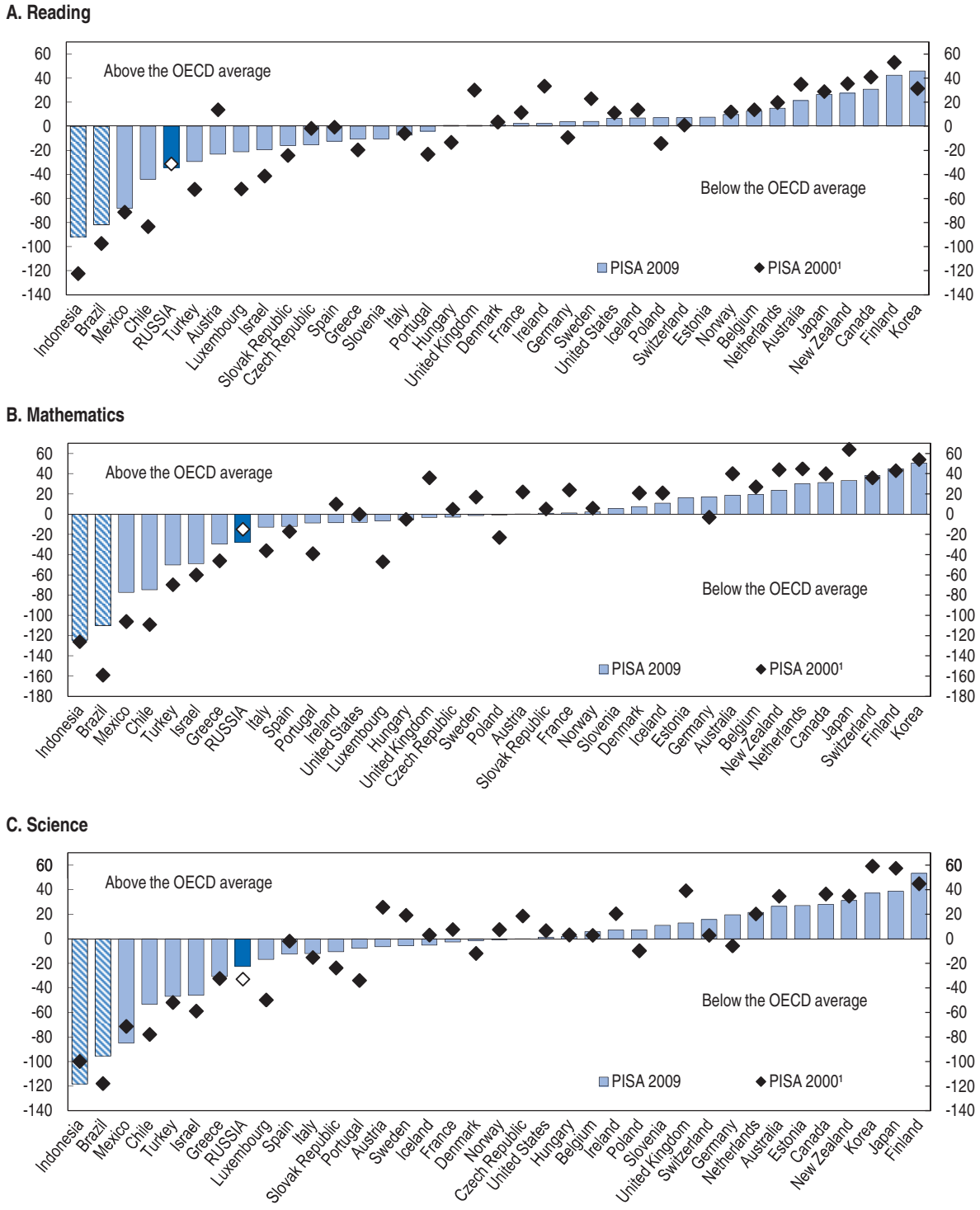
Russia's population is relatively well educated. The literacy rate is nearly 100%, and the tertiary enrolment rate was an exceptionally high 77% in 2008. Class sizes in Russian schools are relatively small. On the other hand, in the PISA 2009 assessment, the average performance of 15-year-old students in Russia was significantly below the OECD average in each of reading, mathematics and science, although still above that of a few OECD countries (Figure 1.10). Russia's performance is not atypical for a country of its income level. Trends in Russia's PISA performance are mixed. Comparing the results of PISA in 2000 and 2009, there is no significant change in Russia's average performance, though the 2009 figures are significantly higher than those in 2006. Russia has a relatively high percentage of low performers: 36% of boys and 19% of girls in Russia do not reach the PISA baseline Level 2 of reading proficiency, considered to be the baseline at which students begin to demonstrate the reading competencies that will enable them to participate effectively and productively in life. Russia does better on measures of equity in outcomes, however. The variation in student performance in Russia and in performance across schools is relatively low. Furthermore, only 11% of performance variation is explained by differences in socio-economic background, compared to 14% across OECD countries.

Russia produces one of the highest proportions of science and engineering graduates in the world, well above the OECD average. It also has higher rates of admission to tertiary education than any OECD country, after rapid growth from the mid-1990s, although a large proportion of tertiary education in Russia corresponds to type-B qualifications (OECD, 2007), where programmes are typically shorter than those of tertiary-type-A institutions and focus on practical, technical or occupational skills. A peculiar feature of the Russian system is that students can enter type-B institutions after having completed only lower secondary school and can thus not be classified as tertiary students in the strict sense (Kapelyushnikov, 2008). Restricting the analysis to only tertiary-type A attainment, Russia is still above the OECD average, but its ranking falls to eleventh among OECD countries (OECD, 2007). Russia inherited a relatively strong system of vocational colleges from the Soviet Union, but this has been somewhat neglected over the last 20 years and is now in a state of serious decline, in part due to demographic change, but also because of the trend towards university attendance (OECD, 2011b). Russia scores poorly on measures of life-long learning, which has become increasingly important for helping workers cope with change and building the technological capabilities of firms. In 2008 about a quarter of employees reported being engaged in some form of lifelong learning in the previous 12-months, compared to an OECD average of about 40%: the figure was above 50% in 10 OECD countries (Figure 1.11)

The ratio of investment to GDP fell sharply at the beginning of transition and continued to decline through the 1990s, being well below both OECD countries and other catch-up economies (Figure 1.12). The investment-to-GDP ratio has gradually picked up since the low-point in 1999, and although it slipped back in the crisis, the decline in the OECD was even greater, with the result that investment to GDP in Russia was back above the OECD average by 2010, though well below the levels in Asian emerging market economies. Because of the low investment rates for much of the past twenty years, the

Figure 1.10. **PISA scores**

Deviation from the OECD average



1. PISA 2003 for Netherlands, Slovak Republic and Turkey.

Source: OECD, *PISA Databases.*

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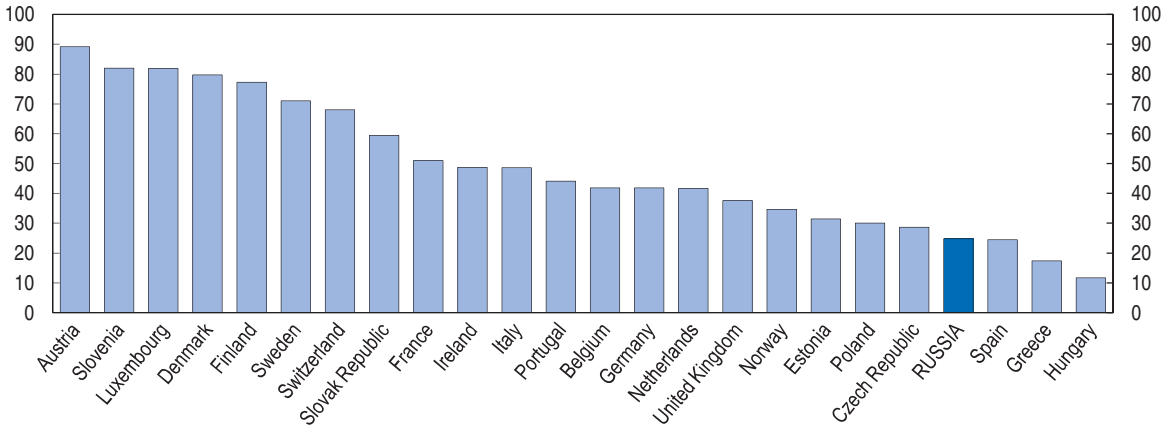
Figure 1.11. **Lifelong learning**

Participation in formal education, non-formal education/training and informal learning during the previous 12 months (percentage of 25-64 year-old), 2007[1]

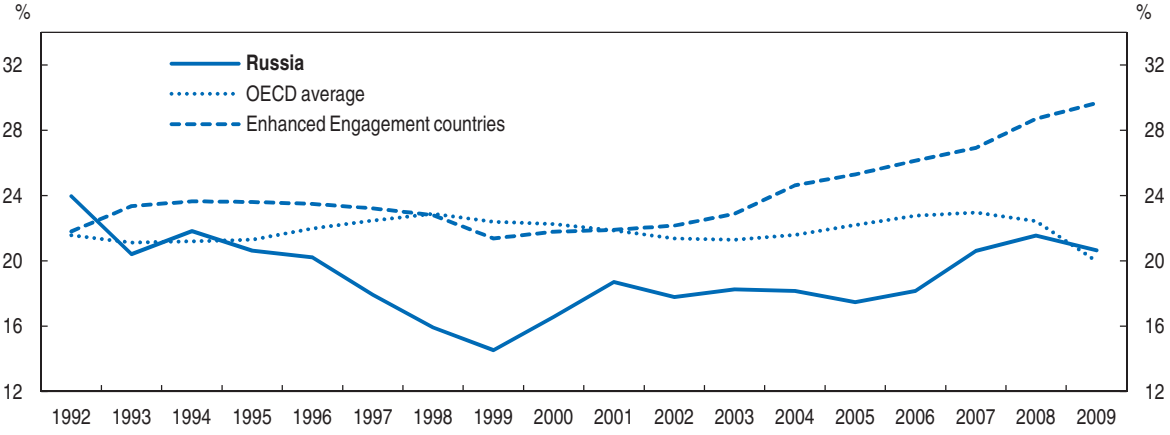


1. 2008 for Russia.

Source: OECD (2011), *OECD Reviews of Innovation Policy, Russian Federation*, Figure 2.55.

Figure 1.12. **Investment**

Gross fixed capital formation as a percentage of GDP



Note: OECD average and Enhanced Engagement countries are a simple average. The Enhanced Engagement countries are Brazil, China, India, Indonesia and South Africa.

Source: OECD, *National Accounts Databases*, *Main Economic Indicators Database* and *OECD Economic Outlook 89 Database*.

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capital stock is relatively old on average, with a high proportion of plant and equipment fully depreciated. Moreover, much of Russia's infrastructure is in a poor condition (World Bank, 2011), with spending that is both inadequate and inefficient.

Most estimates suggest that the size of the informal economy in Russia is limited compared to its emerging market peers, although some model estimates and anecdotal evidence paint a different picture. The estimated share of workers without an employment contract is below 10%, comparable to many OECD economies and significantly lower than in Greece, Mexico and Turkey. Measures related to tax avoidance suggest that the informal sector is sizeable, but within the OECD range. A slightly different definition of an unobserved economy is sometimes used to refer to those economic activities not covered

in the statistical surveys or administrative records from which the national accounts are constructed. A UN survey conducted in 2008 put the size of the unobserved economy in Russia at 24%, which is significantly above the level for those OECD economies for which assessment was made.

Progress on structural reform

This section provides a *tour d'horizon* of progress made in a range of structural policy areas in recent years, highlighting some areas where the gap *vis-à-vis* OECD countries remains large. The review is selective, but is intended to be broad enough to give an overall picture of progress in economic policy reform. Policy areas addressed in other chapters (*e.g.* the business climate, including corruption, which is discussed in Chapter 2, and energy efficiency policies, dealt with in Chapter 5) are not taken up here. Annex 1.A1 provides information on action taken in relation to recommendations made in past *OECD Economic Surveys of Russia*.

Health[2]

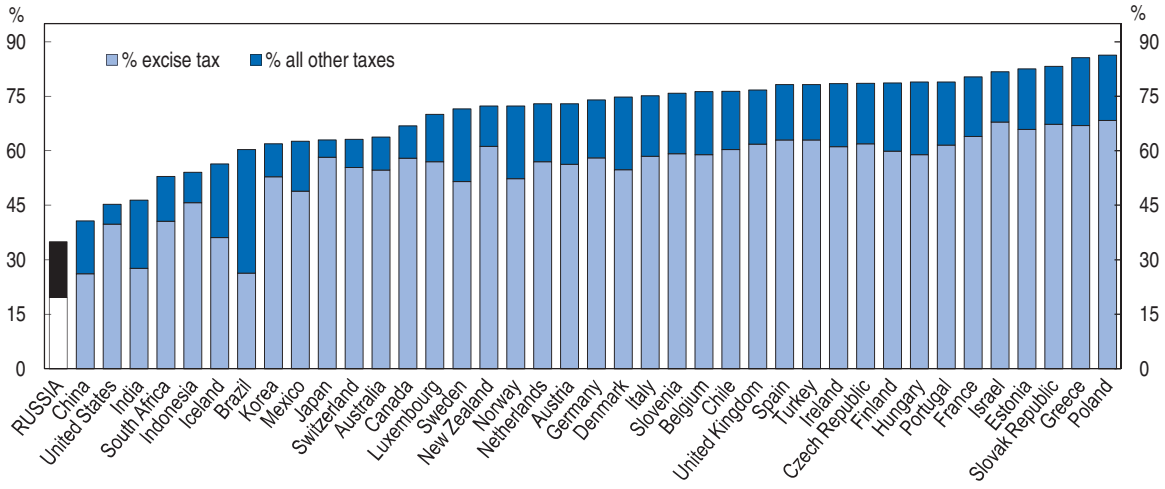
Russian healthcare has progressed a long way from the centralised, hierarchical system that prevailed in the Soviet era to a more decentralised, insurance-based system, although that transition is still incomplete, accounting for some of the poor health outcomes seen over the past two decades (OECD, 2006).

The Ministry of Health and Social Development's draft Plan for the Development of the Health Care System (Ministry of Health and Social Development, 2008) was developed as a part of the government's Long-Term Plan of Social-Economic Development to 2020, which was approved in 2008. It lists all of the current problems of health-care provision at all levels of the system and formulates goals for 2020, including the return to positive population growth, increased average life expectancy, reduced infant mortality, a shift in behaviour towards healthier life-styles and increases in the quality and accessibility of health care. The long-term plan sets out a number of principles and broad directions, including prevention and information programmes to encourage healthy life-styles; stronger primary care provision; improved qualifications of doctors and nurses and the introduction of electronic systems of management and control in hospitals and polyclinics. It does not, however, identify specific policies to achieve the goals, and some of the proposals, such as high-tech medical care and pharmaceuticals for primary-care patients, would be costly. In addition, the realism of the economic projections in the Long-Term Plan of Social and Economic Development to 2020, which was issued in autumn 2008, was dashed by the onset of the global crisis.

While the authorities have long been aware of the need for more emphasis on the prevention of non-communicable diseases (Ministry of Health, 1997), they have only recently begun to address the importance of life-style factors such as abuse of alcohol and tobacco addiction or the high incidence of deaths from external causes such as suicides, traffic accidents and violence. In 2008 the Ministry of Health and Social Development laid out a framework for policies in this area, and a modified version of the WHO Framework Convention on Tobacco Control has been adopted, but more is needed. One obvious and promising avenue is to increase taxes on alcohol and tobacco products. These have proved a cost effective means of changing risky behaviours, and they also have the advantage of raising government revenue. Tobacco taxes in Russia are currently the lowest in Europe (Figure 1.13), and alcohol taxes are also relatively low, especially on beer and wine.

Figure 1.13. **Tobacco taxes**

Share of total and excise taxes in the price of a pack of the most sold brand of cigarettes, 2010



Source: WHO report on the global tobacco epidemic, 2011.

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A system of informal and formal cost-sharing has progressively been built into the financing of health care spending, undermining the promise of free care, even under the basic package. The formal and informal tariffs charged are not consistent across regions and even across providers. As a result, different individuals face very different prices for the same care received. In this context, it may be worth considering a new system of modest cost-sharing as is found in most OECD countries with exclusions for low-income households or the seriously ill. This would bring greater transparency to patients as to the services they have a right to receive and the costs that they will face. Accompanied by higher wages for health professionals, such measures should bring an end to informal payments to practitioners, resulting in greater equity and transparency.

Education

The education system has changed greatly since the Soviet era. Amendments to the legal framework governing education were made in the 1990s, but most of the major reforms have occurred since 2000, in part because of the greater availability of resources. Importantly, teacher salaries have increased substantially in the past decade, helping to retain and attract high-quality teachers. A Unified State Exam was introduced on a voluntary basis in 2001 in a number of regions and was expanded year by year to include additional subjects. In 2005 then-President Putin announced that education would be one of four priority National Projects, with the aim of creating a modern, flexible and high-quality system able to react to the needs of society and social changes. Since then, under a Federal Target Programme for the development of education new educational standards were created, and most schools received broadband internet access. In 2009 the Unified State Exam was made the main exam for school graduation and university, helping to create a more unified system. In 2010 the government approved a new Target Programme to 2015.

The tertiary education system was also extensively reformed. In 2003 Russia signed on to the Bologna Process, a European initiative making academic degree standards and quality assurance standards more comparable and compatible throughout Europe. The

Bologna Process framework is a three-cycle bachelors-masters-doctorate system of higher education qualifications, similar to the system in the US and elsewhere, whereas the Russian system involved an initial 5-year specialist programme, followed by an "aspirant" post-graduate stage broadly similar to a PhD and a further advanced qualification. Accordingly, over the past ten years an increasing number of universities have introduced a "4 + 2" bachelors and masters system, initially alongside the existing 5-year specialist programmes, and in 2007 a law was adopted to move to a two-tier system in line with the Bologna Process. In 2010, 29 universities were awarded, on a competitive basis, the status of National Research Universities, in order to increase the interest of the younger generation in science and support the best universities.

Despite the improvements made to date, problems remain at all levels of the education system. To begin with, public and overall education spending remains low by OECD standards: only Turkey spends a lower percentage of GDP on education. Teachers and professors are obliged to an unusual extent to have second jobs and/or heavier course loads, limiting time for research and compromising teaching quality.[3] Widespread corruption, also linked in part to low pay, undermines the quality and fairness of the system. Also, Russia's low PISA scores may reflect in part a greater emphasis in Russian schools on the acquisition of encyclopaedic knowledge rather than problem-solving, innovative thinking and creativity. As regards tertiary education, there is a perceived need for the curricula of universities and colleges to be updated to better respond to the skills needs of a market economy. In this regard, the business sector's involvement in advising on curriculum design and in offering placements should be encouraged. The authorities should also explore ways of enhancing the standing of vocational training and improving the facilities at vocational colleges.

On-the-job training is provided to a small subset of employees and for a relatively short period. A federal policy to encourage in-work training and lifelong learning is currently lacking. OECD experience suggests a number of ways in which the Russian authorities could encourage greater on-the-job training, including creating a transparent and credible skill certification system, providing financial incentives to training to enterprises through a levy/grant system or profit tax deductions, introducing individual learning accounts or training subsidies, and promoting better co-ordination between the education system and social partners (OECD, 2011b).

Labour markets[4]

Although some of the superstructure of the Soviet-era institutions remains, *de facto* the Russian labour market is rather flexible. Trade union density, though falling since the early 1990s, remains at the relatively high level of around 50%, but in many cases unions do not play the same collective bargaining role they do in OECD countries, and many trade union members are not even aware that they belong to a union (OECD, 2011a). Collective bargaining agreements are often not signed by any employer organisation, and federal, sectoral and regional agreements provide mostly general recommendations on issues such as labour and social policies, indexation rules for the wages in the public sector and targeted ceilings for the national unemployment rate (Denisova and Svedberg, 2005). Sectoral agreements do not appear to represent a binding constraint on employers, being more of a point of reference for workplace arrangements, and the content of the agreement in terms of wages and labour conditions is generally limited, *e.g.* establishing a minimum wage for the branch. At the workplace level, collective agreements rarely provide for

binding commitments regarding wage increases. According to the Federal Labour and Employment Service, these agreements covered less than 30% of employees, mostly in the public sector and state-owned enterprises. Wages are set to a larger degree than in OECD countries solely by employers: 84% of the industrial enterprises surveyed in Gimpelson and Kapelyushnikov (2007) considered that they were (completely or mostly) free in conducting their wage policy.

Similarly, extensive *de jure* labour market regulation in Russia does not constrain firms much, in part because enforcement is uneven. Russia's overall score on the OECD's employment protection legislation (EPL) indicator is slightly below the OECD average (1.9 *versus* 2.2 in 2009), although for permanent contracts its score is well above it (2.8 *versus* 2.1). The use of arrangements other than employment contracts is widespread, however, limiting the coverage of regulation and avoiding the obligation to pay social contributions, while written employment contracts are often not in compliance with the legislation, preventing the proper enforcement of labour rights (OECD, 2011a). Moreover, the exceptionally high rates of voluntary quits and low layoff rates in Russia, even during the recent crisis, suggests that employers find ways to escape employment regulations. Since the early 1990s, 91-97% of total separations were voluntary, much higher than in Western Europe, and part of the high rates in Russia can be explained by "forced voluntary" separations. Given the unusually high degree of downward flexibility of wages in Russia, wage cuts can be used as an instrument to induce quits, and employers can also use other means such as prolonged administrative leaves, the non-payment of wages, reduced working hours or threat of disciplinary proceedings. One role that trade unions might usefully play to a greater degree is helping to ensure enforcement of labour regulations.

Income security is an underdeveloped feature of the Russian labour market (OECD, 2011a). First, while unemployment benefits are available to many compared with OECD countries, their level is low. At the initial stage of unemployment, the estimated net income replacement rate for a single person previously earning the average wage was 26% in 2009, compared with 50% in the OECD on average in 2008. For those unemployed more than 12 months the replacement rate drops to 5% of the previous wage. Second, the assistance provided to jobseekers by public employment services is relatively small. Despite a tripling in 2009, at 0.15% of GDP, the resources available to the public employment service for active labour market policies remain relatively limited, and the service functions more as social assistance for the weakest segments of the population rather than an effective intermediary between prospective employers and jobseekers. A well-designed unemployment insurance system would allow for more effective support to the unemployed, and provide incentives for all workers to register as unemployed, thereby also motivating firms to register vacancies with the public employment service. Any increase in unemployment insurance should be combined with an effective activation strategy. The authorities should at least maintain active labour market policy expenditure at the new higher level even as the economy moves into a cyclical upswing, while re-orienting expenditure from short-time work schemes towards cost-effective programmes or uses that facilitate transitions from unemployment to work and shorten unemployment spells. The Russian authorities can learn from international experience and should invest in rigorous programme evaluation.

The pension system[5]

Pensions fell substantially in real terms in the 1990s and by the end of the decade old-age poverty had become increasingly widespread. In 2000 21% of pensioners had incomes below the minimum subsistence level. The worsening situation for pensioners was one motivation for reforms aimed to provide increased income security in retirement. In 2002 a three-pillar system was put in place involving a defined benefit basic state pension, a notionally defined contribution insurance scheme and a funded pension component. Large increases in the value of basic state benefits over the past decade, and especially the last few years, have virtually eliminated old age poverty, but the system continues to face serious challenges.

First, like almost all OECD countries, Russia faces an increase in the old-age dependency ratio in coming decades. The projected increase for Russia is similar to the OECD average – from about just over 20% in 2000 to around 45% in 2050 – though in Russia's case this is predominantly because of a declining working-age population, owing to low fertility rates and life expectancy, rather than an increase in the number of pensioners. The deterioration of the dependency ratio will place great strain on the financing of pensions if the targeted earnings replacement rate of 40% is to be achieved.

Second, to date, replacement rates have tended to erode. Payment and saving rates were outpaced by rapid wage growth in the first few years of the system, and the real rate of return on the default option of the funded pension component of the system (the near universal choice) has been negative from the beginning. To address these problems, recent reforms have increased the scope for investment by asset managers and introduced a co-financing scheme for additional voluntary pension saving up to a maximum of about USD 500 per year for a duration of 10 years. Pension payment rates were also increased substantially in 2009-10, taking public pension spending to about 8% of GDP. However, it is likely that wage growth will soon start to erode the replacement rate again, as there is less than full indexation to wage increases.

Third, the contribution base is unusually narrow in Russia. One reason for this is the low standard pensionable ages in Russia: 60 for men and 55 for women. Most OECD countries have now unified the pensionable ages for men and women, usually at 65. Given the higher life expectancy for women, the current system of gender inequity in standard pensionable ages is particularly difficult to defend. Unification of the ages for men and women is an obvious first step, while increases in the unified pensionable age should be foreseen in line with advances in longevity. There is also scope to limit early retirement, and to ensure that the cost of early retirement schemes is fully borne by the employer and not the state Pension Fund. Moreover, eliminating the social security contribution preferences granted to certain sectors and providing for indexation of the contribution ceiling would raise contribution revenues.

Given the challenges posed by an aging Russian population, the mandatory funded component of the state pension and other private pension savings will provide increasingly important income sources for future Russian pensioners. Stronger protections are needed to ensure that pension promises to individuals are fulfilled, that pension funds remain solvent and that investments are effectively managed. Furthermore, improving financial literacy on pension matters is essential in order to enable individuals to make informed decisions about their financial future.

Innovation

Innovation is of course a key aspect of modernisation. The recent *OECD Innovation Review of the Russian Federation* (OECD, 2011b) found that Russia's innovation system was beset by a number of weaknesses, including very low levels of research and development (R&D) and innovation activities in firms, weak framework conditions for innovation (particularly weak competition and regulatory frameworks, corruption and lack of trust), and inadequate infrastructures. As the review points out, innovation is not a specialised activity carried out by specific institutions that the government can create and direct but the result of more diffused primary forces that the government can mainly empower and influence.

Russia has an exceptionally large science base inherited from the Soviet Union and, despite the cutbacks of the 1990s, it has continued to spend more on R&D than most emerging economies, though less than the OECD average (OECD, 2006). Yet its performance on most generally accepted indicators of innovation performance is mediocre overall, and poor when it comes to indices that emphasise revealed technical achievement or economic incentives.

The authorities have pursued a number of innovation-related initiatives in recent years, including Special Economic Zones, science cities, technoparks, and venture capital funds. The most well-known recent initiative is the creation of an innovation centre in Skolkovo in the Moscow Region. While these projects highlight the government's determination to overcome barriers to innovation, the proliferation of initiatives underscores the need for careful monitoring and evaluation to minimise the risk of duplication of effort, waste, rent-seeking and the prolongation of measures that fail to generate net benefits. Policy-makers also need to bear in mind the opportunity costs associated with any intervention. For example, the Skolkovo initiative has already had initial success in attracting major overseas technology-based firms and promises to function as a useful demonstrator and incubator for policy experiments, but it is also an expensive initiative that dominates the innovation debate in Russia. As such, it risks diverting attention and resources away from necessary reforms elsewhere.

There have been many changes in the research system since the early 1990s, but some weaknesses continue to reflect flaws inherited from the Soviet system. For example, state-owned branch research institutes and design bureaus, rather than private firms, are the central players in the current innovation system. The drawbacks of this arrangement include weak knowledge flows and a lack of interaction between technology developers and technology producers/users. A range of solutions are available, the most obvious being the full merger of viable former branch institutes with production-oriented enterprises.

In OECD countries firms operating on competitive markets are the main locus of innovative activity, with public research playing a supporting role. The Russian innovation system is not yet firm-centred, despite the high share of the corporate sector in R&D-intensive activities, because most technology-oriented enterprises are only to a limited extent driven by market incentives and subject to market disciplines. The OECD *Innovation Review* concludes that the primary goal of Russia's innovation policy should be to shift the national innovation system's "centre of gravity" away from the publicly-owned R&D system and towards production firms, whether public or private. Various arrangements have hindered the emergence of a more firm-centred national innovation system, including an organisational separation of industrial R&D from industrial production, a

legacy of the Soviet era. But the main obstacle lies with firms themselves, which have too few capabilities to innovate, little absorptive capacity for innovations, weak links to public research institutes and universities and easy access to economic rents that provide few incentives to innovate. The most significant policy contribution to innovation in Russia would be to improve framework conditions.

A conclusion of recent OECD work is that many countries tend to focus too much on developing high-technology sectors and pay insufficient attention to the benefits of promoting innovation in other sectors. The latter often implies more mundane forms of technological upgrading, *e.g.* acquisition of new machinery, but is essential for raising productivity levels across the economy. Innovation agendas, in Russia as elsewhere, therefore need to take a balanced approach to supporting high-technology and low-technology sectors of the economy and to avoid "high-technology myopia". Current Russian innovation policy is overly focused on high technology, which means it neglects large parts of the economy. There should be stronger recognition of the scope and benefits of innovation in low-tech and services industries.

Russian policy, which has inherited from the Soviet era a mostly supply-push perspective on innovation, should pay greater attention to demand and the role of users in promoting and shaping innovation. The technology-push orientation which has hitherto characterised Russian policy has serious limitations in a market economy, where the knowledge of customers is critically important in shaping innovations. Developments in science and technology are important but insufficient as drivers of innovation. Demand, mediated mostly through markets, but also through networks and in-house hierarchies, plays a crucial role in promoting and shaping innovation.

A well designed innovation policy will foster diversification of the Russian economy, allowing the strong dependence on natural resources to be reduced in favour of emerging sectors, including services, as well as formerly strong sectors that have been relatively neglected during the transition period (such as heavy machinery, defence and aerospace). At the same time, deepening of existing industry sectors – technological upgrading through knowledge assimilation and own innovation efforts, as well as building backward and forward linkages – will be important for their future competitiveness.

Public administration[6]

President Medvedev has been clear on the need to improve public administration in Russia as a condition for modernisation of the economy. As he said at the 2011 St. Petersburg forum, "We know that we can overcome our dependence on exports of raw materials and achieve a higher quality of life only if we vanquish corruption, develop effective public administration, and build a quality financial system".

Nowhere has the transformation required by the transition to a market economy been greater than in the public service. The nature of the tasks to be performed by government – the institutions needed to carry out the new functions effectively and the skills and experience necessary for civil servants – all changed radically virtually overnight. The administrative system inherited from the Soviet Union was one in which the political and administrative spheres were intertwined, with the party permeating all aspects of the system. Jurisdictions and lines of authority were often complex and overlapping in order to facilitate monitoring and control by the political leadership. Over the past twenty years a

major transformation has taken place, but in some respects the Russian bureaucracy still retains important vestiges of its Soviet antecedent.

Civil service reform made little headway in the 1990s. A first law on the state service, adopted in 1995, did little more than set out the status, privileges and protections of officials. There was little further progress until the adoption in late 2001 of the Federal Programme for Reforming the State Service of the Russian Federation (2003-05), which aimed to turn the "state service" into a "public service" – a transformation that would require a dramatic shift in the culture and outlook of Russian officials. The reform programme also aimed to make the bureaucracy smaller, more transparent and less expensive. A law adopted in 2004 established a basic framework for the civil service, outlining the legal status of civil servants and the procedures for appointing, evaluating and promoting them. It also made a start in regulating such issues as conflict of interest and the nature of civil servants' contracts, which had previously not been addressed in law. Since the 2004 administrative reform, a number of presidential decrees have been published to enable the provisions of the state service law. The public service reforms have increasingly aligned Russia with OECD countries, but progress has been limited as many features of the old regime are still present, notably politicised recruitment, payments based on seniority, low salaries, and the lack of transparency in administrative systems. The provisions established in the regulatory framework have not yet been fully implemented. The interaction of numerous pieces of legislation (federal laws, decrees and regional laws) can create confusion for officials, and the lack of a single central body in charge of overseeing the implementation of the human resource policy leads every ministry and agency to interpret and implement the law in a different manner.

As regards the structure of government, a variety of arrangements are seen across the OECD, with no clear optimum. Russia has developed decision-making institutions, policies, and practices at the centre of government that often parallel those in OECD countries. Scope remains, however, to further streamline roles and responsibilities of the key actors, strengthen co-ordination and oversight mechanisms, including by the parliament and the judiciary, and develop greater linkages between planning, reporting and budgeting processes.

Russia still lags most OECD countries as concerns openness of government. The practice of engaging citizens in consultation and participation is not widespread and still evolving. There have been a number of recent steps, such as the decree of the president on Public Consultation on Federal Constitutional Laws and Federal Laws and the introduction of the consultation website for federal laws that increasingly require government bodies to engage citizens in policy-making. Nevertheless, much more remains to be done to achieve genuine engagement of civil society in the policy-making process and enhance openness and accountability.

Russia has recently taken significant steps to develop e-government. Both the Strategy for the Development of Information Society in Russia and the State Programme on Information Society 2011-20 are in line with accepted practice in OECD countries. The size of Russia's territory, institutional structure, political and legal legacies, and ICT business sector make e-government implementation a particularly difficult task. Challenges include ensuring an appropriate flow and co-ordination of financial resources towards the planned activities at all levels of government to support the numerous investments necessary to achieve the goals.

In his 2010 Federal Assembly address, President Medvedev emphasised the need for a high-quality judicial and law enforcement system. The President's Advisory Council on Civil Society and Human Rights identified concrete challenges, including incidences of significant pressure on judges as well as limited transparency of the judicial system. A number of judicial reforms have been undertaken in the past decade, including the introduction of legislation to enhance judicial independence. Some steps include increased judicial pay; amended procedures for appointing judges and a new procedure for reporting information about the financial situation and the character of candidates to the office of judge; the establishment in the 2008 National Anti-Corruption Plan of special requirements for persons applying to be judges; introduction of security of tenure (removal is only possible for cause with approval of peers); new mechanisms for punishing judicial malfeasance and the establishment of a federal council of judges in charge of career and disciplinary matters. The federal government has also improved the financing of the entire judicial system and brought the courts under federal jurisdiction, so as to reduce the dependence of judges on regional authorities. Arbitration court rulings are now increasingly disseminated online, and an effort is underway to digitise most court documents and make them available on the internet. The publication of all court decisions (including courts of general jurisdiction) is required, but not rigorously implemented.

A concerted attempt at regulatory reform in Russia began in 2001 with the adoption of a programme to re-define the relationship between the state and the economy. The clearest statement of a regulatory policy strategy was set out in a 2003 presidential decree, which outlined a broad agenda for administrative reform with a number of important regulatory policy elements. Progress in achieving these objectives has been uneven. Good progress has been made towards two of the seven recommendations in the *2005 OECD Regulatory Reform Review of Russia* (OECD, 2005) – those covering regulatory impact assessment and administrative simplification. The others – addressing the creation of an explicit policy for regulatory quality, various institutional recommendations, improving regulatory transparency, multi-level regulatory arrangements, and judicial reform – have yet to be implemented. Russian regulatory policy thus still falls short of the standards of consistency necessary to meet the existing OECD Principles on regulatory quality and performance. Notably, regulatory oversight functions are currently dispersed across the Ministry of Economic Development, the Ministry of Justice, the government and the Presidential Administration. As highlighted in the *OECD 2005 Regulatory Reform Review*, a central regulatory oversight body could perform a number of functions which are currently executed in a sporadic and unco-ordinated way in Russia. Also, attention would need to be paid to implementing regulatory management tools, where they have been established, in order to close the gap with OECD countries.

Banking and financial markets[7]

Until the end of the Soviet era there were no private banks, and no competition within the public sector. The situation changed dramatically during the initial transition period, however, as the central bank issued a huge number of banking licenses in a short period. A legal framework for commercial banks and central banking was rapidly put in place and a system of bank supervision created, but a number of weaknesses were highlighted by the 1998 financial crisis, which resulted in large-scale bank failures. In the wake of that crisis, numerous changes were made to the banking laws to streamline bank bankruptcy, permit earlier resolution of failing banks, and tighten regulation on fit and proper

ownership of banks. Also, in 2001 an anti-money-laundering agency was launched and in the following year Russia was removed from the Financial Action Task Force blacklist. In 2002 the CBR released a strategy for the banking sector covering the period through 2008. Among the most important elements of that strategy were the requirement that banks submit financial statements under International Financial Reporting Standards; the introduction of deposit insurance for household deposits; and refinements to prudential supervision. The introduction of a deposit insurance scheme was itself an important step in improving supervision, as banks wanting to join the scheme were effectively subjected to a relicensing. Other elements of the strategy included the requirement that banks' shareholder structure be disclosed to the CBR; making the methods of calculating loan loss reserves more similar to IFRS; the streamlining of prudential ratios; the sale by the state of most stakes owned in banks; tightened procedures for increasing authorised capital; and the creation of a system of credit bureaus.

The 2008 global financial crisis put the Russian banking system under stress, but, in part because of speedy and energetic provision of liquidity by the CBR, there were no major bank failures and only limited runs on deposits early on. The authorities have been scaling back support measures as the situation has progressively normalised. Nonetheless, the uncovering of bad loans requiring a bail-out of the Bank of Moscow, formerly controlled by the Moscow City government, after its takeover by state-owned VTB in 2011 was a reminder that the effectiveness of bank supervision still has to be increased, as noted in the previous *OECD Economic Survey* (OECD, 2009).

The current banking system plays a greater role in intermediating savings and investment than ever before (bank assets reached 75% of GDP at end-2010), and has become increasingly sophisticated and integrated into the global financial system. Compared to OECD economies, however, the system is dominated by state-owned banks (including the five largest, accounting for more than half of total bank assets), with limited foreign ownership and an increasingly marginalised private domestic bank sector. At the same time, most of the banks, which number around 1 000 in total, are very small and do little genuine banking business. Rather, many were established to act largely as treasuries for non-bank corporations, as trust in third parties and in the rule of law remains deficient. For the same reason, related party lending remains extensive throughout the system. This underscores the link between the development of the banking sector and the need to improve the business climate (discussed in Chapter 2).

The emergence of domestic capital markets in the 1990s was blighted by an unfavourable macroeconomic environment, weak framework conditions and poor supervision. This period was characterised by numerous high-profile failures, from pyramid schemes to asset-stripping by majority shareholders and the default on government debt in 1998. Since 2000, however, bond and equity markets have grown rapidly and proved relatively robust to the shock of the global financial crisis in 2008. The corporate bond market experienced its first ever wave of defaults after the onset of the crisis, but yields subsequently fell back to pre-crisis levels. The Russian equity market is larger in relation to GDP than most middle-income countries, although capitalisation is dominated by a small number of natural resource extraction companies. Floats are also generally relatively small in Russia, with most major companies controlled either by the state or private majority shareholders. Fund management and venture capital remain underdeveloped.

The authorities have made steady progress at building the regulatory framework for capital markets and removing obstacles to the development of markets. Recent measures included improvements in the regulators' framework for repo transactions, the clarification of taxation of repoed paper and the recognition of close-out netting. Furthermore, a definition of derivatives was recently introduced into the Securities Market Law. One element of the authorities' economic modernisation objectives is to develop Moscow as an international financial centre, and this has given impetus to a number of important regulatory initiatives such as legislation on insider trading, adopted in July 2010. Important legislation is under preparation in areas such as payments systems, central depositories and consolidated supervision. The gains from the international financial centre initiative will be greatest if it is used as a means of leveraging necessary regulatory changes rather than just being than a magnet for subsidies and tax advantages.

Environmental policies[8]

A number of significant environmental policy steps were taken in the early 1990s, notably as regards the establishment of a new legislative framework. Given in particular the economic collapse during the 1990s, however, the environment lost prominence, and was a low government priority until recently. The amendments to the law on Environmental Protection adopted in 2002 strengthened the legal foundation for state policy in this area, and were followed by a government resolution the same year on the Ecological Doctrine of the Russian Federation, which stated the long-term environmental policy goals in the Russian Federation. There was little concrete action until 2008, however, when a number of further pieces of legislation and plans were adopted, including "The Concept of Long-term Social and Economic Development of the Russian Federation for the Period to 2020" (the Russia 2020 strategy), approved in November 2008; the "Main Areas of Action of the Government of the Russian Federation for the Period to 2012", an action plan for implementing the Russia 2020 strategy; and presidential Decree #889 on "Measures to Boost Energy and the Environmental Efficiency of the Economy of the Russian Federation". Among other things, the "Main Areas of Action" identifies actions introducing economic incentives for promoting Best Available Technologies (BAT), improving by 2016 the regulatory and economic mechanisms relating to the environment and activities reducing and eliminating accumulated ecological damage as a result of past industrial activities.

President Medvedev has made several interventions in recent years calling for the modernisation of Russian environmental policies and systems. In 2010 he launched the elaboration of the "Basis of Environmental Policy of the Russian Federation until 2030" in order to set long-term policy objectives followed by short-term environmental action plans identifying priority actions. The list of priority actions calls, *inter alia*, for: a comprehensive system of state environmental monitoring, with a focus on improving air pollution monitoring at the regional level; economic incentives to increase demand for renewable energy; partnerships with foreign investors to improve water supply and waste water treatment facilities; and improving waste management by reducing waste generation, promoting recycling and introducing economic instruments. In his presidential address to the federal assembly in November 2010 he said that "the health and future success of our nation depends directly on what kind of environment we leave to our children. In spite of the fact that Russia's environment is unique and rich, we can hardly say that it is in perfect condition. We can only solve that problem by introducing a modern and efficient environment protection system" President Medvedev noted there the need for environmental education in

order to increase the engagement of civil society on environmental issues, and instructed the government to explore the idea of an environmental amnesty for companies taking it upon themselves to make their production facilities environment-friendly and clean up the territories where their plants are located.

In addition, several new laws are being drafted or have already been submitted to parliament to develop a system of environmental audit, to improve environmental regulations and to introduce economic incentives for promoting BAT. Also, a number of new programmes are being prepared: a draft conception of the Federal Target Programme "Environmental Security of the Russian Federation" for the period 2011-20; a draft Federal Target Programme on the protection of Lake Baikal for the Period 2018-20; and a plan for a system of state-protected natural territories through 2020.

Under the Russia 2020 strategy, adopted in 2008, a modernisation of production will be actively promoted and targeted to reduce energy consumption and re-use materials and waste through improved recycling programmes. New measures will also cover the development and introduction of Best Available Technologies for generating electric and thermal energy that are environmentally sound in terms of waste disposal. Another top priority of modernising production will be the control of anthropogenic emissions of greenhouse gases. The strategy foresaw the creation of nearly 300 000 new jobs in the environmental sector through 2020, although that would still represent only about ½ of 1% of total employment.

So far, much of the acceleration of activity in the environmental policy area has been rhetorical and/or involved the definition of broad objectives and principles. Little can be said so far about implementation, and the initial situation is clearly highly unfavourable. Russia still lags in the use of financial incentives such as carbon taxation, cap-and-trade schemes for emissions, or green taxes to influence consumer behaviour. In addition, little has been done to integrate environmental considerations into policy decisions in other areas, with the exception of energy efficiency, where a number of concrete actions have been taken, and energy efficiency identified as a key priority in the work of the Commission on Modernisation and Technological Development of the Economy (see Chapter 5). It is therefore not yet clear to what extent Russia is closing the gap with OECD countries as regards effective environmental measures.

Summary and conclusions

In most areas, economic outcomes in Russia are within the range of the OECD, though towards the lower end, and, at least since 1999, most indicators have been converging towards OECD averages. Moreover, the directions charted for Russia's continued economic modernisation seem to be broadly along the right lines. President Medvedev is right about the need to tackle corruption, encourage openness and reduce dependence on raw materials if Russia is to become a modern economy with productive, healthy and contented citizens. The emphasis on energy efficiency (discussed in Chapter 5) is also well placed.

The main pitfall in framing policy objectives in terms of modernisation is the tendency to overemphasise high-tech activities and especially in using public resources to encourage them – the risk of creating white elephants is ever-present. Modernisation should be a broad agenda linking many areas: better education, health, public administration and environmental policies are all part of creating a favourable climate for innovation. Perhaps

most of all, better results can be obtained by focussing on ensuring good framework conditions for business, which is the subject of the following chapter.

Notes

1. For example, in his "Forward Russia!" article of November 2009 (and in many other addresses) President Medvedev acknowledged the problems of corruption and inefficient public administration, while in his speech to the Commission on Modernisation in Magnitogorsk in March 2011 he spoke about the worsening conditions for small enterprises and the excessive role of state-owned enterprises.
2. This section draws on preliminary findings and recommendations of the OECD accession review on health.
3. This point was made by Yaroslav Kuzminov, Rector of the Higher School of Economics, in an interview in the *Rossiiskaya Gazeta* on 3 August 2011.
4. This section draws on the forthcoming *OECD Labour Market and Social Policy Review* (OECD, 2011a), undertaken as part of the accession process.
5. This section draws on the forthcoming *OECD Labour Market and Social Policy Review* (OECD, 2011a), undertaken as part of the accession process, as well as the preliminary findings and recommendations of the OECD accession review of the Russian Federation on private pensions.
6. This section draws on preliminary findings and recommendations of the OECD accession review on public governance and regulatory policy.
7. This section draws on preliminary findings of the OECD accession review on financial markets.
8. This section draws on preliminary findings of the OECD accession review on environmental policy.

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ANNEX 1.A1

Progress in structural reform and framework conditions

This Annex describes actions taken in relation to selected recommendations made in past *Economic Surveys of the Russian Federation*. The assessment of implementation has been carried out by the Secretariat. This table is without prejudice to the recommendations made as a result of other reviews currently being undertaken for the purposes of OECD accession.

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
1. Structural policy settings in product, labour and financial markets			
1.1. Product market regulation			
Develop transport infrastructure as a measure to aid in the elimination of barriers to intraregional trade and expand markets. *(2009)*		X	
Address weaknesses in the tax and regional funding regimes to break the dependence of regional governments on a limited number of local firms for revenue raising. *(2009)*			X
Promote free internal trade and movement of labour and capital. *(1995)*		X	
Relax security of tenure laws and progressively raise controlled rents towards market levels. *(1995)*		X	
1.1.1. Trade and foreign investment regimes			
Lower FDI and tariff barriers. *(2009)*		X	
Move towards a uniform tariff rate. *(2009)*		X	
Increase the openness and predictability of the foreign investment regime. *(2009)*		X	
Ensure a level playing field between domestic and foreign firms with respect to government procurement and access to subsidies. *(2009)*		X	
Consider introducing provisions to encourage regulators to use internationally harmonised standards and certification procedures wherever possible and appropriate and avoid unnecessary trade restrictiveness. *(2009)*		X	
Actively pursue membership in the WTO and other international and bilateral agreements.*(2009)*	X		
1.1.2. Business regulation			
Remove the reporting and monitoring exemptions for special-status state corporations. *(2009)*		X	
Reduce political interference in the operation of state-owned enterprises (SOEs) and private sector firms (reduce the list of strategic firms and sectors, golden shares in SOEs and private firms, etc.) *(2009)*		X	
Impose an effective firewall between public and private professional activities to avoid conflicts of interest. *(2009)*		X	
Increase the independence and accountability of government representatives and accelerating appointments of independent and accountable directors on SOE Boards. *(2009)*		X	
Intensify privatisation once SOE corporate governance has been improved. *(2009)*		X	

A longer version of the table, with more detail on the actions taken, can be found in Vaziakova *et al*. (2011).

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
Use regulatory alternatives to command-and-control regulation and direct intervention. *(2009)*		X	
Carry out Regulatory Impact Analysis to assess significant new regulatory proposals. *(2009)*		X	
Ensure more vigorous and uniform implementation of competition law. *(2009)*		X	
Undertake administrative reform to reduce red tape. *(2009)*		X	
Develop the capacity and strengthen the hands of the sectoral regulators. *(2009)*			X
Reduce licensing and other formal regulatory burdens to reduce bureaucrats' opportunities to extract bribes from private-sector firms. *(2009)*		X	
Pursue judicial and civil service reforms to improve the fairness, transparency and efficiency with which remaining regulations are administered. *(2009)*		X	
Introduce a "deemed clearance" regime under which licenses are issued automatically if the licensing office does not act by the end of the statutory response period. *(2009)*			X
Reduce the scope of unnecessary regulation and bureaucratic interference in the activities of private businesses. *(2006)*		X	
Remove discrimination against new enterprises and encourage the development of an entrepreneurial culture through publicity, supported information networks, and even limited tax preferences for start-ups. *(1995)*		X	
1.1.3. Energy			
1.1.3.1. Electricity Sector			
Provide for market rules which are transparent, stable and effectively enforced. *(2004)*		X	
Reduce the broad discretion for the government in the field of electricity regulation. *(2004)*			X
Provide for a strong, independent electricity regulator. *(2004)*		X	
Introduce competition into those activities where it is feasible, such as generation and supply. *(2004)*	X		
Set regulated tariffs for transmission and distribution, which are natural monopolies, in such a way as to encourage efficiency and not merely cover costs. *(2004)*	X		
Raise average domestic electricity and gas tariffs and reduce cross-subsidisation. *(2002)*	X		
1.1.3.2. Gas sector			
Put an end to the provision of implicit subsidies via prices which are below long-run cost-recovery levels. *(2004)* Raise domestic gas tariffs and reduce cross-subsidisation while making regulation less politicised and unpredictable. *(2002)*		X	
Separate regulatory and ownership functions more clearly and reduce the state's ownership of energy sector assets. *(2004)*			X
Establish an effective third-party access regime for the sector's infrastructure. *(2004)*		X	
Provide for a separation of Gazprom's natural monopoly/infrastructure provision functions from its potentially competitive activities. *(2004)*		X	
Achieve a clearer separation of Gazprom's accounts with respect to production, transport and dispatch. Increase transparency in the company's other activities. *(2004)*		X	
Formulate and implement clear rules and principles governing the allocation and administration of quotas for regulated-price gas. *(2004)*		X	
Provide for a fair, stable, effective and transparent regulatory framework in which regulatory decisions are taken by an independent, expert regulatory authority rather than a market player. *(2004)* Minimise Gazprom's role as a *de facto* regulator in the gas sector, particularly as regards the allocation of regulated-price gas and pipeline access. *(2004)*			X
1.1.3.3. Oil Sector			
Ensure that the taxation and the regulatory regime yield an adequate responsiveness of exploration and production to oil price fluctuations. *(2009)*		X	
Reduce barriers to foreign participation in the Russian oil and gas sector in order to bring foreign know-how to bear on the efficient development of new fields in inaccessible parts of the country. *(2009)*		X	
Broadly harmonise taxation of gas and oil, with the elimination of export taxes. *(2009)*		X	
1.1.4. Competition policy			
Introduce an overarching competition policy in order to bring the issue of competition to centre stage and spread a competition ethos through different levels of government. Introduce a policy to ensure that all levels of government and economic regulatory agencies take the competition dimension into account when formulating policy. *(2009)*		X	
Apply competition law without exemptions (including for public corporations). *(2009)*		X	

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
Bolster the power of the Federal Antimonopoly Service to allow greater use of inspections and the collection of physical evidence in antitrust cases. *(2009)*	X		
Initiate a programme targeted at reducing violations of antitrust laws by federal and local government. *(2009)*		X	
In network sectors, continue separating the competitive and monopoly market segments and eliminate barriers to entry. *(2009)*		X	
1.1.5. State involvement in the economy			
Improve corporate governance of SOEs, revitalise privatisation, narrow the list of firms and sectors designated strategic, and reduce the use of command and control regulation and direct intervention. *(2009)*		X	
Once the corporate governance of the SOEs has been improved, step up the privatisation programme, especially in the competitive sectors of the economy. *(2009)*		X	
Eliminate the use of golden shares and disclose shareholder agreements and capital structures that allow the government to exercise control over a firm disproportionate to its equity stake. *(2009)*			X
"Unbundle" the non-commercial objectives of the SOEs and consolidate them to the relevant government department. Ensure that any remaining non-commercial objectives that SOEs are required to undertake are clearly mandated by law or regulation. *(2009)*			X
Improve standards of transparency and disclosure in SOEs. Eliminate all exemptions, explicit or implicit, for state corporations from various laws, and make them subject to the standard accounting and reporting principles. *(2009)*		X	
Reduce the list of firms for which privatisation requires the approval of the President. *(2009)*		X	
Privatise the public housing stock (predominantly municipally-owned apartments) rapidly, even giving it away to tenants when the current owners have no resources for its maintenance; and develop effective forms of ownership of the structure and common spaces apartment blocks. *(1995)*		X	
1.2. Banking regulation			
Explicitly divide the Russian banking sector into tiers subject to different levels of supervision, to allow scarce resources to be more focused on the larger banks. *(2009)*		X	
Improve the structure of the banking sector by outlining a long-term privatisation strategy for the state-owned banks. *(2009)*		X	
Facilitate and encourage consolidation of the sector, via speedy resolution of failing banks, facilitation of mergers, and higher minimum capital requirements. *(2009)*	X		
Publicise deposit insurance to raise awareness of its provisions. *(2009)*		X	
Improve the quality of on-site supervision, including via increased resources for staffing and training. *(2009)*		X	
Further streamline formal requirements on banks, while strengthening risk assessments. *(2009)*		X	
Play an active role in international efforts to improve financial regulation. *(2009)*		X	
Explore ways of making capital adequacy requirements countercyclical, such as via dynamic provisioning rules, higher capital adequacy requirements in cyclical upswings, and capital requirements that vary across banks according to their contribution to systemic risk. *(2009)*			X
Expand the use of stress testing, including more testing of system–wide shocks affecting counter–party and market risks. *(2009)*		X	
Seek improved ways of regulating liquidity and responding to shortages for individual banks. Require banks to prepare periodic liquidity assessments for review by the CBR, with the CBR to give liquidity guidance to banks on an individual basis. *(2009)*		X	
Amend Article 837 of the Civil Code which states that term deposits of households may be withdrawn on demand. *(2009)*			X
Expand the use of IFRS financial reporting, including for non-banks. *(2009)*		X	
Develop a system of personal bankruptcy. *(2009)*		X	
1.3. Labour and social policy			
Progressively raise the retirement age *(1995)*; Harmonise standard retirement ages for men and women, raise ages in line with increases in longevity. *(2009)*			X
Undertake reforms directed at providing more effective, targeted and fiscally sustainable social protection to vulnerable groups in the population. *(2006)*		X	

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
1.4. Health			
Strengthen primary care provision and reduce the current over-reliance on tertiary care. *(2006)*		X	
Adopt payment schemes that encourage more cost-effective therapeutic choices. *(2006)*		X	
While raising public healthcare spending, revise the guaranteed benefits package to bring formal commitments into line with available resources, dropping those guarantees that create perverse incentives or are likely to prove financially unsustainable. *(2006)*			X
Create mechanisms to enable citizens to take effective action, at reasonable cost, if the commitments made in the revised guarantee package are not met. *(2006)*		X	
Establish a framework for regular, transparent review and revision of the guaranteed package in light of medical, technological and economic change. *(2006)*			X
End the "two-channel" budget-insurance system of financing healthcare and ensure that the great bulk of healthcare spending takes place via the OMS system, if necessary by channelling most budgetary resources through OMS funds. *(2006)*		X	
Create mechanisms to make it easier for individuals to assess the relative performance of medical insurers and to choose their own insurers. *(2006)*		X	
Strengthen the regulatory framework governing the activities of medical insurers in the OMS system, while simultaneously expanding their freedom to compete with one another. It is critical that they be made risk-bearers. *(2006)*		X	
Encourage pilot projects in the regions with respect to OMS reform, including, where appropriate, experiments involving a single-payer system. *(2006)*			X
Increase investment in primary care in order to establish a long term, coordinated effort to strengthen the training of primary care physicians (GPs) and to provide them with practice settings that favour the provision of integrated primary care. *(2006)*		X	
Shift away from cost-reimbursement or capacity-based methods of financing healthcare in favour of more efficient methods, such as cost-and-volume contracts. *(2006)*		X	
Eliminate the inpatient/outpatient distinction in determining eligibility for free medicines and restructure the arrangements governing access to free medicines, emphasising proven efficacy, safety and cost-effectiveness – with particular stress on the added value of new or especially expensive drugs. A tiered system of co-payments may have a role to play here. *(2006)*			X
Incremental resources should be devoted to preventive medicine, for example, to the restoration of abandoned or run-down immunisation programmes. *(1995)*	X		
1.5. Innovation			
Ensure that specific innovation-promotion schemes, like special zones or technoparks are limited in scope, carefully targeted and rigorously assessed in order to avoid deadweight losses and market distortions. *(2006)*	X		
Broaden the opportunities and incentives for universities and institutes to pursue the commercialisation of the results of their research via the creation of technology transfer offices and/or spin-off companies. *(2006)*		X	
Increase the penalties for Intellectual Property Rights (IPR) violations and reduce the scope for relying on "copycat" patents. *(2006)*		X	
Shift to greater reliance on project-based rather than institutional financing of state-funded research. *(2006)*	X		
Enhance both the independence and responsibility of managers of public R&D organisations for managing their finances. *(2006)*			X
Ensure the involvement of the scientific community, the business community and civil society organisations in the determination of state priorities for funding R&D. *(2006)*		X	
Introduce mechanisms for performance-based pay and more rapid advancement. *(2006)*		X	
Reduce the number of direct recipients of R&D funds from the federal budget. *(2006)*			X
Facilitate information exchange and other contacts between R&D organisations and the business community. *(2006)*			X
Increase the share of public research funding allocated to universities, while enhancing their financial incentives to strengthen links to other public R&D organisations and to private businesses. *(2006)*	X		
Allow accelerated amortisation of R&D expenditures for all firms, not only those in special economic zones. *(2006)*	X		
Ensure that fiscal incentives for private-sector R&D are simple, universal, and aimed at promoting specific activities rather than supporting particular populations of firms. *(2006)*		X	

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
Ensure that except in the cases of start-ups and small firms, such incentives rely on tax breaks rather than subsidies. *(2006)*			X
Facilitate the development of private venture capital via reforms aimed at creating a more attractive legislative and tax framework for Venture Capital firms. *(2006)*			X
Adopt regular, rigorous, external evaluation and monitoring of the costs and benefits of technoparks, special economic zones and other similar initiatives, laying particular stress on their additionality. *(2006)*		X	
Ensure that selection procedures for any direct support programmes aimed at start-ups and small firms are highly transparent and rely upon broad expertise involving entrepreneurs, the applied science sector and private investors. *(2006)*		X	
1.6. Small Business and entrepreneurship			
For licensing, certification and inspections, clarify the precise rights and obligations for small businesses. *(2002)*		X	
Promote and maintain support organisations where entrepreneurs can easily obtain information concerning their various rights and obligations, consulting support, and the ability to lobby their collective interests. *(2002)*	X		
1.7. Agriculture			
Create a functioning market in agricultural land. *(2006)*		X	
Rationalise state support for the agriculture sector. *(2006)*		X	
Make leasing and equipment markets more competitive. *(2006)*			X
1.8. Environment			
Put in place taxation or cap-and-trade systems for emissions of carbon and other pollutants. *(2009)*			X
Expand the use of fiscal instruments to improve environmental outcomes. *(2009)*		X	
1.9. Tax policy			
Establish a tighter link between exhaustible natural resource taxation and economic rents, such as by applying the mineral extraction tax on a project basis, taking into account the cost structures in each field. *(2009)*		X	
Rebalance corporate and personal income taxes, providing for somewhat more progressivity in the latter in order to improve both economic efficiency and equity. *(2009)*			X
Explore the scope for expanding the use of property taxes, while further reducing corporate profit taxes and if possible social security contributions over time. *(2009)*		X	
Explore ways of reducing the comparatively high tax wedge. *(2009)*		X	
Tax and save a high proportion of pure rents arising from price windfalls to insulate the non-oil economy from oil price fluctuations. *(2009)*		X	
Improve the administration of VAT (in particular to address the problem of slow refunds), but refrain from cutting average VAT rates. Ensure that any harmonisation of the existing high and low rates is at least revenue neutral. *(2009)*	X		
Adopt a Tax Code which simplifies and stabilises the number of taxes and their rates. *(1997)*	X		
2. Public governance			
Implement administrative reform to mitigate the potential for corruption by minimising uncertainty and subjective decision-making within the government administration. *(2009)*		X	
Press ahead with reforms aimed at strengthening the rule of law, particularly those that: *(2006)*		X	
– serve to insulate courts from outside pressure			
– make law-enforcement agencies more transparent and accountable		X	
– ensure that state institutions submit to court decisions.		X	
Adopt freedom of information legislation, along with other measures to establish a norm of transparency in public bodies. *(2006)*		X	
Ensure that arrangements for adopting public service standards and the related standing rules are open, consultative and result in documents that are clear and accessible to ordinary citizens. *(2006)*		X	
Create effective non-judicial mechanisms, including an effective system of administrative redress and an ombudsman or similar institution, for citizens and organisations seeking to defend their interests in conflict with public bureaucracies. *(2006)*		X	
Expand the range of opportunities for using ICT in interactions between officials and ordinary citizens or businesses, especially in fields such as licensing or procurement. *(2006)*	X		
Strengthen Russia's anti-corruption legislation, bringing it into line with international standards. *(2006)*		X	

Recommendations in past Surveys (Survey year)	Action substantially complete[1]	Action underway	No significant action taken
Clearly separate the state's ownership role from its other functions, such as regulation and industrial policy. *(2006)*			X
Enhance parliamentary oversight of the executive branch. *(2006)*			X
Strengthen corporate governance of state-owned enterprises, especially as regards transparency and provide a clearer separation between the state's roles as owner and regulator in those sectors in which it fulfils both roles. *(2006)*		X	
Increase the transparency of state institutions. *(2006)*		X	
Strengthen civil society institutions. *(2006)*			X
Increase substantially the pay for important civil servants and establish a strong threat of immediate removal in the event of violations. *(2002)*		X	
Clarify the legal concept of insolvency and bankruptcy for a subnational administration which would include: *(2000)* – provisions for the introduction of temporary administration by a superior level of government in the event of insolvency, – detailed legal investigation that could hold individual officials responsible for improper budgetary management. – improved and more transparent accounting methods that better reflect off-budget funds and accounts at the subnational level.			X
Clearly define responsibilities for the provision of services across different levels of government, but ensure that sub-federal governments are free to deliver services in the manner best suited to local conditions. *(1995)*	X		
3. Macroeconomic framework			
3.1. Monetary policy			
Strengthen the commitment to price stability as the primary goal of monetary policy by amending the CBR's mandate in the central bank law. *(2009)*			X
Gradually increase exchange rate flexibility. *(2009)*		X	
Gradually increase the importance attached to the CBR's inflation targets. *(2009)*		X	
Accelerate efforts aimed at strengthening the institutional basis for monetary-policy-making by improving the CBR's communication policy. *(2009)*	X		
3.2. Fiscal policy			
Define a medium-term fiscal balance target, based on an assessment of the non-oil fiscal stance and long-run sustainability. *(2006)*		X	
Amend the Budget Code to guarantee subnational administrations' autonomy over expenditures financed from their budgets. *(2002)*			X
3.2.1. Stabilisation Fund			
Distinguish between two objectives for the accumulated fiscal reserves: one part should be considered as a buffer against oil-price volatility while the other should be used to generate investment income. The yield generated by the investment-for-income fund could thus be used to cover structural deficits. *(2006)* Split the Fund into two parts with two distinct investment strategies: in highly secure and liquid assets for the "fiscal insurance" part of the Fund, and in a wider range of instruments for the investment-for-income fund. *(2006)*	X		
Adjust the current rules governing the accumulation of fiscal reserves in the Stabilisation Fund to the new environment of high oil prices. *(2006)* Increase the minimum reserve in the Stabilisation Fund to match the potential impact of a sharp drop in commodity prices. *(2006)*		X	
Broaden the Stabilisation Fund's revenue base to include export duties on oil products and natural gas. *(2006)*	X		
Protect the accumulated assets in the Fund against pro-cyclical spending and establish expenditure rules for spending some of these reserves in the event of a downturn. *(2006)*		X	
Diversify into riskier assets gradually, in order to avoid mismanagement and to allow for capacity building. *(2006)*	X		

1. Action taken which substantially fulfils the recommendation.

Chapter 2

Improving the business climate

Although improving the business environment in Russia has been a major priority of public policy in recent years, numerous indicators suggest that it remains poor in international comparison, with no clear overall trend. Russia's poor business climate is hindering the modernisation and diversification of the economy through several channels including weaker competition, slower financial development and lower foreign investment and trade than otherwise. Achieving a decisive improvement in the business climate will require a range of actions to combat corruption, strengthen the rule of law, reduce the role of the state in the economy, lighten administrative burdens on firms, enforce competition law and liberalise the regimes for trade and investment.

A glaring and persistent handicap for the functioning of the Russian economy is the poor business environment. The implications of this pathology are wide-ranging and serious: entry barriers that weaken competitive pressures on firms, sluggish innovation, greater reliance on natural resource extraction than otherwise and slower convergence to advanced country living standards. Although on a number of fronts significant improvements can be discerned, the business climate is one of the areas where the gap between Russia and most OECD economies is still very wide. This is holding Russia back from becoming the modern, diversified, innovative economy that it aspires to be.

That the business climate remains poor is not a new or controversial point. It has certainly been a consistent theme of past *OECD Economic Surveys of Russia*, which have all highlighted various aspects of the problem, and it is also central to the assessment and recommendations in other OECD reviews, including the *Regulatory Review* undertaken in 2005 (OECD, 2005) and the *Innovation Review* released in 2011 (OECD, 2011). The point is also ubiquitous in other international and domestic commentary on Russia, including that of the country's senior political leaders. President Medvedev has put particular emphasis on the need to improve the investment climate. Addressing the Commission for Modernisation and Technological Development of Russia's Economy in March 2011, he characterised the investment climate as "very bad", and said: "Not as many people believe in the possibility of doing safe and successful business in Russia as we would like. Not so many businesspeople have this confidence. We cannot let this situation continue." Prime Minister Putin has likewise stressed the need to improve the investment climate, telling a business forum in May 2011 that if Russia was to achieve the government's objective of becoming one of the world's top five economies within 10 years, private business would have to play the leading part, while the role of the state was to create a favourable investment climate.

In a broad sense, the business climate includes a very large number of factors, including natural resource endowments, levels of human capital, infrastructure, the tax burden, the size of domestic markets, distance from foreign markets, administrative burdens, the efficiency of civil administration, the incidence of corruption and the extent to which the rule of law applies. The factors determining the attractiveness of a given business environment can be broadly divided into "hard" and "soft" factors. Hard factors are those which, in the short term at least, can be taken as exogenous, such as market size, remoteness, natural resource endowments, level of human capital and infrastructure. "Soft" factors broadly relate to institutions that may create barriers to business activity, including regulation, corruption, and public administration. To varying extents across regions, many hard factors are relatively favourable for Russia: the country as a whole is resource-rich, with a relatively educated population and a large national market. On the other hand, some regions are resource-poor and many are remote, with small local markets. The pattern of foreign direct investment to Russia largely reflects the distribution of hard factors across regions: the highest per capita inflows come to oil-rich regions, while proximity to the large market of Moscow and to Western Europe is also important.

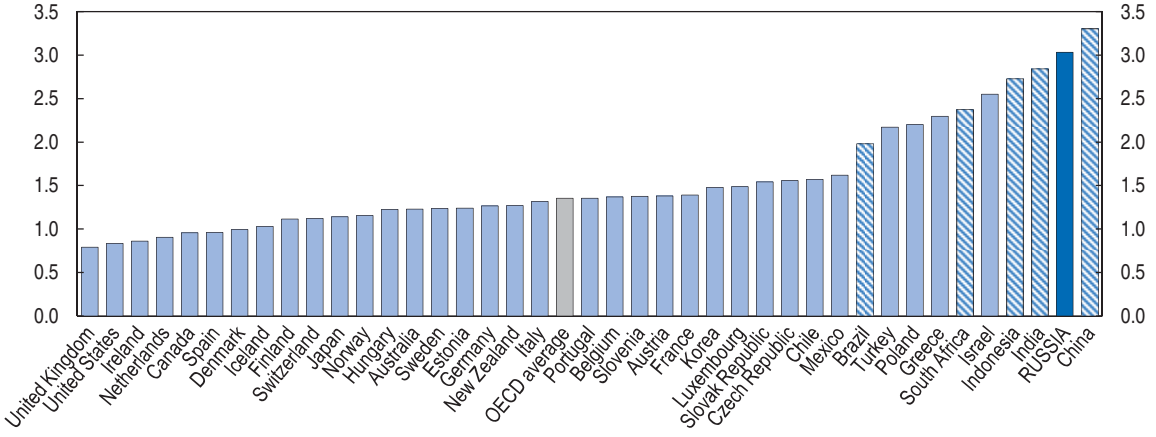
Clearly, therefore, hard factors matter, and some of them can and should be improved in Russia, but in general this is a long-term project, involving factors such as educational reforms, public investment and public-private partnerships to expand and modernise infrastructure. This chapter focuses on soft factors, which is where most can be done in the short to medium term to improve the business climate. Already, the experience of some regions (*e.g.* Kaluga) suggests that results in terms of investment and growth can be considerable even where hard factors are not particularly favourable. Also, while the tax regime is an important aspect of the business climate in general, it will not be discussed here, as in general the tax burden on Russian firms is moderate and is not among the main problems cited by businesses, apart from oil companies.[1] The issue of achieving a more growth-friendly tax system was discussed in the previous *OECD Economic Survey* (OECD, 2009).

The business climate is significantly worse in Russia than in most OECD countries

The extent to which the business climate in Russia lags international comparators, and the areas of particular weakness, can be discerned from a range of quantitative indicators. A key aspect of the business climate, insofar as it bears on the performance of the economy as a whole, is the degree to which it facilitates competition. The OECD's product market regulation (PMR) indicators, which measure the extent to which policy settings promote competition in markets for goods and services where competition is viable, suggest that such policy settings remain relatively anti-competitive in Russia. As of 2008, Russia had more restrictive PMRs than every OECD economy and all other countries for which the indicators have been calculated except China (Figure 2.1).

Figure 2.1. **The overall Product Market Regulation indicator**

2008, index scale of 0-6 from least to most restrictive



Source: OECD, *Indicators of Product Market Regulation Database.*

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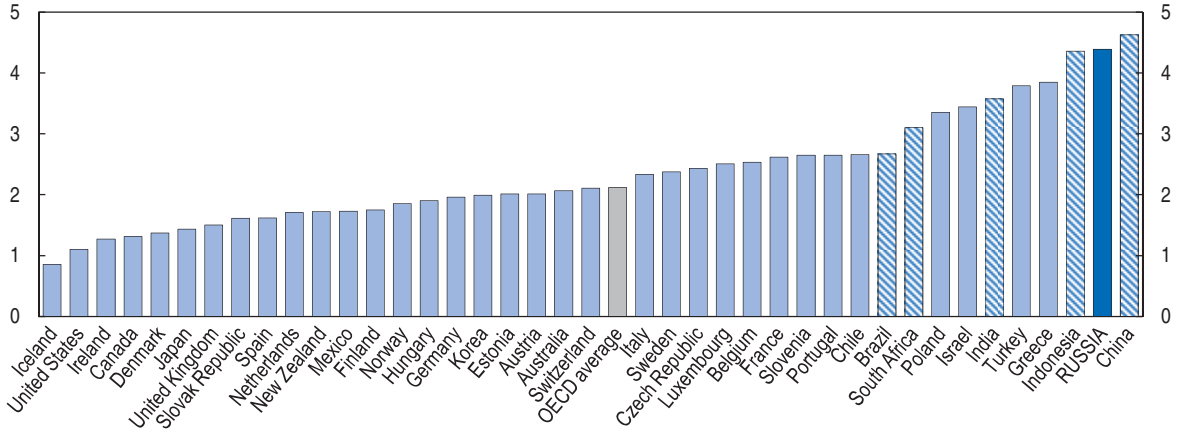
In particular, the PMR indicators reveal that state involvement in the economy is more pervasive in Russia than in any OECD country (Figure 2.2). The degree of direct state control over business enterprises in 2008 was higher than in all but two OECD members, while state-owned enterprises were found to cover a wider range of sectors than any OECD economy except Poland and only Turkey had greater government involvement in

network sectors. An unusually high proportion of total employment, about 17% in 2007, is accounted for by fully or partly state-owned companies, and many state-controlled enterprises (*e.g.* Sberbank, Gazprom) are dominant in their sector. Moreover, a number of state-owned conglomerates, such as in aircraft manufacture and shipbuilding, have been formed by consolidating previously existing state-owned enterprises, while a number of state corporations have been created with a special legal status that exempts them from some of the requirements of the competition and bankruptcy laws and from effective control by the Audit Chamber.

Figure 2.2. **The Product Market Regulation indicator: state control**

2008, index scale of 0-6 from least to most restrictive



Source: OECD, *Indicators of Product Market Regulation Database.*

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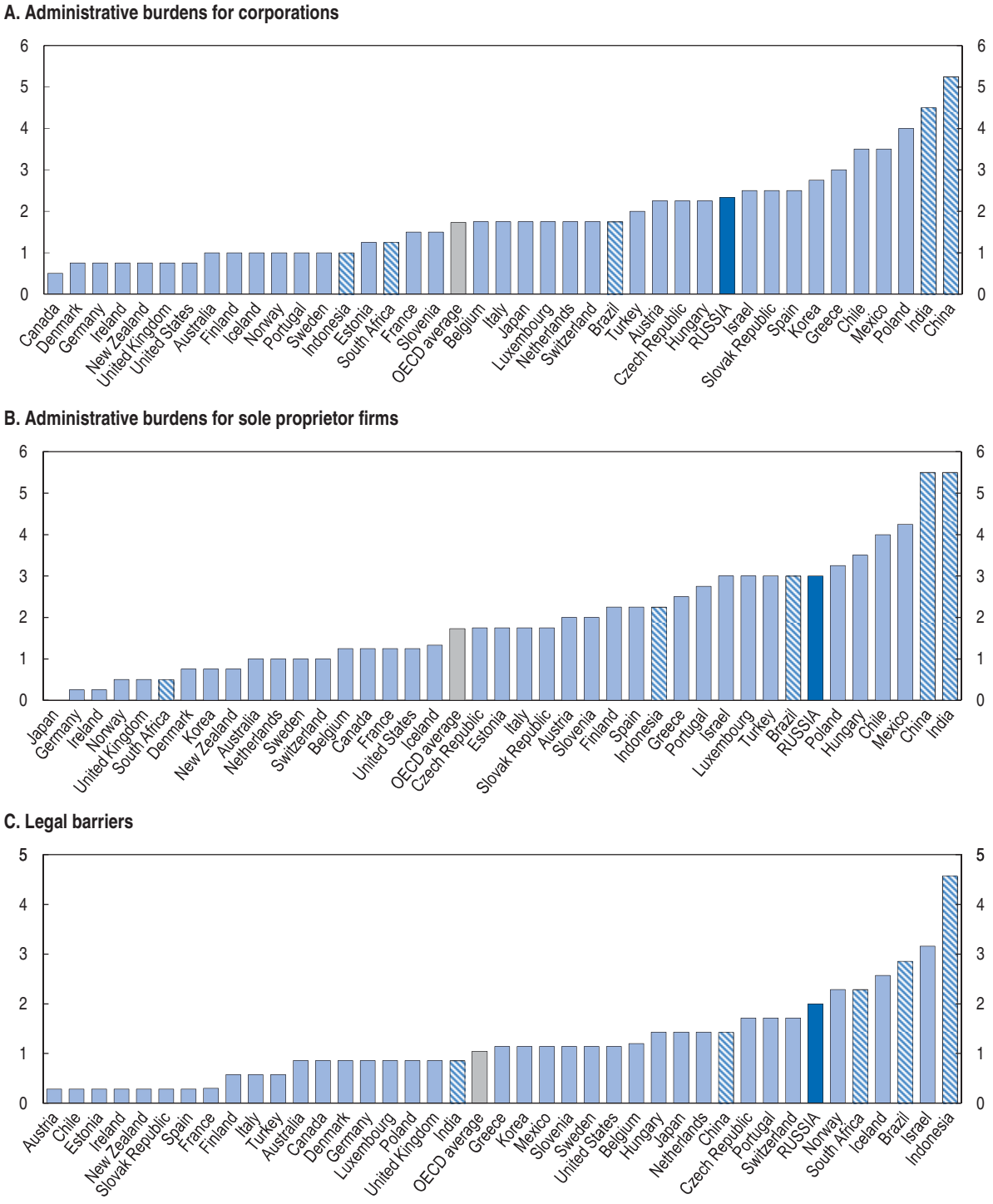
Administrative barriers to the development of new enterprises are relatively high in Russia. Although Russia's scores on some sub-indicators in the area of barriers to entrepreneurship are around or even better than the OECD average, legal barriers to competition in a wide range of sectors are extensive and administrative burdens for starting a firm are heavier than the large majority of OECD countries (Figure 2.3).

The findings of the 2008 PMR exercise are also confirmed by more recent assessments of the environment for doing business in Russia. The Ministry of Economic Development reported in June 2011 that administrative barriers were the most-cited factor (26% of responses) when Russian and foreign businesses were asked what they were least satisfied with. According to the World Bank's *Enterprise Surveys* (World Bank, 2010), Russian managers spent more time dealing with government regulation (22% of their time) than those in all but one other country in Eastern Europe and Central Asia. As to the number of days spent by staff dealing with permits, Russia fared only slightly better, ranking 23rd out of the same 29 countries. In the World Economic Forum's *Global Competitiveness* rankings, Russia is in the bottom decile as regards the burden of government regulation and ranks 115th out of 139 in the ability to use the judicial system to challenge regulations. The World Bank's *Doing Business* indicators also continue to point to Russian firms bearing a comparatively heavy burden from administrative procedures: for instance, Russia is ranked 108 th out of 183 countries for the time, cost, procedures and minimum paid-in capital needed to start a business (World Bank, 2011a). As concerns obtaining a construction permit, Russia was ranked last in the 2011 edition of the World Bank's *Doing Business* report.

Figure 2.3. **The Product Market Regulation indicator: barriers to entrepreneurship**

2008, index scale of 0-6 from least to most restrictive



Source: OECD, *Indicators of Product Market Regulation Database*.

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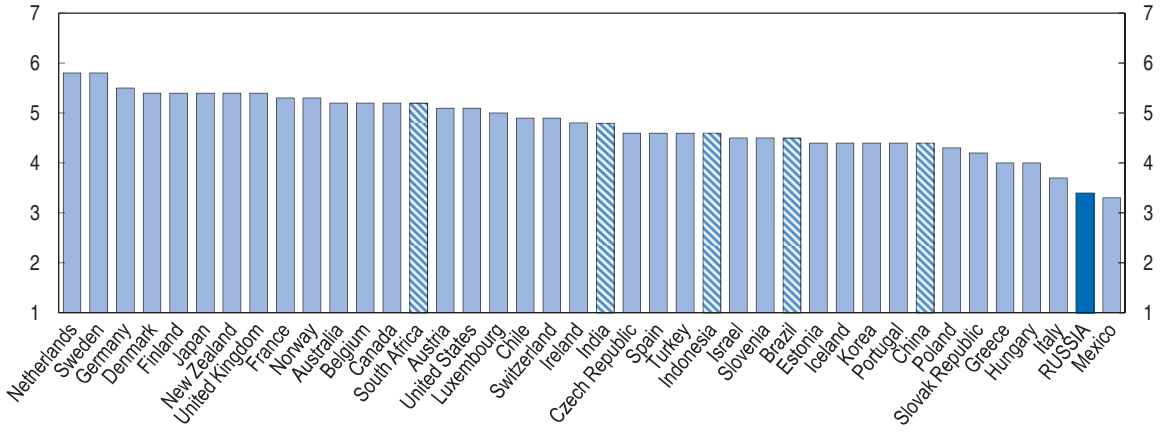
Quantitative comparative indicators suggest that competition policy in Russia is also relatively weak. In the World Economic Forum's *Global Competitiveness Report* (WEF, 2010), Russian anti-monopoly policy received a lower score than all OECD countries except Mexico on the question of the extent to which policy promotes competition (Figure 2.4). Markets continue to be perceived as dominated by companies that are owned or supported by government at one level or another, and it is state bodies and officials that commit more than half the violations of the competition law confirmed by the Federal Antimonopoly Service (FAS) each year (FAS, 2010).

Figure 2.4. **Effectiveness of anti-monopoly policy**

2009-10, score (1-7 scale)



Note: The responses are to the question "To what extent does anti-monopoly policy promote competition in your country? [1 = does not promote competition; 7 = effectively promotes competition]".

Source: World Economic Forum, *Executive Opinion Survey*.

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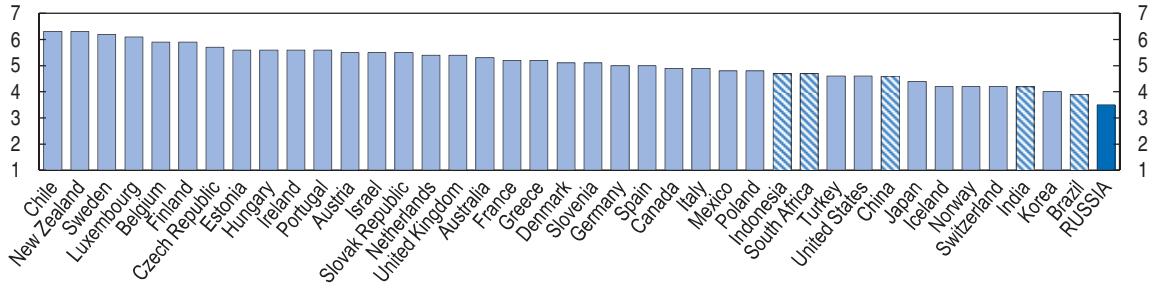
Another factor impeding competitive pressures on incumbent firms is Russia's relatively restrictive trade regime. According to WTO data, among OECD economies only Mexico has higher average trade-weighted import tariffs than Russia, and Russia has worse *Global Competitiveness Index* scores than all OECD members for the prevalence of trade barriers (where it ranked 133rd of 139 in 2010; WEF, 2010) and the burden of customs procedures (where it was 132nd) (Figure 2.5). On the World Bank's *Overall Trade Restrictiveness Index* (Kee, Nicita and Olarreaga, 2009), which takes into account both tariff and non-tariff barriers, Russia's trade regime is assessed as more restrictive than all OECD economies except Mexico. Its score is also higher than China or India, and just below Brazil, placing it 96th of 125 countries in the 2010 edition of the *Global Enabling Trade Report*. The OECD PMR sub-indicator measuring non-tariff barriers to international trade arising from the lack of international harmonisation of standards and norms and mutual recognition agreements portrays Russia's regime as more restrictive than any OECD country (see OECD, 2009, Annex 5.A1).

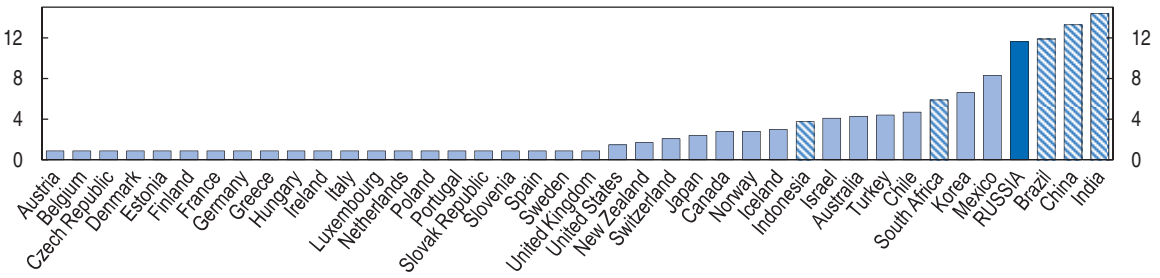
Russia also rates poorly as regards the climate for foreign direct investment (FDI). In part, this reflects the poor overall investment climate, discussed above. In addition, the PMR indicator on barriers to FDI shows Russia to be more restrictive than all but four OECD countries on barriers to foreign ownership (Figure 2.6). Similarly, the World Economic Forum's *Global Competitiveness Index* ranks Russia near the bottom on the business impact of rules on FDI, at 127th of 139 (WEF, 2010). One reflection of the relatively

Figure 2.5. **Barriers to imports**

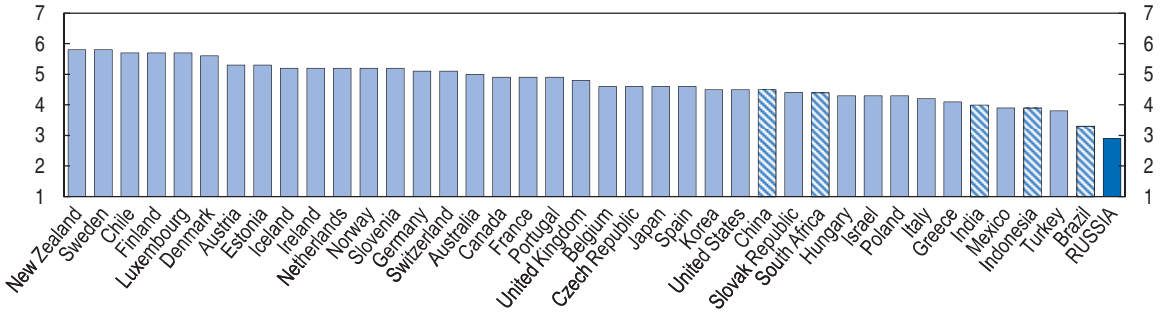
A. Ease of overcoming trade barriers, 2009-10, score (1-7 scale)[1]



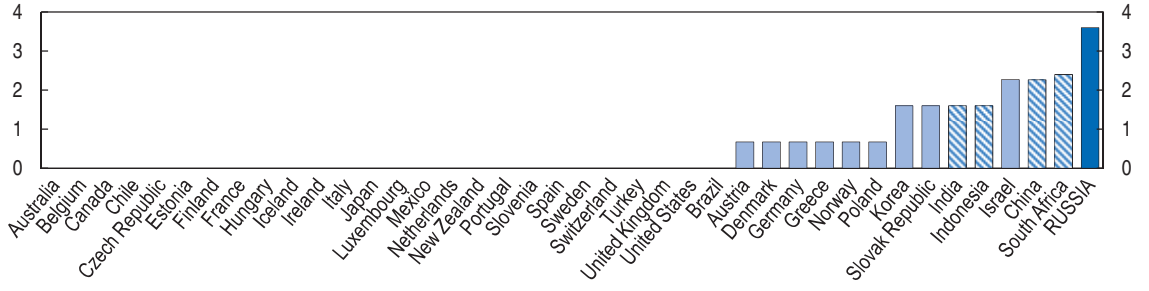
B. Trade-weighted average tariff rate, 2009, %



C. Efficiency of customs procedures, 2009-10, score (1-7 scale)[2]



D. OECD PMR Indicator: Regulatory barriers, 2008, index scale of 0-6 scale from least to most restrictive



1. The responses are to the question "In your country, to what extent do tariff and non-tariff barriers limit the ability of imported goods to compete in the domestic market? [1 = strongly limit; 7 = do not limit]".
2. The responses are to the question "How would you rate the level of efficiency of customs procedures (related to the entry and exit of merchandise) in your country? [1 = extremely inefficient; 7 = extremely efficient]".

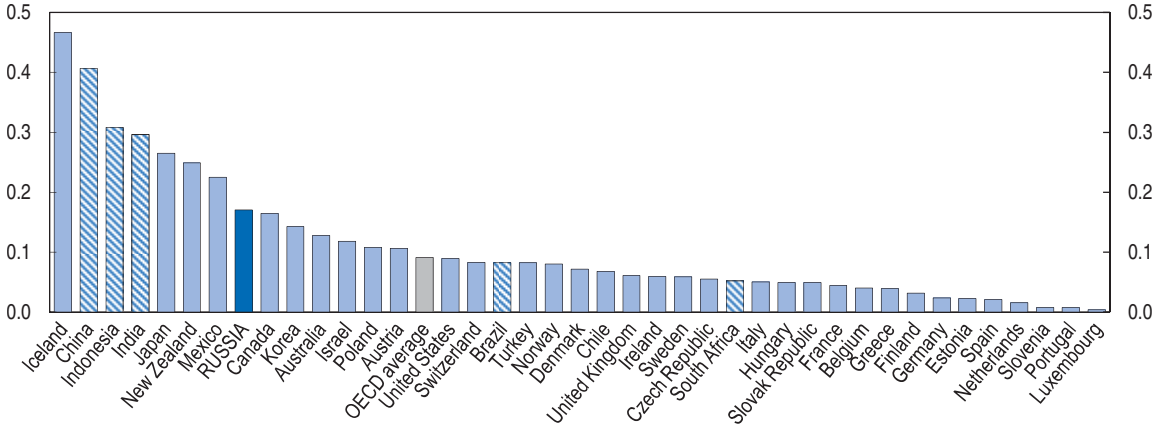
Source: World Economic Forum, *Executive Opinion Survey*; International Trade Centre and *OECD Indicators of Product Market Regulation Database*.

StatLink http://dx.doi.org/10.1787/888932539536

restrictive FDI regime is that Russia is found to have lower levels of foreign ownership of firms than nearly any other eastern European or central Asian economy (*World Bank Enterprise Surveys, 2010*), and lower than any OECD or Enhanced Engagement country (WEF, 2010).

Figure 2.6. **FDI Regulatory Restrictiveness Index**

2010, Index scale of 0-1 from least to most restrictive



Note: The FDI Regulatory Index gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI (foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel and operational restrictions).

Source: OECD, *FDI Regulatory Restrictiveness Index*.

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The climate for foreign direct investment also varies significantly across regions, with some regional administrations much more active in seeking to attract foreign investment than others. A report by KPMG and the Russian business lobby group RSPP (KPMG and RSPP, 2010) found very different levels of attractiveness for foreign investors across 12 regions. The report noted a lack of alignment among different government agencies in the regions, a need for the federal government to act as a coach rather than a player in attracting foreign investment to the regions, and considerable scope for backward regions to learn from the experience of more successful ones. The Kaluga region south-west of Moscow was picked out as one resource-poor region which has nonetheless risen to 4th in the regional ranking of cumulative per capita FDI inflows via an energetic approach to attracting and welcoming foreign investment. Kaluga has in particular become one of the main car-producing regions in recent years as a result of clustering greenfield investments.

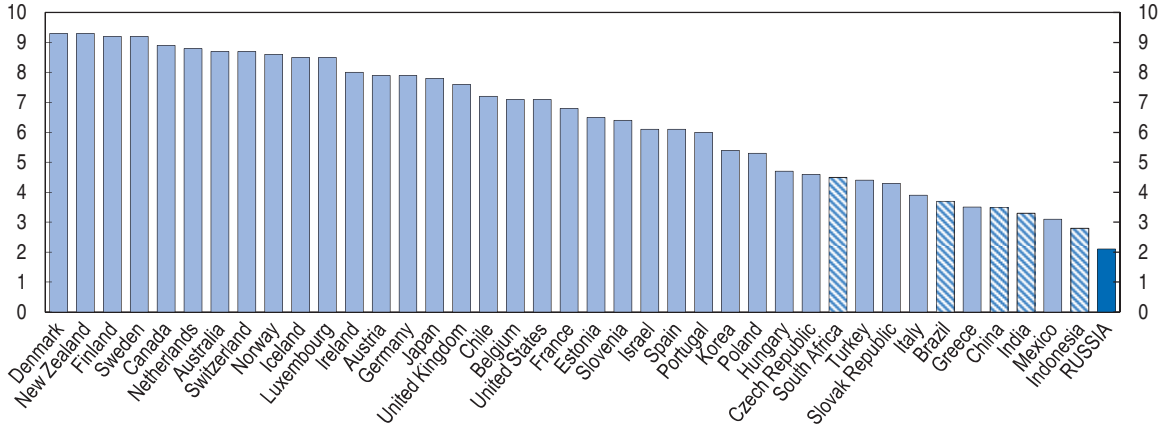
Corporate governance is another area where Russia's standing internationally is low. Ownership and control are seen as often murky, protection of minority shareholders is relatively weak, and some state-owned enterprises have governance structures that prevent the application of normal rules for oversight and accountability. Russia's *Global Competitiveness Index* score on efficacy of corporate boards placed it 113th of 139 in 2010, while on protection of minority shareholder interests Russia was ranked 132nd.

A critical factor undermining the business climate is corruption, which various indicators confirm to be a serious burden on business in Russia. Transparency International's Corruption Perception Index suggests that Russia is perceived to be more corrupt by far than any OECD country, and is both the most corrupt BRIICS country and the most corrupt country in Europe (Figure 2.7). In the World Bank's *Enterprise Surveys* (World

Bank, 2010), the incidence of graft in 2009 was found to be 18.3%, about double the average of the Eastern Europe and Central Asia and nearly four times the average for EU15 countries. Likewise, Russia's scores in the World Economic Forum's *Global Competitiveness Index* are substantially worse than the OECD average and the other BRIICS countries on various aspects of corruption: obtaining favourable judicial decisions, awarding public contracts, public utilities and conducting imports and exports (WEF, 2010).

Figure 2.7. **Transparency International Corruption Perceptions Index**

Corruption Perception Index 2010, scale from 0 (highly corrupt) to 10 (very clean)



Note: The Corruption Perceptions Index (CPI) ranks countries according to perception of corruption in the public sector. The surveys and assessments used to compile the index include questions relating to bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and questions that probe the strength and effectiveness of public sector anti-corruption efforts.

Source: Transparency International, *Corruption Perceptions Index 2010*.

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Corruption is widely acknowledged to be endemic in Russia, both in daily life and in business. As President Medvedev said in his 2009 article "Forward Russia!":

> "Centuries of corruption have debilitated Russia from time immemorial. Until today this corrosion has been due to the excessive government presence in many significant aspects of economic and other social activities. But it is not limited to governmental excess – business is also not without fault. Many entrepreneurs are not worried about finding talented inventors, introducing unique technologies, creating and marketing new products, but rather with bribing officials for the sake of 'controlling the flows' of property redistribution." (*http://eng.kremlin.ru/transcripts/298*).

President Medvedev's predecessor, Vladimir Putin, had struck a similar note as early as his 2002 State-of-the-Nation address: "The way the state apparatus is organised at present unfortunately promotes corruption. Corruption is not the result of the absence of repression, but a direct consequence of the restriction of economic freedoms." Households are accustomed to having to make informal payments in education, the health care system, and in dealing with law enforcement bodies and the legal system. By far the bulk of bribes, however, is paid by firms. The burden of corruption on business takes a variety of forms. One problem is low-level harassment facilitated by complex and hard-to-comply-with regulation. Firms may also offer bribes as a way of staying competitive with others who are doing likewise. At a higher level, the power of the authorities is sometimes subverted to engineer corporate raids in which firms' owners are wrongfully dispossessed,

whether in favour of officials themselves or for the benefit of others. In addition, there have been some high-profile cases with an allegedly political aspect where the impression has been created that the legal system is pressured to further the aims of the executive, or does so unbidden in an effort to please political leaders.[2] Moreover, as confirmed by President Medvedev, the problem of corruption is not new. Corruption was infamous in both tsarist Russia and the Soviet Union, and such behaviour and attitudes became entrenched. Although much has changed since the Soviet era, informal channels and mechanisms for navigating officialdom either remain much as before or have evolved with the changes in the system. As argued by Ledeneva (2009), the main change since the Soviet era in the use of informal networks to gain advantages, colloquially know as "*blat*", has been that the exchanges have been monetised. Now, as in Soviet times, the use of *blat* arises in large part from defects in the system that make it necessary to break rules in order to do business without undue difficulty.

Of course, corruption is far from a peculiarly Russian phenomenon. It is present to some degree in all countries, and is well correlated with a number of explanatory factors, including income. Indeed part of the difference between perceptions of corruption in Russia and those in most OECD economies can be explained by per capita income differences. Nonetheless, Russia has unusually high corruption levels for a country of its income level (Figure 2.8A). One plausible reason for this is the abundance of natural resource rents in Russia, which facilitates both the supply of and demand for bribes and preferences (such as mineral rights or sales of state-owned resource enterprises). Looking at a cross-section of countries, there is a positive relationship between the share of oil in total exports and Transparency International's Corruption Perception Index score (Figure 2.8).

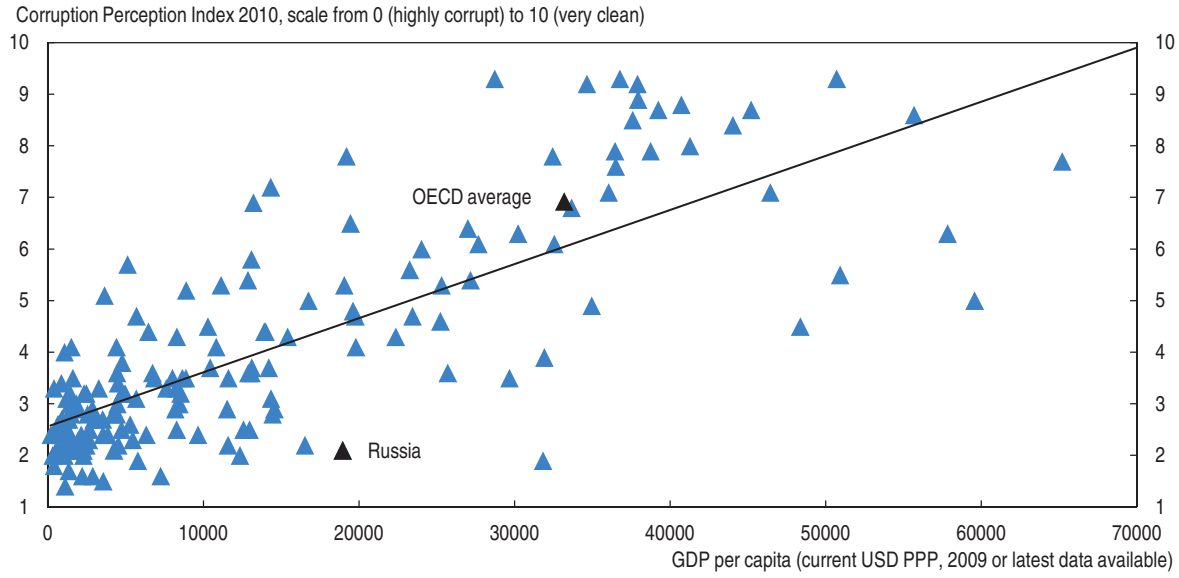
Indices of freedom or democracy also show robust (negative) correlations with corruption, which again explain part of the degree of Russia's corruption problem. Regressing Corruption Perception Index scores against per capita GDP, share of oil exports in total exports and scores on the Economist Intelligence Unit's democracy index, with a dummy variable for countries of the former Soviet Union, confirms that all these variables are statistically significant with the expected signs (Table 2.1). In such a regression Russia still has a sizable negative residual, *i.e.* it is perceived as having more corruption than would be expected on the basis of the explanatory variables, but most of its deviation from the OECD average is explained by income levels, oil export shares, democracy scores and transition economy status.

Not surprisingly, given the endemic nature of corruption in Russia, companies are also poorly rated in international comparisons of anti-corruption measures in place. According to Transparency International's 2010 report *Transparency in Reporting on Anti-corruption*, Russian companies were the worst of 17 economies (including 13 OECD member countries) as regards measures put in place to discourage corrupt practices. Russia also ranked last of 22 assessed countries in the Transparency International *Bribe Payers Index*, a measure intended to capture exporting companies' willingness to bribe abroad.

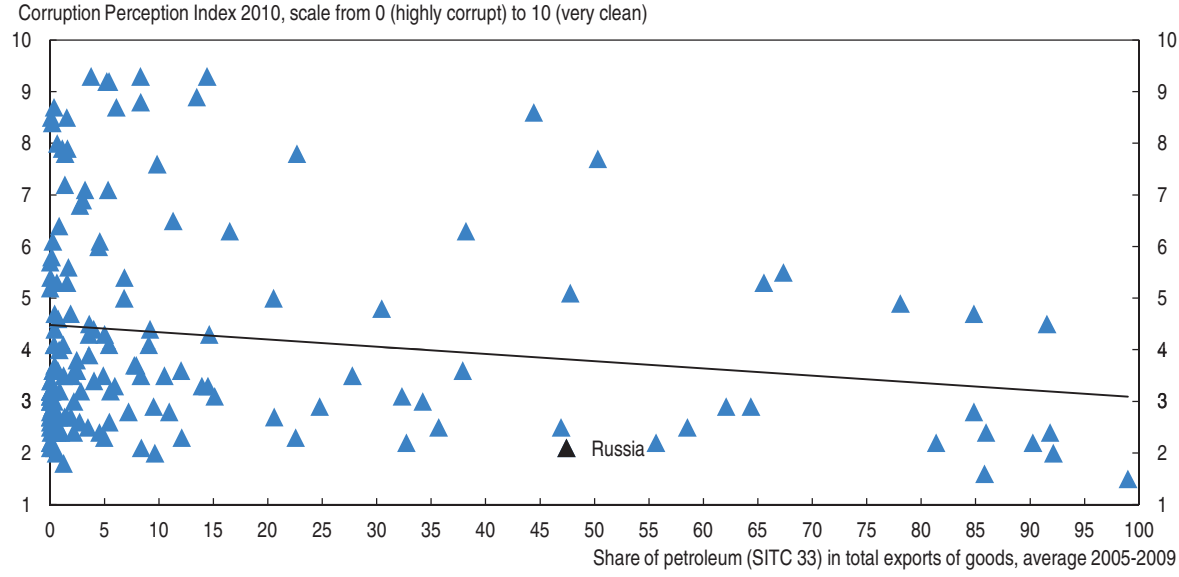
A closely related aspect of the business climate is the rule of law. In this area, a recent ranking of 66 countries by the World Justice Project showed Russia to be lagging on several dimensions, although scores were above average on order and security and delivering effective criminal justice (Table 2.2). Serious deficiencies were observed in checks and balances among the different branches of government, and the institutional environment was assessed as beset by corruption, impunity, and political interference. Russia ranked 52nd of 66 on the consistent enforcement of regulations, and civil courts, although

Figure 2.8. **Corruption Perceptions Index (CPI)**

A. CPI scores and GDP per capita



B. CPI scores and share of oil in total exports



Note: The Corruption Perceptions Index (CPI) ranks countries according to perception of corruption in the public sector. The surveys and assessments used to compile the index include questions relating to bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and questions that probe the strength and effectiveness of public sector anti-corruption efforts.

Source: Transparency International, *Corruption Perceptions Index 2010*; *United Nations Commodity Trade Statistics Database*; and World Bank, *WDI Database*.

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accessible, were described as corrupt and inefficient. Russia's scores for the protection of property rights in the WEF's 2010 *Global Competitiveness Index* are also strikingly low: it ranks 128th of 139 countries on property rights in general and 119th on the protection of intellectual property rights. On judicial independence, Russia's ranking was 115th and on favouritism in official decisions 106th.

Table 2.1. **Results of corruption regression**

Dependent variable: Transparency International Corruption Perception index score, 2010

Sample: 156

Included observations: 146

Variable	Coefficient	Std. error	t-Statistic	Prob.
Per capita GDP constant	1.448990	0.313412	4.623275	0.0000
Per capita GDP	9.44E-05	6.53E-06	14.45588	0.0000
Share of oil in exports	–0.009363	0.003823	–2.449337	0.0155
EIU democracy index	0.266292	0.053643	4.964161	0.0000
Dummy for former Soviet Union	–0.436016	0.298273	–1.461805	0.1460
R-squared	0.786070			
Adjusted R-squared	0.779958			

Sources: Transparency International, Economist Intelligence Unit and OECD staff estimates.

Table 2.2. **WJP *Rule of Law Index* scores**

	Score	World ranking (out of 66)
Limited government powers	0.42	55
Absence of corruption	0.49	39
Order and security	0.75	36
Fundamental rights	0.55	46
Open government	0.41	52
Regulatory enforcement	0.45	52
Access to civil justice	0.54	40
Effective criminal justice	0.64	23

Source: World Justice Project *Rule of Law Index* 2011.

The economic consequences of the relatively poor business climate are serious

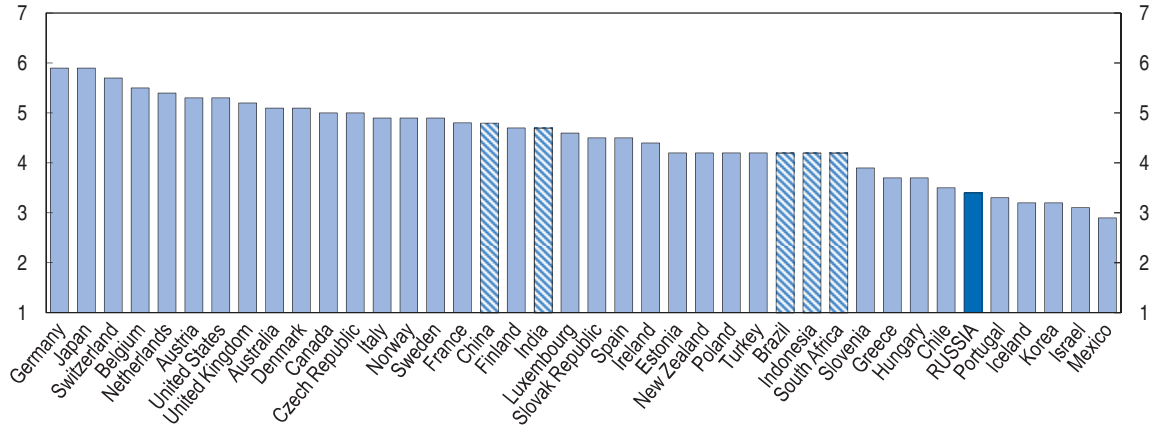
There is considerable evidence that the business climate is related to several indicators of economic performance, which suggests that a failure to make rapid progress in this area would frustrate some of the key goals of the Russian authorities.

Probably the most important channel through which different aspects of the business climate affect economic performance is competition. Given the shortcomings in policy settings and private sector institutional factors discussed above, it is not surprising that numerous indicators confirm a relative lack of competitive pressures in Russia. The previous *OECD Economic Survey* noted that the share of highly-concentrated markets in Russia in 2007 was estimated to be 47% (OECD, 2009), up from 43% in 2001. Russia was found to have among the highest degrees of market dominance in the World Economic Forum's *Global Competitiveness Report*, while its rankings on domestic and international competition were 115th and 126th of 139 respectively (WEF, 2010) (Figure 2.9). In a study on competition, innovation and export diversification, the World Bank (2011b) reported that Russian firms were much more likely than firms in similar economies to consider their local (regional) market as their main market, and Russian manufacturing firms were also found to have higher mark-ups than firms in other countries in Eastern Europe and Central Asia. The Federal Antimonopoly Service reported that as many as one in five industries are prone to cartel activity (FAS, 2008).

Another sign of the weakness of competition is the relatively low share of economic activity generated by small and medium-sized enterprises (SMEs) in the Russian economy.

Figure 2.9. **Extent of market dominance**

2009-10, score (1-7 scale)



Note: The responses are to the question "How would you characterize corporate activity in your country? [1 = dominated by a few business groups; 7 = spread among many firms]".

Source: World Economic Forum, *Executive Opinion Survey*.

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SMEs account for about one fifth of employment and an even smaller share of output, whereas in most OECD economies both figures are above one half. The World Bank (2011b) found that firms in industries with relatively high price-cost margins tended to be larger than those in more competitive industries, and found some evidence from the Russian firm-level data that larger firms had higher price-cost margins than other firms.

Similarly, entry and exit of firms appears to be low in Russia. The World Bank (2011b) puts Russian entry rates lower than in most eastern European and central Asian countries, while according to the *Russian Competitiveness Report* (WEF, 2011), only about 5% of firms either begin or cease operations per year, which is at the low end of the range of more advanced economies. Russia ranks 108th of 182 countries in the 2011 *Doing Business* rankings for ease of starting a business and 103rd for closing one.

Apart from weak competitive pressures country-wide, there is also substantial variation in such pressures across regions, with some regions having extremely high mark-ups and firm concentration (Bessonova, 2009). The World Bank (2011b) shows that there are large inter-regional differences in the number of dominant firms in the regional market, concentration indices in different industries, state preferences to incumbent firms, anticompetitive actions by government bodies, and price levels. They find that even after correcting for differences in gross regional product, population and distance from main market, interregional discrepancies remain large.

A large and varied range of empirical studies indicates that competition is linked to economic growth. The improvements of allocative efficiency when low-cost entry allows resources to be shifted from low- to high-productivity firms results in higher average productivity (Conway *et al.*, 2006) and employment (Nicoletti and Scarpetta, 2005). Arnold *et al.* (2008) find that resources are allocated less efficiently across firms in countries where service regulations are less market-friendly, and that anti-competitive service regulations hamper productivity growth in ICT-using sectors, especially for firms catching up to the technology frontier and close to international best practice. Wölfl *et al.* (2010) find evidence that the harmful growth effects of restrictive product market regulation are larger for high-

income than for low-income countries, which suggests that as Russia converges on advanced-country per capita income levels, it will become increasingly important to implement pro-competitive policies. Djankov *et al.* (2006) show that countries with less burdensome business regulations, as measured by the World Bank's *Doing Business* indicator, grow faster, and find some evidence that the causality runs from regulation to growth.

Apart from allocative efficiency gains, increased competition can also have positive dynamic effects. For example, Aghion and Griffith (2005) conduct a survey of the empirical literature and conclude that there is evidence of a U-shaped relationship between competition and innovation at the firm level. Aghion and Bessonova (2006) argue that the economy-wide effect of increased competition on innovation is positive, as the weaker firms which reduce their innovation activity shrink or close, while those closer to the world technological frontier expand. The scope for Russia to benefit from the pro-innovation effects of increased competition is clear: the country has both weak competition and a relatively poor innovation performance (see Chapter 1).

The general findings on the relationship between competition and growth are also supported by a range of Russia-specific evidence. Yakovlev and Zhuravskaya (2007) look at an episode of liberalisation of registration, licensing and inspections in the early 2000s, and find a substantial positive effect of deregulation on net entry and small business employment. In another recent study (World Bank, 2011b), using firm-level data for 2008, competition and other investment climate variables were found to explain over half of the export intensity of exporting firms. Competition was also found to be a significant determinant of productivity and the probability of a given firm being an exporter. Firms facing intense competitive pressure from domestic firms were estimated to be 18.8% more productive on average, and to have a 7.9% higher probability of exporting, than firms not facing intense domestic competition. Similarly, Bessonova *et al.* (2003) find that increased competition from foreign producers had positive effects on productivity and restructuring of domestic firms. Other evidence (Carlin *et al.*, 2001; Aghion *et al.*, 2002) suggests that soft budget constraints and state ownership hinder the restructuring of firms as the business environment improves. Russia, with a relatively poor business climate, has seen slower-than-average enterprise restructuring compared to other transition economies in Eastern Europe and Central Asia. The EBRD's *Transition Indicators* for 2010 show that only 11 of 29 transition countries in the region had made less progress on enterprise restructuring than Russia.

The empirical literature on corruption reveals considerable evidence of negative effects on investment, income and growth (*e.g.* Paldam, 2002; Rose-Ackerman, 1999; Mo, 2001), with one mechanism for such effects being that corruption is inimical to competition. Causation seems to run in both directions: Bliss and di Tella (1997) note that a lack of competition encourages corruption, but Klapper *et al.* (2006) show that cross-country variation in entry rates depends on the extent of corruption and other aspects of the institutional context, while Campos *et al.* (2010) point to the negative impact of corruption on firm entry and competition, showing that when the probability of being able to extract a bribe is high, officials will be motivated to restrict firm entry to maximise rents earned by incumbents. Fisman and Svensson (2000) find evidence that firm growth is negatively correlated with bribery payments. Weill (2011) shows that bank lending to firms and households in Russia is stunted by corruption. The OECD *Review of Innovation in the Russian Federation* (OECD, 2011) cited corruption as one factor holding back private

innovation. Some studies (*e.g.* Gupta *et al.*, 1998; Gyimah-Brempong and de Camacho, 2006) also suggest that greater corruption is associated with higher levels of inequality, although others (*e.g.* Chong and Calderon, 2000; and Dobson and Rodriguez Andres, 2010) do not find a monotonic relationship.

The positive relationship between openness to trade or trade liberalisation on the one hand and economic growth on the other is well established, with competition again a likely mechanism. Wacziarg and Welch (2008), following up on the earlier work of Sachs and Warner (1995) on the positive growth effect of openness, find that countries that liberalised their trade regimes subsequently experienced average annual growth rates that were about 1½ percentage points higher than before liberalisation, with higher investment being the main reason. Microeconomic studies tend to confirm the cross-section macroeconomic studies, showing that exporting firms are more productive than non-exporting ones (*e.g.* Aw and Hwang, 1995), and that there is a causal link running from trade to productivity (Lopez, 2005), although causality may also run in the other direction, with productive firms self-selecting into exporting activities (Arnold *et al.*, 2005). World Bank estimates (*e.g.* Rutherford *et al.*, 2005) suggest that the gains to Russia from WTO accession would be several percentage points of GDP over the medium term, with the bulk of the gains coming from Russia's own liberalisation rather than increased market access for Russian exporters. This illustrates the potential benefits to Russia of a less restrictive trade regime. A recent report produced by the OECD/WTO/ILO for the November 2010 G20 Summit in Seoul (OECD *et al.*, 2010) estimated that a halving of most-favoured nation tariffs and non-tariff barriers by all G20 countries would boost the real income of G20 countries by more than 8%, with increased employment of less skilled workers of nearly 2% and 3% for skilled workers.

Another aspect of the effect of the business climate on economic performance is that obstacles to entry and the development of SMEs inhibit economic diversification, which may both increase vulnerability and hold back economic growth. Russia is widely seen, including by its leaders, as excessively dependent on oil and gas, and reducing that dependence is a major policy goal. The concentration of exports in oil and gas exposes the Russian economy to major shocks when international energy prices swing rapidly. In 2008 the price of oil fell by about 75% in a matter of five months, resulting in an annualised reduction in export revenues (at given volumes) of more than USD 200 billion or about 14% of 2008 GDP. At the same time, the oil price fall undermined the solvency of many of Russia's largest companies and banks and sparked a sharp reversal of what had been net capital inflows. The combined effects, together with the collapse of world trade in the same period, triggered an abrupt shift from rapid economic growth to deep recession. This episode was a stark reminder of Russia's vulnerability to negative oil price shocks. Beyond that problem, however, a high degree of dependence on natural resource extraction may have other harmful effects, such as encouraging non-productive rent-seeking and displacing more dynamic and innovative activities. These are among the reasons advanced for the finding that resource-rich economies generally fail to grow more quickly than resource-poor ones, despite the advantage that the resource endowment should offer. Frankel (2010) reviews the evidence on "resource curse" effects. While the extent to which resource abundance itself is harmful to growth remains controversial, there is increasing evidence that a lack of export diversification in general is linked to weak growth. Lederman and Maloney (2008) conclude that it is not natural resources *per se* that are the problem but rather concentration of exports. Similarly, Hesse (2009) finds strong evidence in panel

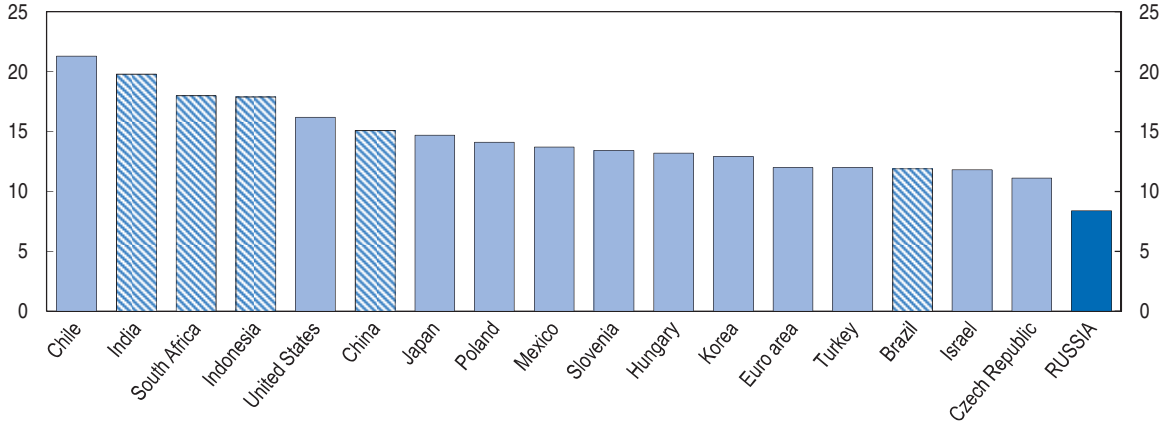
regressions that export concentration is detrimental to per capita GDP growth: countries which diversified their exports enjoyed faster growth. Haddad *et al.* (2010) argue that the positive link between diversity of exports and long-run growth derives from reduced output volatility via lower exposure to shocks, as well as increased potential for positive spillovers. Hausmann *et al.* (2006) divide goods into productivity levels based on the income levels of countries that are net exporters of those goods. They found that countries exporting high-productivity goods (like China) grow faster than those exporting low-productivity goods. For countries like Russia which are catching up to advanced country income levels, this generally means developing non-commodity activities. Thus, one channel through which Russia's poor business climate is likely to be harmful to growth is the low level of economic diversification resulting from weak competitive pressures and the underdevelopment of SMEs.

An unfavourable general investment climate tends to hold back financial development in various ways. Notably, the ineffective or inconsistent application of the rule of law impedes the development of the trust necessary for arms-length financial transactions. Deficiencies in accounting rules, disclosure and financial reporting make it more costly and difficult for lenders to assess the creditworthiness of potential borrowers. Moreover, general difficulties in the business climate, such as regarding the degree of corruption and the extent to which the rule of law is applied consistently, affect financial firms just as they do firms in other sectors. Thus, drawbacks in the business climate threaten to complicate the task of fulfilling the authorities' stated ambition to make Moscow an international financial centre.

The poor investment climate is also reflected in persistently low price-earnings multiples on Russian equities compared to other emerging economies and most advanced countries, reflecting a market assessment that prospects for earnings growth are worse in Russia, risks are greater, or both. Russian shares trade on about half the P/E ratios of China or Mexico, and about a third of the level of Chile or India (Figure 2.10). The higher cost of equity capital hinders Russian firms' investment and growth.

Figure 2.10. **Trailing 12-month P/E ratios**

July 2011



Source: Datastream.

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Foreign direct investment can be deterred by various shortcomings in the business climate, not only FDI-specific barriers such as a broad definition of strategic sectors requiring government approval for acquisition by non-residents but also, for example, the perceived arbitrariness of the rule of law. The fear that well-connected locals will have an advantage in legal disputes, or that the law enforcement bodies and/or the courts can be used to harass or dispossess foreign owners, is a commonly-cited factor in surveys of potential investors to Russia. The negative FDI effect of these weaknesses in the business climate is likely to be harmful to Russia's growth prospects. The empirical literature shows that the contribution of FDI to economic growth depends on many factors. For example, Borensztein *et al.* (1998) find a positive growth effect of FDI if the host country has a highly educated workforce; Balasubramanyam *et al.* (1996) conclude that the growth benefits of FDI depend on openness of the trade regime; and Alfaro *et al.* (2003) stress the importance of developed financial markets.

Progress has been made on improving the business climate, but much more should be done

As already noted, the President and the government have long acknowledged the need to improve the business climate, and many actions have been taken to that end. Nonetheless, as seen above, Russia's business environment is still seen as poor in comparison with OECD countries and many other middle-income economies. In part, this failure to make a rapid and sustained move up the international rankings on various business climate indicators despite making clear progress in several areas may reflect the fact that other countries have also been advancing. Also, reforms in different areas may be complementary and mutually reinforcing; continued weaknesses in one or two areas may result in perceptions of the business climate remaining poor despite progress made in other areas. The likelihood is that a broad range of measures, whose effects will take years to be fully visible, will be needed if overall indicators of Russia's business climate are to approach the OECD average in the foreseeable future.

Tackling corruption

Reducing the burden of corruption on business has been on the policy agenda in Russia for a long time. As early as the 1990s institutional reforms to increase the independence of the judiciary were undertaken, but these initiatives were undermined by an underfunding of the courts and a fall in real wages for judges, which made them dependent on local administrations. Judges' real pay and the funding of the system improved radically from the turn of the century. In addition, civil service reforms launched in 2003 aimed at improvements in accountability and transparency. A 2001 law to limit the number of inspections that could be conducted without the approval of the Prosecutor General was an important step to limit harassment of firms by rent-seeking officials. Also, a new public procurement law was adopted in 2005 with a view to cutting waste and corruption.

Anti-corruption efforts were given additional impetus after the election of President Medvedev in April 2008, when he made the fight against corruption one of the main initiatives of his presidency. In July 2008 the Presidential Administration released a National Anti-Corruption Plan, and in December of that year, pursuant to the Plan, Federal Law No. 273 "On Counteracting Corruption" was adopted. The law provides a broad definition of corruption, making it a criminal offence to engage in active or passive bribery,

abuse of office, influence-peddling and corruption by agents. It also obliges officials to declare their income and property and that of their spouses and dependent children, and limits gifts to officials. In May 2011 amendments to the Criminal Code were adopted which introduced fines in multiples of the bribe's amount as an alternative penalty to imprisonment for giving or taking commercial or other bribes. The fines range from 10 to 100 times the bribe in question, depending on the gravity of offence, with a minimum of RUB 25 000 and a maximum of RUB 500 million. The use of new technology to reduce corruption and waste in public procurement has increased: notably, since July 2010 most government orders for goods and services have had to be placed in electronic auctions.

One of the ten points in the plan for improving the investment climate announced by President Medvedev in March 2011 was an order to the Prosecutor General to introduce a special procedure to examine complaints about corruption in state agencies. Another established mobile offices of the Presidential Administration that would travel the regions and take general complaints about the authorities. Another plank of the President's anti-corruption efforts is the Police Bill adopted in 2011. An overhaul of the Interior Ministry is to reduce personnel by 20% over two years while raising pay for retained staff.

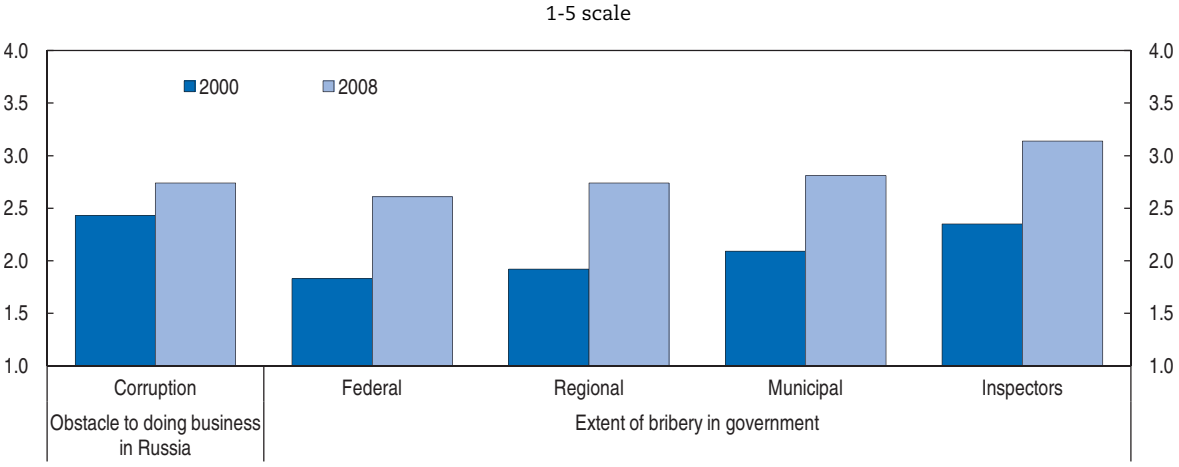
Progress has also been made in signing up to international agreements on tackling corruption. In 2006 Russia ratified both the Council of Europe Criminal Law Convention on Corruption and the UN Convention Against Corruption, and in May 2011, after the adoption of a package of legal amendments, it was invited to join the OECD Anti-Bribery Convention, which relates to bribery of foreign officials by companies of the signatory countries. It is expected that Russia will ratify the Convention by end-2011.

Follow-up to the anti-corruption law is ongoing, in particular via the development and implementation of anti-corruption programmes at the regional level and among government agencies, but a track record of full implementation and enforcement remains to be established.[3] For example, as regards the expert review of laws and regulations to ensure absence of corruption loopholes, bills submitted by the Presidency have not so far been submitted to review, while other bills have either not been reviewed or the results not released.[4] More generally, despite the reforms undertaken in recent years, implementation appears to have been uneven, and there has been little change (and maybe even a worsening) in perceptions of corruption. An OECD review of Russia's public governance (OECD, forthcoming) found that there is as yet little evidence on how conflict-of-interest procedures and institutions are functioning beyond public perceptions and media stories, which as yet offer little clear sign of progress. It likewise found little available evidence on the extent of communication, training and advice taking place to support public officials in dealing with integrity dilemmas. President Medvedev has recognised that there has been little visible progress in combating corruption in public procurement, despite the reforms of recent years. In his March 2011 address to the Modernisation Committee in Magnitogorsk he called for the costs of state purchases to be cut by 15% (for a given volume of goods and services); Kremlin financial oversight department head Konstantin Chuichenko had earlier estimated that corruption in public procurement leads to losses of about RUB 1 trillion annually, about 20% of total state purchases.[5]

Overall it is hard to discern a clear trend in the burden of corruption, which is not surprising given the many dimensions of the phenomenon and the difficulty of measuring it objectively, but a number of measures point to a worsening of the problem. Frye (2010) reports that based on surveys of 500 business people in 8 Russian regions, corruption was

found to be a greater obstacle to doing business in 2008 than in 2000 (Figure 2.11). Russia's ranking in Transparency International's *Corruption Perception Index* has slipped in recent years: between 2002 and 2004 it was ranked in the 62nd to 69th percentile, while in 2009 and 2010 it was in the 81st and 86th percentile respectively.[6] A Levada Centre poll in July 2010 found that 60% of respondents believed that corruption and abuse of power by senior officials had worsened over the previous 10 years, while only 10% thought they had improved. This was worse than in 2005, when the figures were 45% and 10% respectively. In September 2010 Prosecutor General Yuri Chaika publicly criticised the law enforcement agencies for inaction in tackling corruption, citing a sharp fall in the number of cases and convictions over the previous year. A March 2010 report by the Ministry of the Interior asserted that the size of bribes had nearly tripled between 2008 and 2009, despite the global economic downturn.

Figure 2.11. **Change in perceived burden of corruption for business**



Note: Responses rated on a scale of 1 to 5, where 1 equals not all a problem and 5 equals a very serious problem.
Source: Frye, T. (2010), Tables 4.3 and 4.4 of Aslund *et al.*

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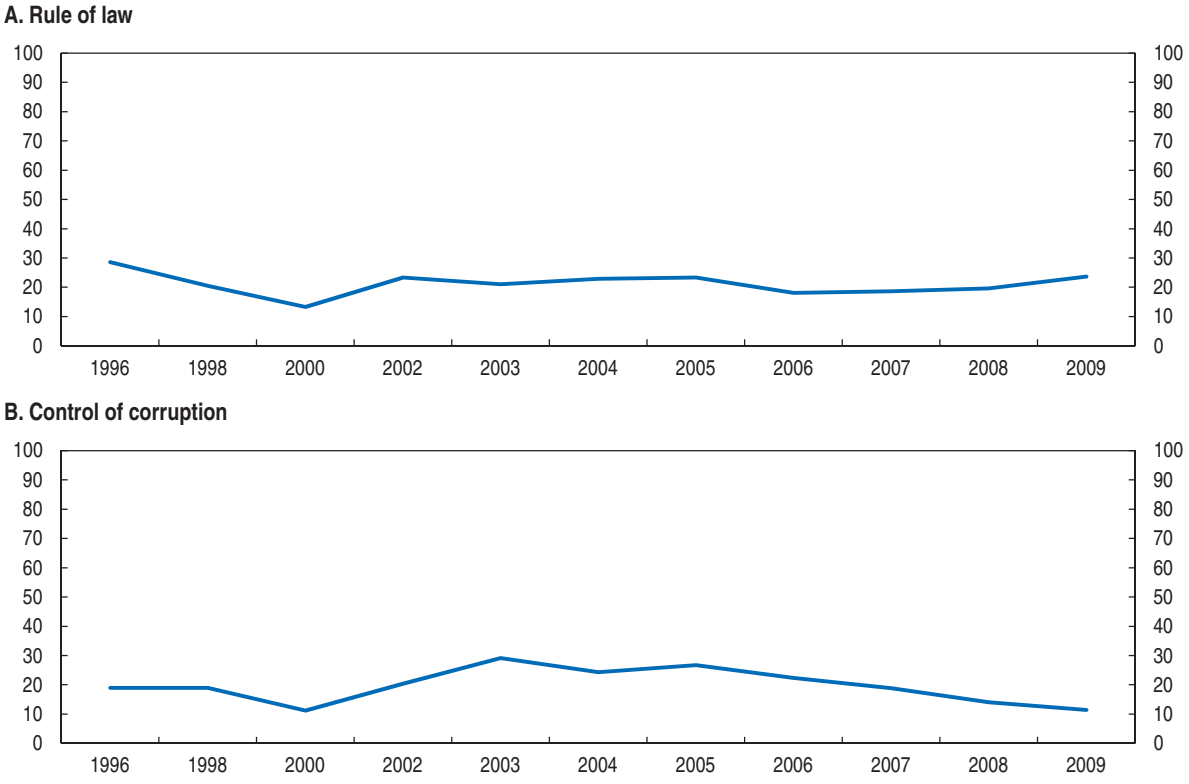
As against these indications of a worsening corruption problem, some indicators do point to improvements in recent years. For example, the World Bank's *Enterprise Survey* country note for Russia observes that the share of firms reporting that they were expected to give gifts in meetings with tax officials fell from 52% in 2005 to 20% in 2009, while the percentage expected to make informal payments to "get things done" declined over the same period from 76% to 32%. On balance, there appears to have been little change as yet in public perceptions of the severity of corruption. The percentile ranking of Russia on control of corruption in the World Bank's *World Governance Indicators* is roughly where it was in 2000, after having improved initially and then worsened from about 2005 (Figure 2.12B). The lack of a clear uptrend despite a large number of anti-corruption efforts over an extended period suggests that the measures taken to date have not been fully effective or have not had time for their effects to be recognised. Certainly, survey evidence reveals scepticism as to whether some measures, such as financial disclosure of officials, will really be used to combat corruption or are mainly for show, and President Medvedev has himself admitted that there are so far no mechanisms in place to check and follow up on the declarations.[7]

Figure 2.12. **Governance indicators**

Percentile Rank (0-100)[1]



Note: Rule of law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

1. Percentile rank indicates the percentage of countries worldwide that rate below the selected country. Higher values indicate better governance ratings.

Source: World Bank, *Worldwide Governance Indicators Database*.

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One clear direction for anti-corruption efforts is therefore to follow through on the various reforms that have already been launched, demonstrating that the anti-corruption initiative will be sustained and strengthened, and will be applied at all levels without favour. Beyond this important task, there are a few areas where additional measures seem to be called for. The OECD's accession review of the Russian Federation in the area of public governance contained a number of preliminary findings and recommendations, including that the government should consider introducing a "cooling-off" period on post-public employment, together with a monitoring system, to avoid conflict of interest. Also, while competitive tendering is regulated and exceptions are defined, procedures are not always respected, and prevention of misconduct, compliance and monitoring remain weak in the Russian public procurement system. One measure found to have been effective in OECD countries, and which should be emulated in Russia, is to identify risks to integrity for particular jobs, activities and projects and to set up specific mechanisms to minimise those risks. In addition, Russia has relatively weak protection for whistleblowers. Given endemic corruption, this is a deficiency that should be corrected. Some OECD countries have specific laws to protect whistleblowers, and though not the only effective solution, this could be considered in Russia.

Looking to the few cases where countries have succeeded in moving quickly from high to low levels of corruption, such as Hong Kong and Singapore, one step that might increase the chance of success would be to give financial rewards to officials who refuse bribes and report the would-be bribe-giver. Perhaps most importantly, however, Singapore and Hong Kong pursued numerous reforms at once, and in both bases the top political leadership was committed to reducing corruption.

The correlation of corruption perception scores and indicators of the strength of democracy suggests that successful efforts to combat corruption should be looked at holistically, with important contributions to be made by press freedom (including protection of journalists from attacks carried out with apparent impunity), vigorous political opposition and civil society organisations. These are areas where Russia continues to lag and has arguably moved backwards in recent years, with more centralised political control, a less diverse media, and tighter controls on opposition groups and NGOs. Relatedly, it may be useful, not least to impart more credibility to reforms, to give outsiders a greater role in changing institutions perceived as corrupt.

One possible reason why corruption indicators have not shown a decisive improvement despite successive initiatives to combat the problem is that one key aspect of the opportunity for corruption, the availability of natural resource rents, has expanded sharply in the last dozen years. Oil and gas exports alone increased tenfold in US dollar terms between 1999 and 2008, with by far the bulk of the increase coming from higher prices. At the same time, the number of government officials has also increased markedly, growing by 22.7% between 2000 and 2010, much faster than the 4.7% increase in overall employment. It is possible that improvements in the rules of the game (*e.g.* greater civil service transparency and accountability, increased judicial independence) have been offset by a growing supply of bribes (via soaring natural resource rents) and growing numbers of public officials. This is a reminder that administrative reforms to improve public integrity, while necessary to reduce the burden of corruption on businesses and citizens, may not be sufficient. The broader policy environment, not specifically targeted at reducing corruption, is also likely to be important. For example, less restrictive product market regulation, primarily undertaken to spur innovation and growth, will tend to reduce product market rents and limit the scope for rent-sharing between incumbent firms and public officials. Effective rules governing the taxation of oil and gas rents and the use to which the revenues are put, needed to help insulate the economy from oil price shocks, will again also hamper rent-seeking behaviour. A reduction in the number of government employees, together with increased pay for those who remain, will reduce the motivation to seek bribes, while also helping to lighten the role of the state in the economy. In this respect, many of the complementary policies espoused by the government are on the right track. The authorities are committed to diversifying the economy, taxing and saving a large share of oil and gas rents, reducing administrative burdens on firms, reforming law enforcement and reducing the size of the civil service while increasing pay.

Strengthening the rule of law

Closely linked to the issue of corruption is the question of the rule of law. Breakdown of the rule of law is not always due to corruption, nor does the existence of corruption imply that the rule of law is weak, but the two phenomena interact. The key to the rule of law is that all are equal before the law, with equal access to justice and the protection of fundamental rights. While that is not ruled out by widespread corruption, it is likely to be

compromised. And weak rule of law facilitates corruption. As with corruption, there has long been recognition at the highest levels in Russia of weaknesses in the rule of law. When he became President in 2000, Vladimir Putin (himself a lawyer) promised a "dictatorship of the law", and President Medvedev (also a lawyer) has spoken of the need to combat "legal nihilism". A number of actions have been taken to that end over the past decade. Major amendments to the civil and criminal codes were adopted, and the resources allocated to courts and judicial pay were greatly increased, reducing the dependence of judges on regional authorities. In 2011 a first legal summit was held in St. Petersburg, and in July the President met with state court justices to discuss the role of the courts in improving the investment climate.

Nonetheless, as noted earlier, perceptions of the rule of law in Russia remain very negative, and, as with corruption, there is little sign of an improving trend (Figure 2.12A). A nationwide survey conducted by the Levada Centre in November 2010 found that only 4% of the respondents believed that the judicial system is not used for any unlawful purposes, unchanged from an earlier poll in 2007. Similarly, only 12% believed that all or practically all court decisions are made in accordance with the law, again the same level as in 2007 (Ledeneva, 2011). Moreover, those with experience of the court system (as a litigant, witness, jury member, etc.) had a more negative impression of the prevalence of bribery and informal influences than those with no direct experience. Businesses complain of the risk of illegal corporate raids and legal extortion, whereby payment is extracted on pain of spurious litigation in corrupted courts.[8] The widespread perception that public officials are able to influence judicial decisions has revived use of the Soviet-era expression "telephone justice" (Ledeneva, 2011). Moreover, there is some evidence that institutions supporting the rule of law, such as a free and diverse press, a vigorous political opposition and civil society organisations, have been eroded. The recent decision to have the President appoint the Chairman of the Constitutional Court (previously the Chairman was elected by the Court) is not helpful from the point of view of separating the executive and the judiciary.

As stressed in the preliminary findings of the OECD accession review on public governance, the rule of law is a broad and many-faceted issue, and, as with combating corruption, a range of complementary measures will need to be implemented over an extended period to transform the situation for the better. Notably, the quality of laws and regulations needs to be improved, with more emphasis on general principles, and their quantity reduced: voluminous and sometimes conflicting legal and regulatory provisions encourage selective or arbitrary enforcement, undermining confidence in the rule of law. Public institutions need to be made more transparent and accountable, media freedom increased and enforcement of laws strengthened. Judicial reform is another aspect of the necessary improvements. Further increases in judicial pay and regular rotation of judges among courts to prevent long-term informal relationships influencing legal decisions could be useful, along with increased resources for training of judges. Another problem is that the tribunal presidents have excessive power over judges, including as regards housing and the assignment of cases; giving the tribunal presidents less scope for discretion would reduce the degree of influence that can be exerted on judges and prevent the selection of compliant judges for particular cases. The sustained avoidance of any appearance of political interference in law enforcement or court cases will also be important.

Cutting red tape

The excessive administrative burden faced by firms in Russia is another problem that has long been acknowledged by the authorities – indeed, it is closely connected to the issues of corruption and the rule of law, since excessive regulatory complexity has traditionally been a means by which all or almost all businesses can be put in the wrong, creating opportunities for rent extraction by officials, and giving rise to the arbitrary enforcement of rules in certain cases. An important package of laws was passed in the early 2000s, with a law on inspections coming into effect in 2001, a law on licensing and a law on registration in 2002, a law on certification in 2003 and an amended version of the law on registration in 2004. More recently, a single window was put in place for all procedures related to land use. A number of regions have introduced one-stop-shops for registration with regional agencies. In March 2011 President Medvedev announced that the Ministry of Economic Development would be given new powers to propose that the Justice Ministry demand the repeal of any regulations that unjustifiably obstruct business. A new law on licensing adopted in April 2011 eased the licensing regime, although it also increased the number of state bodies involved.

Nonetheless, once again available evidence fails to point unambiguously to an improvement in the situation as perceived by firms. For example, in surveys of 500 businessmen in 8 regions, Frye (2010) found that regulations were judged to be a more serious obstacle in 2008 than in 2000: the score for regulations increased from 1.98 to 3.15 on a scale where 1 indicates not at all an obstacle and 5 a very serious obstacle. Russia's Global Competitiveness Index rankings on ease of starting deteriorated between 2005 and 2011, and businesses complain that legal and regulatory reforms are not subjected to sufficient consultation with companies (BIAC, 2011). In response to such complaints, President Medvedev called in March 2011 for all regulations and instructions, at all levels of government, to be subjected to discussion with business and professional associations.

Even if clear evidence has yet to emerge of firms bearing a lighter administrative burden, many of the reforms introduced go in the right direction, and once again, a major priority should be implementing the new simplified rules and procedures. Beyond that, some additional steps could be useful. For example, as recommended in the 2009 *OECD Economic Survey*, a "deemed clearance" regime should be introduced under which licenses are issued automatically if the licensing office does not act by the end of the statutory response period. Regulatory impact analysis should be rapidly expanded (the government decided in 2010 to apply RIA, but so far progress appears to have been slow), and consideration given to the scope for reducing the number of agencies. At the regional level, deriving the full benefits of the introduction of regulatory one-stop-shops is impeded by the fact that federal agencies cannot be brought into the unified system; a way should be found to remove barriers to such a unification, permitting the establishment of true one-stop-shops.

Reducing the role of the state in the economy

Relative to the situation at the beginning of transition, Russia has of course seen a large reduction in the role of the state in the economy, and for most of that period there has been an increase in private ownership and reduced government intervention in markets. Important steps along the way have included the shifting of most production into the private sector, the liberalisation of the electricity sector, and the creation of independent institutions to regulate

markets and foster competition. But while the rhetoric of Russia's leaders on the leading role of the private sector has been consistent, official actions have been more mixed, particularly in the last few years.

As regards ownership trends, the government has increased its stake in enterprises considered strategic to a controlling level while selling its minority stakes in a large number of non-strategic enterprises. Thus the share of firms with state equity participation in which the federal government held a majority stake increased from 25% in 2005 to 61% in 2008 (Sprenger, 2008). The government also created new state-controlled conglomerates, in some cases via the consolidation of existing SOEs, and established a number of state corporations that have special legal status that limits the application of bankruptcy and competition laws and restricts oversight through the Audit Chamber. Moreover, during the crisis, state support for the major state-owned banks saw them increase their share of assets and capital in the system to over 50%, and the two largest state-owned banks, Sberbank and VTB, have engaged in major acquisitions in 2011.[9] A more worrying recent development has been the creeping renationalisation of the electricity sector: since the liberalisation of the sector, a growing number of regional producers have come under the control of state-owned enterprises.

Another outcome of the crisis was the expanded state support for large incumbent firms, as the anti-crisis programme tried to prevent large-scale job losses, especially in one-company towns. More recently, the upsurge in inflation driven by food and energy prices has resulted in a number of *ad hoc* interventions by the authorities, including preventing real increases in electricity prices, banning grain exports, and imposing a prohibitive export tax on petrol. It is probably still too early to say whether these backward steps in ownership and intervention in the economy signal a reversal of direction or only a temporary blip caused by the crisis and the more recent surge in food and fuel prices. Some signs since the easing of the crisis are encouraging, notably the announcement of a new privatisation programme, a scaling back of corporate subsidies and a reduction in the number of enterprises and sectors designated as strategic. Also, the decision in March 2011 to remove top level government officials from boards of state-owned enterprises was a step towards addressing a major corporate governance concern and bringing Russia closer to best international practice. Besides helping separate the state's ownership function from its market regulatory function, that decision should contribute to improving the autonomy of the boards and their professional competences, although it remains to be seen whether implementation will allow these potential gains to be reaped. High-level officials were to be replaced by independent directors, but in some cases the candidates for the positions have included the incumbent's son and a prominent exception is reported to have been made allowing First Deputy Prime Minister Zubkov to remain chairman of Gazprom, the largest Russian state-owned enterprise.

With the cyclical recovery now well underway, the time is right to firmly re-establish the trend towards reduced state involvement in the economy, as an important step to improving the business climate. One key to that end is reinvigorating privatisation. The announcement in 2010 of a major new privatisation programme over the period 2011-13 was positive, although the main impetus to that decision was the need to finance what were expected to be large budget deficits in the immediate future. In the event, high oil prices have pushed the budget back towards balance, so the need for privatisation receipts has become less pressing, potentially weakening the resolve to move ahead. Moreover, the stakes identified for sale did not involve a reduction in state ownership below 50%, and the only sale so far was a 10% stake in state-owned bank VTB, which left the government as the majority shareholder. Encouragingly, in September 2011 a more ambitious plan

through 2017 was developed, involving a wider range of enterprises and the sale of all equity in some of them, albeit with the retention of a golden share in some.

In addition, as argued in the previous *OECD Economic Survey*, the commercial and non-commercial roles of the state-owned enterprises should be transparently unbundled, with the latter transferred back to the relevant line ministry and with any remaining non-commercial obligations and responsibilities of the enterprise for public policy purposes clearly mandated by laws or regulations. Also, there is a need to prevent state-owned enterprises from benefiting from soft budget constraints in the form of subsidies or preferences of various forms, in order to avoid wasting resources, level the playing field with private firms and improve the framework conditions for innovation-related spending.

Strengthening competition policy

Notwithstanding Russia's weak international ranking on indicators of the effectiveness of competition policy, the latter is an area where there has been much activity, spearheaded by the FAS. It has been responsible in recent years for a new competition law, new laws on public procurement and contracting, and new legislation regulating, *inter alia*, advertising, retail trade and electricity markets. A general OECD review of competition policy in 2009 found many pro-competitive changes since 2004, when FAS was created, while raising questions about enforcement patterns and the outcome of pending initiatives. The government has adopted a Programme on Developing Competition that lists measures to increase competition in key economic sectors, requires that state bodies review new rules and policies for their effect on competition, assigns regional governments to draw up plans to promote competition and proposes changes to competition law to improve efficiency and the economic basis for decisions. The new system for competitive state purchasing has focused attention on bid-rigging and abuses of public funds, and FAS has promoted reviews of the competition effects and general performance of the state corporations and of state and municipal enterprises overall. Merger thresholds have been adjusted to reduce unnecessary filings and rules are being created for non-discriminatory access to essential facilities and natural monopolies.

Despite the clear and generally impressive progress in competition policy, some more recent trends are worrying. Notably, FAS has had a role in government efforts to limit price increases for politically sensitive goods and some recent legislative initiatives have tended toward the detailed regulation of business behaviour in specific sectors. It is important for government to avoid the temptation use enforcement of the competition law to control inflation, adjust politically sensitive prices, or meet other goals unrelated to the promotion of competition. Sector-specific competition legislation that places strict limits on market shares, pricing, and contracting is likely to restrict competition and entry and should not become a substitute for the development and application of the general provisions of the competition law.

Also, progress is needed in other areas. In particular, to reduce uncertainty and undue interference in markets, rules concerning dominance abuse and co-ordination should be narrowed and clarified through legislative amendment and appropriate guidance on enforcement. Criminal sanctions should be available only for clearly defined violations of the law that represent the most serious threats to competition. The use of a restricted market analysis in co-ordination cases should be discontinued and the expansion and improvement of economic analysis across the board made a high priority, including in the crafting of effective merger remedies.

The government should use the current round of legislative amendments as an opportunity to provide clarity on the need and the legislative basis for the proposed improvements, after which a stable competition law environment should be maintained for a reasonable period to allow the development of clear and predictable interpretations and good enforcement and analysis practices. In addition to improvements in competition law enforcement, policy measures to increase entry and promote competition should be vigorously pursued, including those envisioned in the Programme on Developing Competition that may have been delayed by attention to the crisis and those envisioned in the regional programmes. The Programme's requirement of competition review for new policies should be given effect and extended, as recommended in the previous *OECD Economic Survey,* to existing rules and policies.

Liberalising the trade and foreign investment regimes

There has been a substantial liberalisation of trade policy since the early 1990s, but the trend in the past few years has been less clear. After the onset of the global crisis there were tariff increases on processed foods, light manufacturing, cars and trucks and some construction equipment, while since then there have been reductions on other items, along with a few further increases. Some export taxes (*e.g.* timber) were removed, but at least one other (the prohibitive export tax on petrol) was imposed, and there was also resort to export bans (grain). According to Global Trade Alert, Russia has introduced more discriminatory trade measures since the November 2008 G20 meeting at which leaders pledged to abstain from protectionist responses to the crisis than any other G20 country.

As regards the FDI regime, there have been some recent moves towards liberalisation. A second batch of amendments to the strategic industries law, reducing the number of sectors characterised as strategic and clarifying issues within others, was adopted in November 2011. President Medvedev's initiative to establish investment ombudsmen in the regions to help businesses deal with the authorities, as well as the designation of First Deputy Prime Minister Shuvalov as an overall ombudsman for the investment climate, should help foreign investors as well as domestic ones. The President has also ordered an improvement in various services of particular interest to foreign investors, including visa issuance procedures, work permits, airport accessibility, customs and registration procedures. A further major initiative is the proposed creation of a direct investment fund via which the state would co-finance foreign equity investment. The initial size of the fund is to be USD 2 billion, with an eventual target of USD 10 billion.

The Skolkovo city innovation project is also geared towards attracting foreign investment, and numerous foreign partners are already involved. Likewise, foreign participation has been invited to the project to make Moscow into a major international financial centre. Encouragingly, many of the measures foreseen in both these projects involve a country-wide improvement in the environment for innovation and financial services respectively.

Given the variation across regions in the capacity and willingness to attract foreign direct investment, it could be useful to create a federal institution whose role would be to disseminate best practice across regions and help train regional governments to deal with foreign investors. Such an institution could also help to harmonise the efforts of the federal and regional governments to attract FDI. The proposed regional ombudsmen for investors could be a step in this direction.

Full integration into the international system of rules and standards on trade and investment could bring important benefits both in cross-border transactions as well as for the domestic economy. Accession to the WTO, which has been underway for some 18 years and is finally going ahead, and the OECD are particularly important in this respect. Now that negotiations on WTO accession have been completed, Russia should move swiftly to ratify accession and implement the accession package. As regards the OECD, compliance with the OECD's codes and standards in areas such as investment, competition and corporate governance, would be important to increase certainty and confidence among investors.

Summary

Russia has already undertaken many policy actions to improve the business climate, but the perception has persisted that the problems are deep-set, and there has been little change in Russia's relative position on a variety of indicators of different aspects of the business environment. In part, this may be because the situation has tended to improve elsewhere as well, so that the rankings may fail to reflect the absolute improvement in the environment for business in Russia. Nonetheless, it is clear that big gaps remain *vis-à-vis* almost all OECD economies, and this implies large opportunity costs for Russia. In the short term the greatest benefits may be derived from concentrating on the hard slog of implementing and enforcing existing policies and commitments, given that there have already been many amendments to relevant laws and regulations, and stability of the regulatory framework is one of frequent complaints of business. Of course there will always be a need to launch new reforms, as international best practice evolves and as the sophistication of government services and technological advances proceed.

Box 2.1. **Recommendations on improving the business climate**

- Use the opportunity afforded by the reviews conducted for various OECD committees in the context of Russia's accession to the OECD to bring policy settings fully into line with the OECD's legal instruments and standards relating to the investment climate.

Combating corruption and strengthening the rule of law

- To prevent misconduct in the public procurement system, identify risks to integrity for particular positions, activities and projects and set up specific mechanisms to minimise those risks.
- Adopt measures to strengthen protection for whistleblowers.
- Complement top-down anti-corruption measures with reforms favouring political openness, transparency and civil society participation.
- Pursue a range of mutually reinforcing actions to improve the rule of law: raising the quality and reducing the quantity of laws and regulations; improving the accountability and transparency of public institutions; increasing media freedom; and strengthening law enforcement.
- Strengthen judicial independence, with better training and pay for judges.
- Ensure regular rotation of judges among courts to prevent long-term informal relationships influencing legal decisions.
- Give tribunal presidents less scope for discretion as regards assignment of judges; case assignments could even be randomised.
- Avoid even the appearance of political interference in law enforcement or court cases.

Box 2.1. **Recommendations on improving the business climate** *(cont.)*

Reducing the role of the state in the economy

- Implement and go beyond the privatisation programme for 2011-13, with a view to giving up government control of enterprises in sectors where competition is viable, while ensuring that privatisation is well managed and that remaining state-owned firms have good governance and are run efficiently.
- Transparently unbundle the commercial and non-commercial roles of state-owned enterprises, with the latter transferred back to the relevant line ministry and with any remaining non-commercial obligations and responsibilities of the enterprise for public policy purposes clearly mandated by laws or regulations.

Lightening administrative burdens for firms

- Continue cutting red tape and increasing the transparency and accountability of the public administration.
- Ensure that legislative or regulatory changes are preceded by sufficient consultation with affected firms, and provide for adequate transition periods to allow business to adjust.
- Systematically carry out Regulatory Impact Analysis to assess the costs and benefits of all significant new regulatory proposals.
- Introduce a "deemed clearance" regime under which licenses are issued automatically if the licensing office does not act by the end of the statutory response period.

Strengthening competition policy

- Develop a clear and economically sound interpretation of abuse of dominance and co-ordination to address the excessively broad interpretation of provisions, which creates significant uncertainty for businesses.
- Ensure that competition law is not used as a means to control inflation or to adjust prices of specific goods or services.
- Eliminate all remaining subsidies to large firms introduced or expanded during the global crisis.

Liberalising the international trade and investment regimes

Reduce both the average and the dispersion of tariff rates, with the medium-term aim of achieving a low uniform rate.

- Following approval by the WTO Ministerial Conference, quickly ratify the WTO accession protocol and implement the accession package.
- Unwind all restrictive trade measures adopted during the global economic crisis.
- Co-ordinate federal and regional regulation to minimise burdens for foreign investors and assist the regions to disseminate best practice on attracting foreign investment.
- Ensure a level playing field between domestic and foreign investors as regards government procurement, access to subsidies, law enforcement and dispute resolution.

Notes

1. Taxation of oil and gas is an exception, where the government faces the challenge of ensuring that pure economic rents accrue to the public while allowing firms to earn normal risk-adjusted rates of return on investment. Oil is taxed more heavily than gas, and oil companies have been vocal in calling for lower rates. The government is working towards a reform of oil and gas taxation that is better geared towards the profitability of individual projects and fields.
2. For example, in a statement in December 2010 US Secretary of State Hillary Clinton said "Today's conviction in the second trial of Mikhail Khodorkovsky and Platon Lebedev on charges of embezzlement and money laundering raises serious questions about selective prosecution – and about the rule of law being overshadowed by political considerations".
3. For example, Samara Oblast had by early 2011 become the first region to have a dedicated website for its anti-corruption efforts (*http://samaraanticorr.ru/*).
4. See "Anti-Corruption Law Doesn't Cover Presidential Legislation", *Moscow Times,* 7 July 2011.
5. See "Corruption Costs Russia 3% of GDP Yearly", *Ria Novosti*, 1 November 2010.
6. Care needs to be taken in trying to draw conclusions about trends from the Corruption Perceptions Index data, as there can be changes in sources and methodology from year to year. At the very least, however, the slippage in Russia's ranking since the first half of the 2000s does not suggest an easing of the problem of corruption.
7. In his address to the Council on Corruption in January 2011 (*http://eng.news.kremlin.ru/transcripts/1598*) President Medvedev ordered the Federal Taxation Service and the Prosecutor General's Office to check public officials' income declarations and report to the President on follow-up.
8. Recent examples include the case of Alexander Lebedev, who in January 2011 wrote an open letter to Prime Minister Putin asking for his help in fighting a gang of corrupt security officials who were, he alleged, trying to illegally take over a bank he controlled, and who used harassment by the tax police and demanded huge bribes to desist. He later sold his banking interests. Another similar case was that of Evgeny Chichvarkin, who made an internet appeal to President Medvedev claiming that a number of police officers (including 2 generals) were behind a corporate raid on the company Evroset of which he was the co-owner.
9. Russia was of course not alone in seeing an increase in government involvement in the banking sector during the crisis. In Russia's case, however, the effect came mainly through the bolstering of already existing (and dominant) state-owned banks that faced no obvious immediate solvency threat.

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Chapter 3

Strengthening the fiscal framework to enhance resilience to external shocks and safeguard sustainability

Since the beginning of the transition process, Russia has progressively built modern fiscal institutions and fundamentally reformed its tax system and fiscal framework. Moreover, fiscal outcomes improved markedly in the past dozen years, reflecting rising oil prices, strong output growth and a commitment to restrain spending of windfall gains, supported by an institutional mechanism to manage resource wealth. The government paid off most of its debt and accumulated assets in two oil funds, which financed the large fiscal stimulus during the global crisis. However, fiscal policy has not sufficiently insulated the economy from oil price fluctuations. The surge in expenditure during the boom preceding the crisis, coupled with the fiscal stimulus during the crisis, left Russia with a large non-oil deficit, making it vulnerable to a sharp fall in oil prices. Moreover, the large non-oil deficit implies sub-optimal saving from oil revenues and puts upward pressure on the real exchange rate, hindering diversification of the economy. There is therefore a need for medium-term consolidation, even though the budget will record a small surplus this year, with only moderate deficits foreseen over the next three years. To reduce the pro-cyclical bias of fiscal policy that is re-emerging in the current high-oil-price environment, and to assist in the consolidation of the budget position, the non-oil deficit target in the Budget Code that was suspended during the crisis should be restored and complemented with binding ceilings on the annual growth in expenditures. Long-term fiscal pressures arising from demographic trends should be addressed in the first instance by equalising the pensionable ages for men and women and gradually raising the pensionable age in line with gains in longevity.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

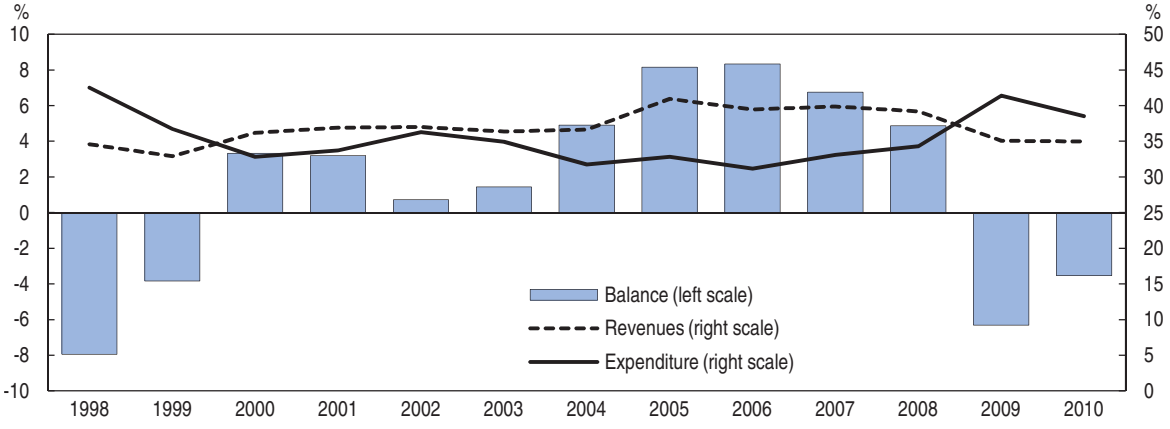
Overview of fiscal policy trends and the sustainability outlook

Fiscal outcomes have improved markedly in the past twelve years and have been very favourable in international comparison...

Russia has come a long way since the beginning of transition to establish and maintain sound public finances. Over the past two decades the country has built modern fiscal institutions and fundamentally reformed its tax system and budgetary practices. According to preliminary findings of the OECD accession review of the Russian Federation on public governance and regulatory policy, in most areas, including medium-term budgeting, fiscal reporting and macroeconomic forecasting underpinning the budget, Russia's budgeting procedures are quite advanced and comparable to those in many OECD countries. Fiscal initiatives in the 2000s, including wide-ranging tax reforms and reforms of the fiscal framework, laid the foundation for a marked improvement in fiscal outcomes, from persistent budget deficits of the-1990s to a series of budget surpluses that lasted almost a decade and was interrupted only by the onset of the global crisis (Figure 3.1).

Figure 3.1. **Government finances**

General government, as a percentage of GDP



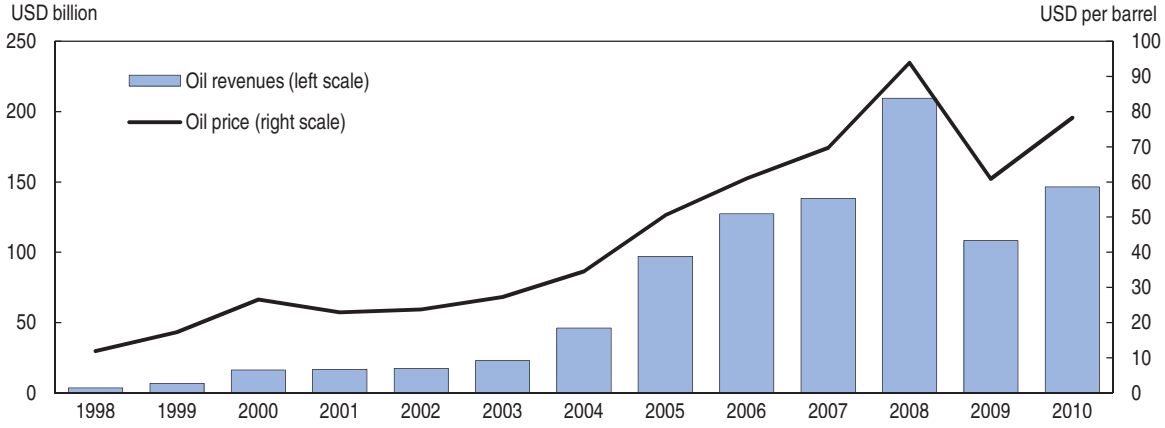
Source: IMF, *WEO Database*, September 2011.

StatLink http://dx.doi.org/10.1787/888932539688

Strong output growth and soaring prices for natural resources exported by Russia, in particular oil and gas, facilitated these favourable outcomes. Due to rising energy prices and the tax reforms of the first half of the 2000s which increased the share of natural resource rents accruing to the state, general government revenues from the oil and gas sector rose almost tenfold in US dollar terms between 2003 and 2008, exceeding USD 200 billion in 2008 (Figure 3.2), about one third of all general government revenues and close to a half of federal budget revenues.

As a share of GDP oil[1] revenues more than doubled between 2003 and 2005, but were capped afterwards at below 13% of GDP (Figure 3.3), as output rose very fast in US dollar terms over this period. This rapid rise in dollar GDP reflected a combination of strong output growth and substantial real appreciation of the rouble, itself linked to rising terms of trade (Figure 3.4). The tax burden on the non-oil sector was reduced following the tax reforms of the 2000s that simplified the tax structure and broadened the tax base while reducing marginal rates. Critical for the turnaround in the fiscal situation was the government's resolve to restrain spending of windfall gains, supported by an institutional mechanism for managing resource wealth.

Figure 3.2. **Oil price and oil revenues**

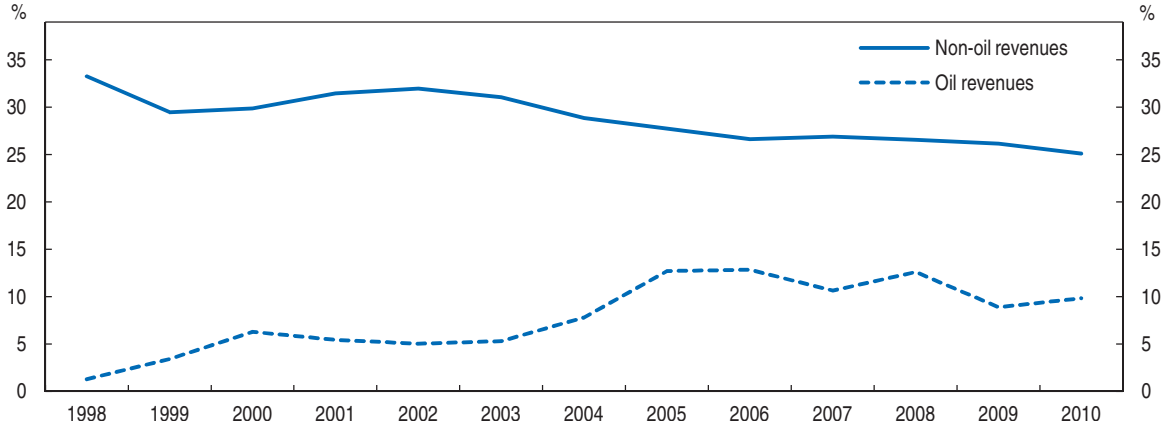


Source: Datastream and IMF, *WEO Database*, September 2011.

StatLink http://dx.doi.org/10.1787/888932539707

Figure 3.3. **Oil and non-oil revenues**

Percentage of GDP

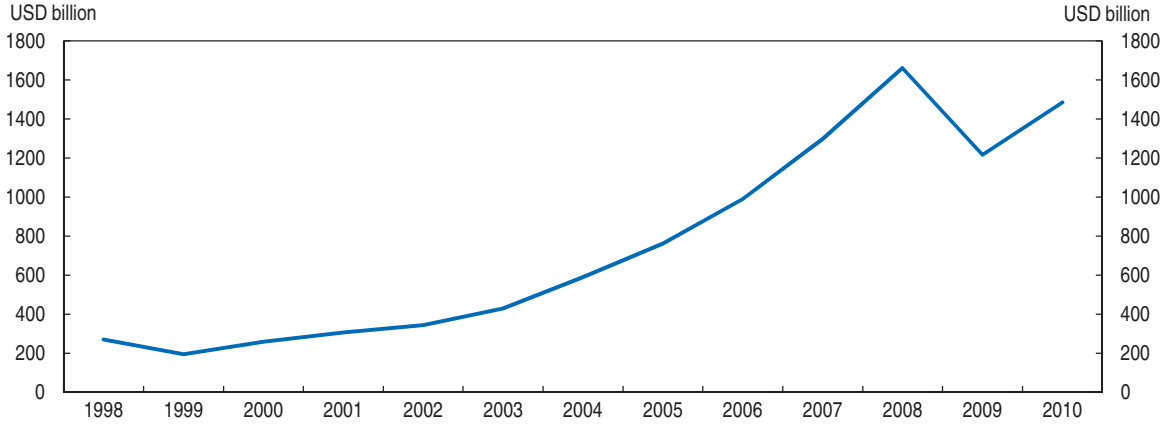


Note: Net of one-off tax receipts from Yukos in 2005 and 2007.

Source: IMF, *WEO Database*, September 2011.

StatLink http://dx.doi.org/10.1787/888932539726

Figure 3.4. **Evolution of GDP in US dollar terms**



Source: Rosstat and Central Bank of Russia.

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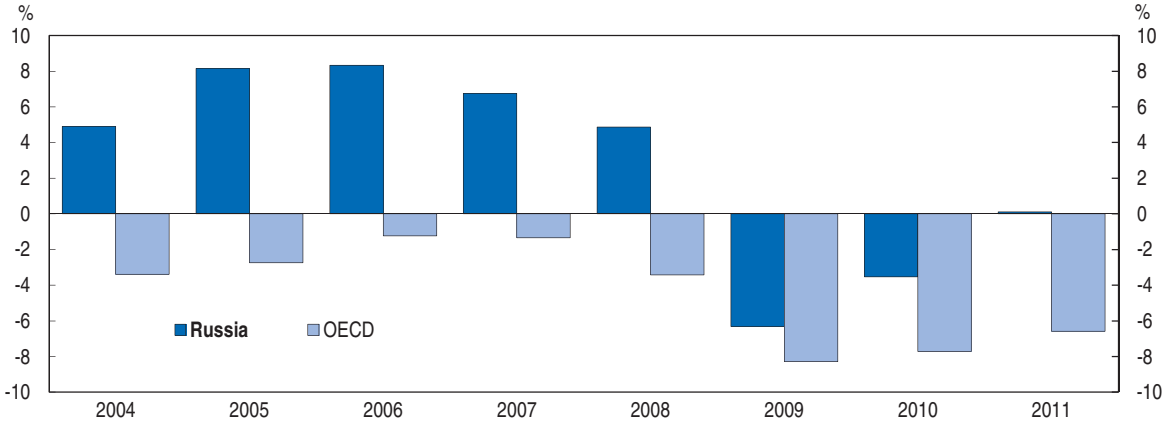
Russia's strong fiscal outcomes over the last decade are notable, both against the backdrop of its own performance in the first years of transition and in international comparison. The headline budget surpluses of the boom years preceding the crisis contrast with the average deficits of OECD economies over that period (Figure 3.5). Russia's fiscal surpluses during the pre-crisis commodity boom were also above the average for oil-exporting countries, although a number of oil exporters, for example Norway and Saudi Arabia, had much larger surpluses during that time. The transformation of the government debt position in less than a decade from one of the weakest compared to the OECD and a number of emerging economies to one of the strongest among this group is particularly remarkable (Figure 3.6).

Figure 3.5. **General government financial balances, Russia and OECD countries**

Percentage of GDP



Source: *OECD Economic Outlook 90 Database* and IMF, *WEO Database*, September 2011

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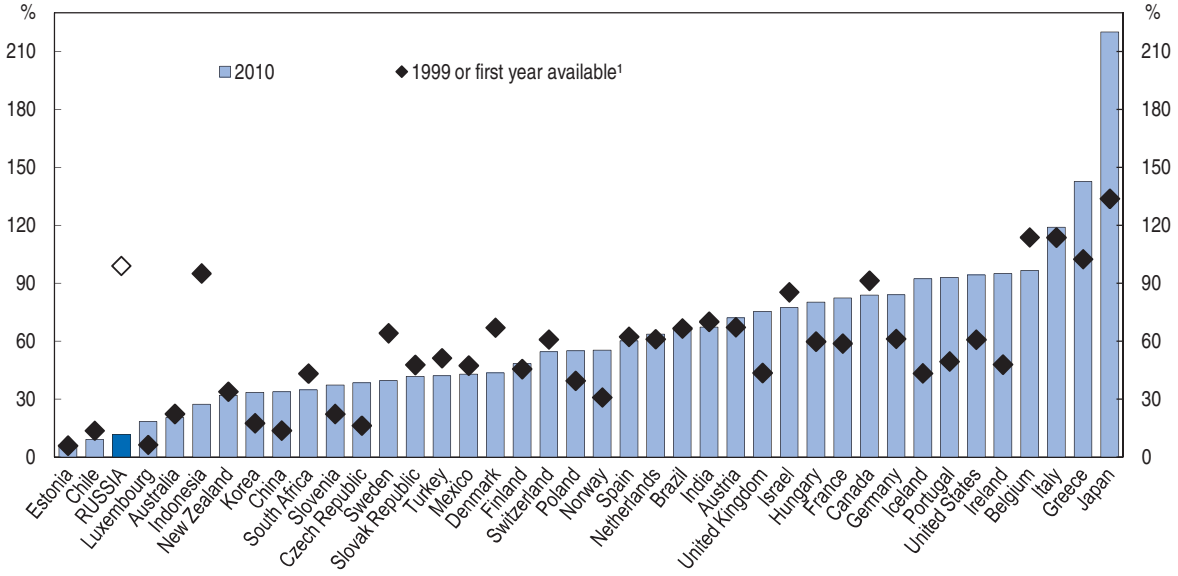
Figure 3.6. **General government gross debt, international comparison**

Percentage of GDP



1. 2000 for Brazil, Indonesia, Israel, South Africa and Turkey.

Source: IMF, *WEO Database*, September 2011.

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The sovereign debt burden was already high at the beginning of transition as Russia assumed the obligations on Soviet debt after the dissolution of the USSR in 1991.[2] External debt repayments aggravated the already dire fiscal situation of the early transition years, brought about by a fall in output and a collapse of the old system of tax collection, and prolonged by the lack of political consensus on the need to reform large social obligations and significantly reduce budget subsidies. The need to finance chronic large deficits led to the accumulation of the so-called "new Russian debt", which consisted of loans from international financial institutions, Eurobonds and, beginning in 1995, rouble-denominated government bonds. The latter debt grew quickly, and, while debt-to-GDP ratios were not particularly high in international perspective, the rouble-denominated instruments were issued at extremely short maturities and at relatively high interest rates. In the absence of the needed fiscal adjustment, the situation quickly became unsustainable, and in August 1998, Russia defaulted on its domestic currency-denominated debt.[3] The debt burden was still extremely heavy at the end of 1999; while the ratio of rouble-denominated debt to GDP shrank as domestic prices grew by 80% in 1999, the share of foreign debt soared due to the sharp devaluation beginning in August 1998. As the fiscal situation improved, the government made debt reduction a priority, and used windfall revenues to make early repayment of external debt, in addition to building up assets in an oil stabilisation fund (later split into two, designated the Reserve Fund and the National Welfare Fund).

Reflecting this and other factors, such as the already mentioned fast rise in GDP in US dollar terms since 1999, the Russian government virtually eliminated its gross debt and became a net creditor in 2006. The country's relative debt position looks even stronger in the aftermath of the crisis: gross public debt rose only slightly in Russia over the crisis, as the budget deficits that arose were largely financed by drawing on the resources accumulated in the Reserve Fund, while public debt levels rose significantly in many OECD economies. Russia's position *vis-à-vis* OECD countries in terms of net debt is also very favourable. Even after the use of government financial assets to cover the budget deficits during the crisis, the Russian government has remained a net creditor; only a few OECD countries have had negative net public debt before and after the crisis, Norway being the leader.

... but fiscal policy showed clear features of pro-cyclicality over the last few years...

At the same time, fiscal policy has not sufficiently insulated the economy from energy price fluctuations. Given the country's dependence on volatile oil prices which drive the business cycle, and limited effectiveness of monetary policy instruments (see Chapter 4), fiscal policy is the principal stabilisation tool in Russia. Taxing and saving a large proportion of windfall revenues dampens excess demand during commodity booms, alleviating inflationary pressures and counteracting other signs of overheating, such as asset price bubbles. It can also provide at least partial protection against "Dutch disease" by mitigating the upward pressure on the exchange rate caused by surging foreign currency inflows from export proceeds. Spending the accumulated resources during a period of low commodity prices should in turn support domestic demand.

In the first half of the 2000s, the government maintained a prudent fiscal stance in the environment of large windfall revenues (OECD, 2004, 2006, 2009a; Bogetic *et al.*, 2010). However, as oil prices continued to soar, pressures for fiscal expansion mounted, especially in the context of the 2007-08 electoral calendar. While estimating the underlying fiscal

trends in Russia is methodologically complicated (Box 3.1), various indicators point to a significant fiscal relaxation during the boom preceding the crisis. Expenditure ratcheted upwards, adding a stimulus to the already overheated economy (Table 3.1). The non-oil primary balance, an indicator often used as a proxy for the fiscal stance (Box 3.1), deteriorated in 2005 and then again in 2007 and 2008 (Table 3.1). The picture is slightly altered if the cyclical dividend from non-oil revenues is taken into account; for example, Vlasov (2011) suggests that fiscal policy was counter-cyclical until 2005, but then turned pro-cyclical in 2006. This also implies that fiscal policy provided insufficient protection against Dutch disease pressures, which manifested themselves in the sizeable real appreciation of the rouble and the rapid growth of imports.

Table 3.1. **Fiscal stance (general government)**

	2004	2005	2006	2007	2008	2009	2010
	In per cent of GDP						
Budget balance	4.9	8.2	8.3	6.8	4.9	–6.3	–3.5
Non-oil primary balance[1]	–1.8	–4.2	–4.0	–6.2	–7.5	–14.9	–13.1
Change in non-oil primary balance	0.6	–2.4	0.2	–2.2	–1.3	–7.4	1.8
Memorandum items							
Oil price, URALS, USD/barrel	34.6	50.5	61.0	69.7	93.9	60.9	78.3
Nominal GDP growth, per cent	28.9	26.9	24.6	23.5	24.2	–6.0	15.9
Nominal expenditure growth, per cent	17.2	31.1	18.3	31.3	28.6	13.4	7.8
Inflation, annual average, per cent	10.9	12.7	9.7	9.0	14.1	11.7	6.9

1. Net of one-off tax receipts from Yukos in 2005 and 2007.
Source: Datastream; IMF, *WEO Database*, September 2011; and OECD calculations.

Box 3.1. **Methodological issues in assessing the underlying fiscal indicators in Russia**

The OECD regularly computes and publishes the underlying fiscal indicators for its member countries. Eliminating cyclical fluctuations and non-recurrent operations from the headline indicators helps to assess the effectiveness of fiscal policy in stabilising the cycle, as well as its sustainability. The standard OECD methodology adjusts headline revenues and expenditures to the output gap, *i.e.* the deviation of actual output from its potential level, which reflects in particular the cyclical movement of tax revenues. The cyclically adjusted balance (CAB), which is the difference between cyclically adjusted revenues and expenditures measured as a percentage of potential GDP, indicates what the budget balance would have been achieved if output were at its potential level (Girouard and André, 2005). Excluding large non-recurrent fiscal operations, or one-offs, from the CAB yields the measure of the underlying fiscal balance* (Joumard *et al.*, 2008). An improvement in the underlying (primary, *i.e.* net of interest payments) balance indicates consolidation.

For the purpose of fiscal analysis of commodity-exporting countries, total revenues are often separated into commodity-related revenues and other revenues. One way to estimate the underlying balance is to adjust commodity revenues to the deviation of actual commodity prices from their long-term trends, and non-commodity revenues to the business cycle.

Box 3.1. **Methodological issues in assessing the underlying fiscal indicators in Russia** *(cont.)*

In the case of Russia, "commodity revenues" usually refer to oil and gas revenues, even though Russia exports other commodities as well, such as non-ferrous and ferrous metals, coal and timber. However, revenues from these commodities are not clearly identified and are usually included in the category "other revenues". The Budget Code stipulates that "oil and gas revenues" include the mineral extraction tax on oil and gas and export duties on oil, gas and oil products. In principle, corporate income tax on profits of mining companies should also be considered as part of "commodity revenues" and is usually included into commodity-related revenues in other countries, for example in Chile and Norway. Other government revenues from the commodity sector, such as personal income taxes or social security contributions of those working in that sector, are usually not included.

Adjusting oil- and gas revenues to the deviation from their long-run trends requires estimating the long-term "equilibrium" oil price, which is notoriously difficult. As such, any assessment of sustainability linked to long-term oil prices in Russia should be done in a scenario form, rather than as a definitive statement. For the purpose of measuring the fiscal stance, it is more convenient to exclude oil revenues completely and trace the developments in the underlying non-oil balance (or the non-oil primary balance), *i.e.* the difference between non-oil structural revenues and expenditures (minus net interest payments). A deterioration of the underlying non-oil primary balance indicates fiscal expansion, while an improvement indicates consolidation.

Adjusting non-commodity revenues to the business cycle in Russia is not straightforward, as the relatively short time series and ongoing structural changes make it difficult to estimate the output gap and the magnitude of automatic stabilisers, which is essential to decompose the headline balance into cyclical and structural components. Therefore, the non-oil balance is often used in the assessment of fiscal trends in Russia, without adjusting non-oil revenues to the cycle. One of the fiscal rules in the Budget Code sets the target for the non-oil balance.

Taking into account the difficulties associated with assessing the fiscal stance in commodity-exporting countries, it might be more informative to look at the correlation between government expenditure and the business cycle to assess the pro-cyclicality of fiscal policy. Such an approach is sometimes implemented in studies assessing the cyclicality of fiscal policy in developing countries. Significant increases in public spending when commodity prices are rising is perhaps the simplest and clearest indicator suggesting that windfall revenues are being overspent.

* The term "structural balance" is often used in the literature as a substitute for either the cyclically adjusted balance, if one-offs are not excluded, or the underlying balance.

This box draws on Vladkova-Hollar and Zettelmeyer (2008); Medas and Zakharova (2009); Villafuerte and Lopez-Murphy (2010).

Fiscal policy became counter-cyclical from the second quarter of 2009. The non-oil deficit rose sharply between 2008 and 2009, mainly due to higher expenditure. This rise in public spending was not only due to a stimulus package; the three-year budget approved before the crisis already showed a significant increase in spending in 2009 in anticipation of high oil prices and robust growth. Even without a stimulus, the deterioration in the underlying fiscal position would have been quite significant. In fact, large increases in social transfers, approved before and during the crisis (Table 3.2), are not temporary and their subsequent withdrawal is not planned. Another item that increased significantly

during both the boom and the crisis was spending on the "national economy", which to a large extent represents subsidies. This item increased by two percentage points of GDP between 2006 and 2008, and jumped to 7.1% of GDP in 2009, as many crisis-response measures were directed towards supporting enterprises.

Table 3.2. **Structure of government expenditure**

Percentage of GDP

	2006	2007	2008	2009	2010
Total expenditure, general government	31.1	34.2	33.9	40.9	38.5
Interest	0.8	0.5	0.5	0.6	0.6
State administration	2.3	3.0	2.7	2.7	2.6
Defence, law and order	5.2	5.1	5.2	6.3	5.8
National economy	3.5	4.7	5.5	7.2	5.2
Housing and utilities	2.3	3.3	2.8	2.6	2.4
Education	3.9	4.0	4.0	4.6	4.2
Health and sport	3.6	4.2	3.8	4.3	3.8
Social policy	8.8	8.6	8.7	11.7	13.0
Pensions[1]	6.2	5.9	6.2	8.3	9.9
Other	0.8	0.8	0.8	0.9	0.8

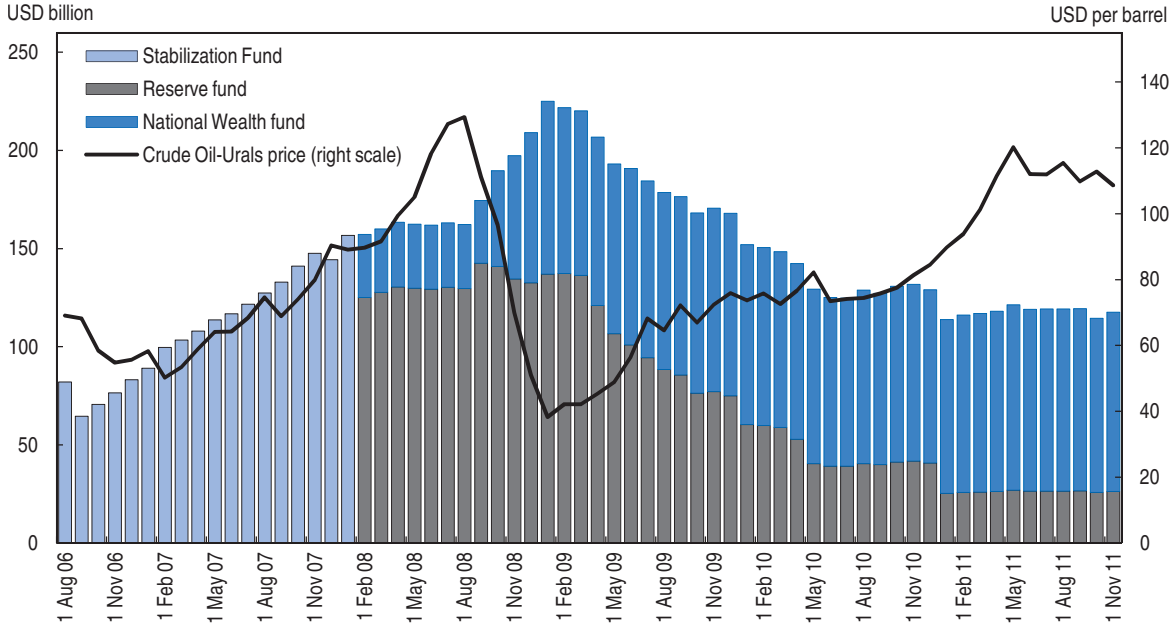
1. Including expenditure of the State Pension Fund other than pension benefits.
Source: Ministry of Finance.

... and the non-oil deficit has risen to excessive levels

Although the federal budget is expected to record a small surplus in 2011, aided by high oil prices, the non-oil deficit that rose during the boom and then expanded rapidly during the crisis remains very high at about 10% of GDP for the federal budget, well above the government's own medium-term target of 4.7% of GDP. The large non-oil deficit makes the fiscal position vulnerable to a sharp reduction in the oil price. As of October 2011, the assets in the Reserve Fund were below 2% of GDP (Figure 3.7) which means they would be exhausted very quickly should the need to cover a large fiscal gap arise. The assets in the National Welfare Fund (NWF) are not supposed to be used to finance the budget deficit, although they may be used to cover the deficit of the Pension Fund. In any case, the NWF's assets were relatively modest at about 5% of GDP as of October 2011. The government appears to have ample room for borrowing, given the low level of debt and the relatively low level of Russia's sovereign spreads currently. If oil prices were to fall sharply, however, it is far from certain whether it would be possible for the Russian government to borrow on reasonable terms to cover the (potentially large) deficit. Financial markets' assessment of the sustainability of Russian public finances could be quickly downgraded in such a situation, which could lead to a higher risk premium and a shortening of maturities. Moreover, should the fall in the oil price reflect problems in the world economy, such financing might be difficult to obtain. This suggests that any sharp reduction in oil prices would strain the capacity of the government to finance its deficits without being forced into a pro-cyclical reduction of expenditure. A more rapid reduction in the non-oil deficit and a speedy refill of government coffers is therefore needed for self-insurance reasons.

Moreover, the large non-oil deficit implies sub-optimal saving from oil revenues and puts upward pressure on the real exchange rate, hindering diversification of the economy. There is therefore a case for a medium-term consolidation, even if public debt is low and the budget is expected to be in surplus this year. The medium-term plan for the federal

Figure 3.7. **The Reserve Fund and the National Welfare Fund**



Source: Ministry of Finance and Datastream.

StatLink http://dx.doi.org/10.1787/888932539802

budget envisages deficits over the next three years and little reduction in the non-oil deficit (Table 3.3). As fiscal outcomes in Russia are shaped by the federal budget (budgets of other levels of government and of extra-budgetary funds are close to balance after transfers from the federal budget), and as oil revenues accrue mostly to the federal government, federal fiscal plans determine the path for the overall and non-oil general government deficits. These plans look insufficiently ambitious. In particular, a more than 8% real increase in spending in 2012, when the budgeted oil price is expected to remain high, risks becoming pro-cyclical.

As the deterioration in the non-oil balance occurred mainly due to a jump in spending before and during the crisis, reversing this fiscal expansion would be needed to reduce the non-oil deficit. Partial scaling back of support to enterprises in 2010 and 2011 already improved the underlying fiscal position. Further removal of subsidies by bringing spending on "national economy" programmes back down to 2006 levels as a percentage of GDP would reduce the non-oil deficit by about two percentage points of GDP. The increase in spending on the "national economy" was largely geared towards support for inefficient enterprises and did not promote development and modernisation of the Russian economy (Kudrin and Sergienko, 2011). There may be legitimate reasons for additional social spending, although such increases should be implemented in the context of reforms of the system of social protection (OECD, 2011a). At the same time, there seems to be considerable scope in Russia for raising the efficiency of public spending in education and health (OECD, 2006; Word Bank, 2011). The Russian government adopted a comprehensive programme to increase the efficiency of government expenditure in 2010, which is a welcome step. These efforts need to be continued alongside the strengthening of the fiscal framework that provides a better protection against pro-cyclical policy, so that efficiency gains in some areas are not cancelled out by an increase in inefficient spending in others, triggered by the

Table 3.3. **The medium-term budget plan for the federal budget**

	2011(f)	2012(f)	2013(f)	2014(f)
In trillions of roubles				
Revenues	11.1	11.8	12.7	14.1
Oil revenues	5.5	5.6	5.6	6.1
Non-oil revenues	5.7	6.2	7.1	8.0
Expenditure	11.1	12.7	13.7	14.6
Balance	0.0	–0.9	–1.0	–0.5
Non-oil balance	–5.5	–6.5	–6.7	–6.6
In per cent of GDP				
Revenues	20.9	20.1	19.6	19.4
Oil revenues	10.3	9.5	8.7	8.5
Non-oil revenues	10.6	10.6	10.9	11.0
Expenditure	20.9	21.6	21.2	20.1
Balance	0.0	–1.5	–1.6	–0.7
Non-oil balance	–10.3	–11.0	–10.3	–9.1
Memorandum items				
Urals oil price, USD/barrel	110	100	97	101
Real GDP, % change	4.1	3.7	4.0	4.6
CPI inflation, %	6.5-7.0	5.0-6.0	4.5-5.5	4.0-5.0
Nominal growth in expenditure (%)	9.9	13.8	8.5	6.2

Note: Components may not add up to totals due to rounding.
Source: Ministry of Finance.

availability of windfall revenues. It is also notable that the increase in spending in the 2012-14 budget is disproportionately oriented to unproductive expenditures such as military spending. This both hinders the pace of fiscal consolidation and squeezes other areas that are of high priority in economic terms, such as infrastructure investment, health and education.

Demographic trends will put increasing pressure on public finances

An ageing and shrinking population (Chapter 1) will impose an increasing burden on the pension system, which poses a risk to the long-term sustainability of the public finances. The increase over the next two decades in the old-age dependency ratio measured as the ratio of the population over 65 to the population aged 15-64 is about average compared to the OECD and a group of selected emerging countries. If, however, old age dependency is measured as the ratio of the population eligible for retirement to the working age population, it would stand at 33%, and is expected to rise to 52% by 2030, higher than all but a few OECD countries. This is explained by a relatively low pensionable age in Russia, 55 for women and 60 for men. Most OECD countries have unified pensionable ages for men and women, usually at 65, although the effective retirement age is often somewhat lower in many OECD economies (see OECD, 2011b).

Public expenditure on pensions amounted to about 8% of GDP in 2010, following large increases in 2009-10 in the value of basic pensions in particular. This resulted in a rapid increase in relative earnings of pensioners compared to the working population, with the ratio of the average pension to average gross earnings increasing from 24% in 2008 to 36% in 2010. If the current level is to be maintained or increased, pressures on public finances will intensify substantially under unchanged policies with respect to the pension age. Gurvich (2011) estimates that maintaining the current ratio of the average pension to average

earnings would increase public spending on pensions by 8 percentage points of GDP by 2050.

Various reforms of the pension system have been implemented over the last decade, establishing a three-pillar pension system (OECD, 2011a). The reforms have been incomplete, however, and further policy actions are required (Chapter 1). In the first instance, pressure on future pension liabilities should be addressed by equalising the pensionable ages for men and women and gradually raising the pensionable age in line with gains in longevity. Implementation of such a reform is complicated by strong public opposition to raising the pensionable age. While it would be difficult to achieve wide support for this measure, it is important to devote greater efforts to communicating the rationale for these decisions and addressing some popular misconceptions. In particular, it is perceived to be extremely unfair to raise the pensionable age for men to 65, above life expectancy for men which stood at 63 in 2009. It is important to clarify that what matters is life expectancy at the age of 65, which in 2008 was estimated at 11.7 years for men – still below the level in all OECD countries except Turkey, but a less pronounced difference than on the life expectancy at birth indicator. Moreover, life expectancy at the age of 65 for women is higher than for men on both measures (life expectancy at birth for women was 75 in 2009, and life expectancy at the age of 65 was 16.1 years in 2008), while women's pensionable age is lower. The trade-off between the replacement rate and pensionable age should also be clearly explained.

Strengthening the fiscal framework

A rule-based fiscal framework has been developed over the last decade

Since 1999 the Russian fiscal framework has been significantly reformed.[4] The Budget Code, adopted in 1998, came into force in 2000, modernising budgeting procedures and laying the foundation for greater transparency and an improved quality of fiscal policy-making. All government activities were put on a Single Treasury Account in 2000, and since then, considerable progress has been achieved in constraining off-budget operations. Most extra-budgetary funds were eliminated and the boundaries between the government and the market sector clarified. Several issues remain to be resolved, such as the unclear status of some public institutions. Efforts have been devoted to develop performance budgeting, with the aim of using performance information in managerial and budgetary decision-making and shifting the emphasis from administering budget resources (expenses) to "performance management", in line with trends in OECD countries. A framework for programme budgeting was developed, re-classifying the budget according to programmatic areas, as has been done in several OECD countries. The framework has not yet become fully operational, but the new 2010 reform optimising budget expenditures marked a clear shift to programme classification and budgeting. Three-year budgets were introduced, starting from 2008. The revisions for the out-years, as well as for the current year, require parliamentary approval.

Creating an institutional mechanism to address macroeconomic and fiscal challenges resulting from resource dependence was part of the government strategy. Since oil revenues accrue largely to the federal budget, and given the general trend to centralisation of fiscal relations at the beginning of the last decade, such a mechanism was developed at the federal level. The establishment at the end of 2003 of the "Stabilisation Fund of the Russian Federation" ("the Fund"), together with a rule governing accumulation and

spending of its resources based on a reference oil price, was an important milestone. The Fund can be viewed as an example of a strong fiscal institution due to its full integration into the budget and a high degree of transparency about its objectives, operations and investment strategies. The establishment of the Fund brought the need to insulate the budget and the economy from the fluctuations in commodity prices to the centre of the fiscal policy debate, which helped to restrain spending during times of high oil prices. The presence of an oil fund has been regularly cited by rating agencies as an essential positive factor underpinning an investment grade rating that Russia has enjoyed since late 2003.[5] At the same time, the mechanism governing accumulation and particularly spending of resources from the Fund proved not to be well-suited to the environment of high and rising oil prices (OECD, 2006). As soon as the Fund reached the level of RUB 500 billion (about 2% of 2006 GDP), spending was allowed for "unspecified purposes". As long as the assets were used to repay external debt, this did not create any tensions with the objective to mitigate Dutch disease effects. However, after the debt repayment was largely completed, and as the actual oil price significantly overshot the reference oil price of USD 27 per barrel, pressures mounted for spending the Stabilisation Fund's resources. The narrow revenue base of the Fund, which included only taxes and export duties from the oil sector, was another issue.

In an attempt to address these challenges, the government initiated further reforms of the fiscal framework in 2007. The Stabilisation Fund was split into two oil funds, the Reserve Fund and the Future Generation Fund, which was soon renamed the National Welfare Fund (Box 3.2), and a number of fiscal rules were introduced. Spending out of oil revenues was restricted to 3.7% of GDP. The limit on the non-oil balance was set at a slightly higher level, 4.7% of GDP, to allow some borrowing up to 1% of GDP (even if the budget was in surplus) to pursue different objectives such as the development of financial markets. In the event of oil revenues falling below 3.7% of GDP, the government would be allowed to finance the deficit with the assets accumulated in the Reserve Fund, but other sources of financing could not exceed 1% of GDP. The rules at the federal level were complemented by the rules for sub-national governments, which put numerical constraints on the deficit, total annual borrowing, debt and debt service.

The framework was weakened during the crisis

The changes to the fiscal framework, which were broadly in line with OECD recommendations (OECD, 2006; see also Annex 1.A.1) were expected to come into effect in 2011. The 2008-10 budget, which was the first three-year budget, outlined a path for gradual convergence of the non-oil deficit to the target of 4.7% of GDP. The timing of the transition to new fiscal rules proved unfortunate. The old framework had been dismantled, but the new one had not yet become operational when the fiscal situation changed radically. As expenditure soared, the 4.7% of GDP limit on the non-oil deficit began to look unrealistic. In this difficult and uncertain environment, the authorities decided to push back the entry into force of the new fiscal rules to 2013.

Russia was far from alone in deciding to postpone its fiscal rules in the context of the crisis: many other countries breached their fiscal rules during this period and some amended the targets or suspended the rules until the situation became more stable (Schick, 2010). While Russia's rule was not yet operational, the 2011 date for the coming into force of the rule had been set with a gradual consolidation path in mind, which was superseded by events. In September 2010, the date was pushed even further out to 2014.

Box 3.2. **The Reserve Fund and the National Welfare Fund**

Following the amendments to the Budget Code approved in April 2007, two oil funds were established at the beginning of 2008 in place of the Stabilisation Fund of the Russian Federation, which had been created in 2004. Their revenue base was expanded to include the mineral extraction tax on natural gas and export duties on natural gas and oil products. The Reserve Fund assumed the role of the original Stabilisation Fund: its main statutory objective is to insulate the federal budget from oil price volatility. The Reserve Fund also has a wider purpose of promoting economic stability by mitigating inflationary pressures and reducing dependence of the economy on fluctuations in oil prices. Oil and gas revenues in excess of 3.7% of GDP are automatically accumulated in the Reserve Fund until it reaches 10% of GDP, at which point any additional oil and gas revenues are used to accumulate assets the National Welfare Fund (NWF). Assets accumulated in the Reserve Fund can be used to cover the budget deficit if oil and gas revenues are below 3.7% of GDP, or to repay external debt.

The NWF's main objective is to co-finance voluntary pension savings and to cover the deficit of the State Pension Fund. Initially, as its original name the *Future Generation Fund* attests, the fund's role was defined more broadly as saving part of the income from current exploitation of non-renewable resources for the benefit of future generations (Ministry of Finance, 2007).

On 1 February 2008, assets of the Stabilisation Fund amounting to USD 135 billion, or 10% of 2007 GDP, were transferred to the Reserve Fund. The remaining USD 25 billion, about 1.5% of GDP, were transferred to the NWF. Over 2008, the Reserve Fund's assets rose slightly to keep its statutory limit at 10% of GDP in line with nominal GDP growth, while the NWF's assets increased by USD 56 billion. Assets accumulated in two funds reached USD 225 billion (more than 13% of 2008 GDP) at their peak at the end of 2008. The Reserve Fund's assets were used to finance the deficits which emerged during 2009-10. More than USD 100 billion was used for that purpose. By end-2010, the Reserve Fund's assets stood at USD 25 billion, less than 2% of 2010 GDP. The NWF's funds remained intact and at end-2010 were just above USD 90 billion (6% of 2010 GDP). During the first ten months of 2011 the two funds were neither drawn on nor built up, as the federal budget was in surplus but the expectation was that all oil revenues would be spent by the end of the year.

The rules governing the NWF's asset allocation were relaxed to allow investment in rouble-denominated assets. This was used during the crisis as a measure to provide support for domestic banks and companies.

This appears less justifiable, as the economic situation had stabilised and the recovery was underway by that time, also supported by a strong recovery in oil prices. Moreover, the three-year budget plan for 2012-14 (Table 3.3) envisages the non-oil deficit widening in 2012 and declining only slowly to 9% of GDP by 2014. This suggested that the entry into force of the rules was to be pushed further back in October 2011 and indeed this was confirmed when the Budget Code was again amended to get a new date of 1 January 2015. The government is also considering whether to return to the mechanism of the cut-off oil price.

Fiscal rules should be quickly restored

Russia would benefit from a prompt reinstatement of fiscal rules that could help reduce a pro-cyclical bias of fiscal policy that is re-emerging in the current environment of high oil prices, and assist in the reduction of the non-oil deficit. The country's own

experience attests to the fact that institutional constraints on fiscal policy can enhance the management of public finances and lead to better fiscal outcomes. Restoring such constraints would assist the Ministry of Finance in its continued efforts to restrict pro-cyclical overspending of windfall revenues and ensure sustainable consolidation.

There is no one-size-fits-all fiscal rule, either in general or for commodity exporters. For example, three commodity-exporting OECD countries – Chile, Mexico and Norway – have all adopted a fiscal rule, but with different designs (Box 3.3). Generally, the checklist for a well designed fiscal rule should include the criteria of simplicity and transparency, flexibility in the response to shocks, and a stable link between the targets and ultimate policy objectives (Kopits and Symansky, 1998; IMF, 2009; Schick, 2010). The major objective for Russia can be defined as reducing the pro-cyclical bias of fiscal policy, in particular during commodity booms, which would help mitigate the impact of fluctuations in the commodity prices on economic performance. A specific aspect that needs to be considered in connection with the country's natural resource endowment is intergenerational equity, *i.e.* how Russia's non-renewable natural resource wealth, and in particular its oil and gas wealth, should be shared between current and future generations. In a catching-up economy like Russia, future generations are expected to be significantly wealthier, which makes a case for spending a larger part of resource wealth by current generations (OECD, 2006). Nevertheless, the Russian government itself set a goal of saving part of the income from resource exploitation for future generations via a gradual build-up of assets in the National Welfare Fund, which is expected to generate significant investment income in the future. This objective remains valid, especially taking into account unfavourable demographic trends.

The current rules in the Budget Code score well on many dimensions and should be restored. This has the potential advantage of preventing yet another overhaul of the budget legislation, as the rules are already in place and need only to be reactivated. The non-oil balance target is easy to monitor, although it has proved at times difficult to communicate to parliament and the public. Limiting spending out of oil revenues insulates to a large extent the budget and the economy from oil price fluctuations and allows for a gradual build-up of assets in the NWF, in line with an objective to save part of the income from exploitation of non-renewable resources and generate investment income. An advantage of this rule is that it does not require an explicit assumption about long-term equilibrium oil prices. At the same time, quantification of the target implicitly assumes some "equilibrium" level of oil revenues (as a percentage of GDP) that will cover the non-oil deficit on a sustainable basis, and lead to a gradual accumulation of assets. The 4.7% of GDP target for the non-oil deficit does not look unreasonable in the medium term, as the ratio of oil revenues to GDP, now about 10%, is expected to decline with economic growth and a diversification of the economy, but the gradual build-up of the NWF should generate investment income that could be used to finance future non-oil deficits. This would move Russia closer to the Norwegian model, which requires all oil revenues to be transferred to the oil fund and allows the use only of a notional long-term investment return (4%) on the fund's assets to finance the non-oil deficit. However, as oil revenues are much higher now, this would currently imply a substantial saving rate out of oil income. It may take some time to reduce the non-oil deficit to the level of 4.7% of GDP specified in the Budget Code. Moreover, oil prices may continue to trend upward, in which case limiting the non-oil deficit to 4.7% of GDP would be too strict as this would imply more saving out of oil revenues than would be desirable. One way to overcome this difficulty is to allow for a

Box 3.3. **Fiscal guidelines in commodity-exporting OECD countries**

Chile: the structural balance target for the central government budget

Chile's fiscal policy is guided by a structural balance target, defined as the central government budget balance that would have been achieved if output were at its potential, prices of copper and molybdenum were at their long-term levels, and the return on financial assets corresponded to the long-term interest rate. In practice, as expenditures are not cyclically sensitive, commodity-related revenues (*i.e.* revenues from the state-owned copper company CODELCO and tax revenues from private mining companies) are adjusted to the gap between long-term and actual prices of copper and molybdenum, while non-commodity revenues are adjusted to the deviation of output from trend. A panel of independent experts estimates the long-term copper price every year, while another panel assists with the estimates of potential output.

Surpluses generated by the structural balance rule are accumulated in several sovereign wealth funds, such as the Economic and Social Stabilisation Fund and the Pension Reserve Fund. The former can be used to finance headline deficits.

Major aspects of the framework are institutionalised in the Fiscal Responsibility Law, but the legislation does not define a particular target for the structural balance. The target was set in 2001 as a surplus of 1% of GDP and reduced to 0.5% of GDP in 2008. In 2009, it was further reduced to zero to allow for a fiscal stimulus in the context of the crisis. The rule was *de facto* suspended in 2010 due to the earthquake in February. The government now targets a structural deficit of –1% of GDP by 2014.

Norway: the structural balance target for the non-oil central government budget deficit linked to a long-run real return on the oil fund's assets

In Norway, all oil and gas revenues are saved in the Government Pension Fund Global (GPFG). The fiscal guidelines established in 2001 state that the non-oil structural central government budget deficit should normally be 4% of the GPFG's value, which is assumed to be the long-run real return on the Fund's assets. GPFG's assets are invested solely in foreign assets. The purpose of this framework is to insulate the economy and public finances from oil price fluctuations, spend the income generated by the petroleum wealth while saving the wealth itself for future generations, and mitigate Dutch disease effects.

The rule allows for deviations from the 4% target in the event of exogenous shocks or abrupt changes in the GPFG's value. The 4% non-oil deficit path can therefore be undershot during periods of strong economic growth, and overshot during downturns, allowing a discretionary counter-cyclical response. Since the inception of the fiscal guidelines in 2001, the structural non-oil central government deficit has on average only slightly exceeded 4% of the GPFG. However, the strong counter-cyclical fiscal response in 2009 led to a significant overshooting of the 4% target.

Mexico: a balanced budget rule and a rule for excess revenues based on a reference price for oil

Since 2006, the key element of Mexico's fiscal framework has been the balanced budget rule applied to part of the budget balance. The rule covers the "budgetary public sector" (central government and public enterprises) and includes non-oil revenues and expenditures, oil revenues (royalties and revenues from the state-owned oil company PEMEX), and current PEMEX spending. It does not apply to the government's net lending operations or to PEMEX investment.

The balanced budget rule is complemented by a rule requiring some of excess oil revenues to to be transferred to three oil stabilisation funds (for the federal government, PEMEX and state governments). The Fiscal Responsibility Law requires that 90% of excess revenues (estimated on a basis of a reference oil price) be transferred to the oil funds, whith the remaining 10% allocated to the states for investment. The balances in the funds are capped at relatively low levels and once the limits are reached, 75% of extra revenues are allocated to investment and 25% to support of the pension system. At end-2008, the assets accumulated in the oil funds stood at 1.2% of GDP.

Source: This box draws on Dabán (2011), IMF (2009), OECD (2009b), OECD (2010b), OECD (2010c), OECD (2011c).

periodic revision of the non-oil deficit target. For example, if the size of the National Wealth Fund is judged to be too big or too small, the target can be reviewed to reflect sustained changes in the oil prices.

Having a target for the non-oil deficit expressed as a ratio to GDP can substantially reduce, if not completely eliminate, the pro-cyclicality of fiscal policy. The rule still has some pro-cyclical bias. First, the target is expressed as a share of actual GDP. As the GDP deflator tends to rise faster than consumer price inflation during a positive terms-of-trade shock, the ratio of expenditures to GDP (and therefore the ratio of the non-oil balance to GDP) may look stable even though real expenditures are rising fast, as happened in 2006-08. Second, a sufficiently counter-cyclical fiscal policy should save all cyclical revenues during an upturn, not just windfall gains from oil and gas revenues. Such cyclical dividends in the case of Russia come from revenues from other commodities (non-ferrous and ferrous metals, coal and timber metals, coal and forest products) and non-commodity revenues. In principle, Russia should identify windfall gains from other commodity-related revenues, and estimate a cyclical component of non-commodity revenues by adjusting them for the business cycle. Finally, it is important to eliminate one-offs (large non-recurrent fiscal operations) to get a clear understanding of underlying trends (Box 3.1). Admittedly, these conceptually attractive improvements can prove difficult to implement in practice. The process of cyclical adjustment has many limitations, especially in a middle-income transition economy like Russia. Having a fiscal rule based on a target in structural terms is probably not advisable at this point, as it could just add to the uncertainty in formulating fiscal policy. Nevertheless, developing and refining such estimates would be useful as a means to enhance understanding of fiscal developments. Moreover, as the share of oil and gas revenues is expected to decline with economic growth and diversification of the economy, the impact of the business cycle on government revenues will become more pronounced, and the concept of structural balance will gain in importance. In that context, it is important to develop the necessary expertise on the cyclical adjustment of non-oil revenues. Work on such estimates has already started and should be advanced, and information on cyclical indicators should be published in budgetary documents, while highlighting the associated uncertainties.

The government is considering the idea of returning to a cut-off oil price concept, aiming at a 1% federal budget deficit at the reference oil price, which would be set every year at the average level over the previous 10 years. The concept of a cut-off price is relatively intuitive for the public, although the rule is in fact less transparent than it may appear, as it requires assumptions about the behaviour of non-oil revenues. During a period when commodity prices are trending upwards the rule may again turn pro-cyclical. OECD estimates suggest that while in 2002-04 the application of the reference price rule would have resulted in a non-oil deficit close to 4.7% of GDP (*i.e.* virtually the same as the suspended rule currently enshrined in the Budget Code), between 2004 and 2008, the non-oil deficit would have been significantly larger and the government would have saved less of windfall gains than would have been the case with the implementation of the existing non-oil deficit rule.

Designing an expenditure rule

As noted earlier, the non-oil deficit target may not be sufficient to prevent overspending of windfall revenues, particularly when commodity prices are rising. To further reduce the pro-cyclical bias of fiscal policy, a non-oil balance rule may be usefully

supplemented by a public expenditure rule. An expenditure rule sets a limit on aggregate spending, expressed either in nominal terms (in which case, they are called expenditure ceilings; see Ljungman, 2008), or in growth rates. The limits can also be defined as a percentage of GDP, but especially in the case of Russia, this risks building in a degree of pro-cyclicality, as discussed above. Expenditure rules are transparent, easy to communicate, and have counter-cyclical features by allowing full working of automatic stabilisers (Anderson and Minarik, 2006), at least in a country like Russia where automatic stabilisers on the revenue side are strong but spending is not cyclically sensitive. Evidence suggests that rules with expenditure targets are associated with longer-lasting consolidation (Guichard *et al*., 2007).

Multi-year expenditure ceilings have been adopted in several OECD countries, including the Netherlands and Sweden, and the experience has been generally positive. The main idea of these ceilings is that by setting *ex ante* spending limits in a multi-year framework, usually for three or four years, the government explicitly pre-commits not to exceed this level, no matter how revenues perform. Such pre-commitment helps to restrain pressures for fiscal expansion during periods of revenue buoyancy caused by transitory factors. For Russia, such a rule has the potential to constrain spending when oil prices are soaring. The ceilings may then be reviewed in the next three-year cycle and raised if necessary, for example in line with the changes in the average level of the oil price for that period.

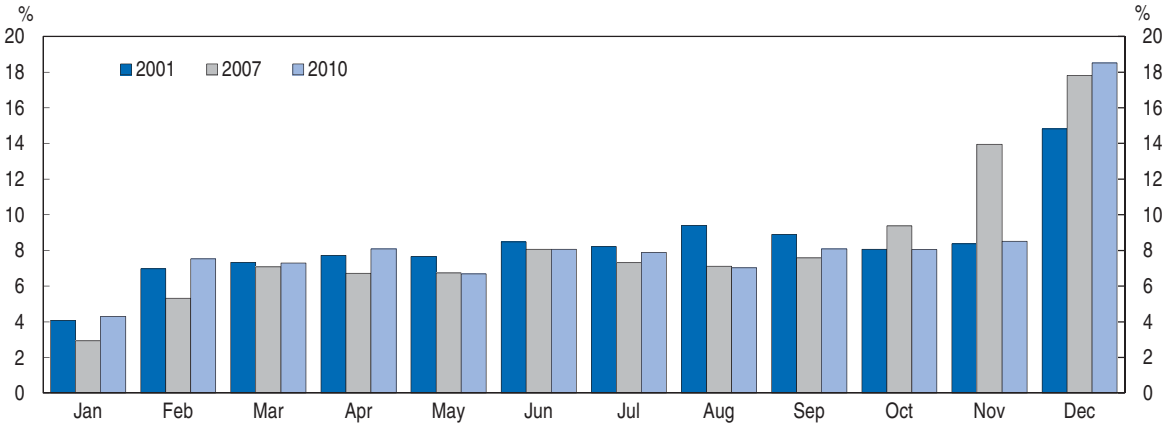
In fact, since 2008 Russia has set expenditure targets in the three-year budget plans adopted by parliament. This could be viewed as an expenditure rule with a strong institutional basis, as parliamentary approval is required to amend the ceilings. However, supplementary budgets adopted every year since 1998, and often more than once a year, have undermined the discipline such a framework might provide. Such amendments have often been triggered by the deviation of the actual oil price from the one that was budgeted. As a recent example, the supplementary budget adopted in April 2011 pushed expenditure for 2011 and the two out-years upwards compared with the three-year budget plan approved in November 2010, and 2011 expenditures were raised again in a further budget amendment tabled in October. A commitment to expenditure targets, by treating them as firm ceilings, would help to make fiscal policy more counter-cyclical. A still stronger commitment would be achieved by setting up a rule limiting the annual increase in total expenditure in real terms to some ceiling.

This tendency to adopt supplementary budgets also exacerbated the very uneven and inefficient pattern of expenditure within the year, with large December spending peaks (Figure 3.8). One measure that could help reduce the frequency of supplemental budgets, while imparting a pro-consolidation bias to fiscal outcomes, would be the inclusion in each annual budget of a significant contingency reserve controlled by the Ministry of Finance, to accommodate underestimated needs in some areas without having to reduce allocations in others. Importantly, the contingency reserve should not be used to finance new policy initiatives. Such a mechanism was successfully implemented, for example, in Canada, supporting the effectiveness of the budget process (Blöndal, 2001).

It is probably not possible for any set of rules to be appropriate under all circumstances. An effective rule should also contain a well-defined escape clause (Kopits and Symansky, 1998; IMF, 2009) to provide clear guidance regarding the circumstances

Figure 3.8. **Within-year expenditure pattern**

General government expenditure, percentage of each month in the year



Source: Economic Expert Group.

StatLink http://dx.doi.org/10.1787/888932539821

under which the rule can be suspended, and for what period. This is preferable to an *ad hoc* suspension of a rule that can be put on hold for an unspecified period of time, as happened in Russia. An exceptional circumstances clause should therefore be added to the Budget Code.

As discussed above, intergenerational fairness calls for saving at least part of oil income for the benefit of future generations, beyond saving for the purpose of smoothing cyclical fluctuations. The establishment of the NWF (Box 3.2) had this objective in mind. The redefining of the NWF's objective as contributing to the sustainability of the pension system is a reasonable approach, as this is a more focused goal that has a better chance of surviving the inevitable demands of various interest groups than the more abstract goal of benefiting future generations. At the same time, it serves the same purpose, given the demographic burden that future generations will encounter. The accumulation of NWF assets could be accelerated by transferring privatisation proceeds to the fund. Currently, the legislation is silent on what to do with these revenues.

Russia should also consider enhancing its rule-based framework by setting up an independent fiscal agency, as has been done in several OECD countries, including Sweden and the United Kingdom (Hagemann, 2010). An independent group of experts providing input into policy decisions, including on fiscal policy, would not be something entirely new for Russia. The government has long drawn on the expertise of think-tanks and research institutes, as well as renowned economic experts. Creating a specialised agency would formalise such arrangements with regard to input into fiscal policy decisions. Such a "fiscal council" can usefully assume a number of important advisory tasks, for example, providing estimates of short-term macroeconomic variables and trend growth. An independent panel of experts can also help build expertise on the cyclical adjustment of non-oil revenues, and can also perform independent analysis of fiscal issues, for example as regards the sustainability of pension arrangements, or estimate the cost of various fiscal initiatives. It can also help communicating fiscal issues to the public, for example, as regards the rationale for increasing the pensionable age.

Box 3.4. **Recommendations on fiscal policy**

Fiscal rules and council

- In the Budget Code, restore a rule governing management of oil and gas revenues and limiting the non-oil deficit, along with a well defined escape clause regarding the circumstances in which the rule can be breached.
- Supplement the non-oil deficit limit by a rule restricting the annual increase in total expenditure in real terms to some ceiling.
- Develop the necessary expertise on the cyclical adjustment of non-oil revenues. Publish more detailed information on the underlying fiscal position, highlighting uncertainties.
- Set up an independent fiscal council to perform a number of advisory tasks such as providing estimates of short-term macroeconomic variables and trend growth. An independent panel of experts can also help build expertise on the cyclical adjustment of non-oil revenues.

Budgeting and spending reforms

- Consider including in each annual budget a significant contingency reserve controlled by the Ministry of Finance, to accommodate underestimated needs in some areas without having to reduce allocations in others.
- Consider transferring privatisation proceeds to the National Welfare Fund.
- Equalise pensionable age for men and women and gradually raise the pensionable age in line with gains in longevity.

Notes

1. Henceforth, "oil revenues" will be used as a short form for "oil and gas revenues". General government oil and gas revenues include the mineral extraction tax on oil and gas; export duties on oil, gas and oil products; and corporate income tax on the companies operating in the oil and gas sector. The Budget Code definition used by the authorities refers to the federal budget only and does not include corporate income tax on the companies operating in the oil and gas sector.
2. Russia took on both the financial assets and liabilities of the Soviet Union. The former were on paper substantial, but mostly consisted of claims on developing countries that were eventually written off entirely or in large part.
3. The situation was aggravated by the external shocks, namely a fall in oil prices and a wave of capital outflows from emerging markets induced by the Asian crisis, but at the centre of it were domestic macroeconomic weaknesses. See Gilman (2010) for a comprehensive discussion of Russia's 1998 default.
4. This paragraph draws on preliminary findings and recommendations of the OECD accession review on public governance and regulatory policy as well as Kraan *et al.* (2008).
5. Moody's awarded an investment grade to Russia in October 2003, shortly before the Stabilisation Fund became operational. Fitch assigned an investment grade to Russia in 2004, and Standard & Poor's in 2005.

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Chapter 4

Moving to a new framework for monetary policy

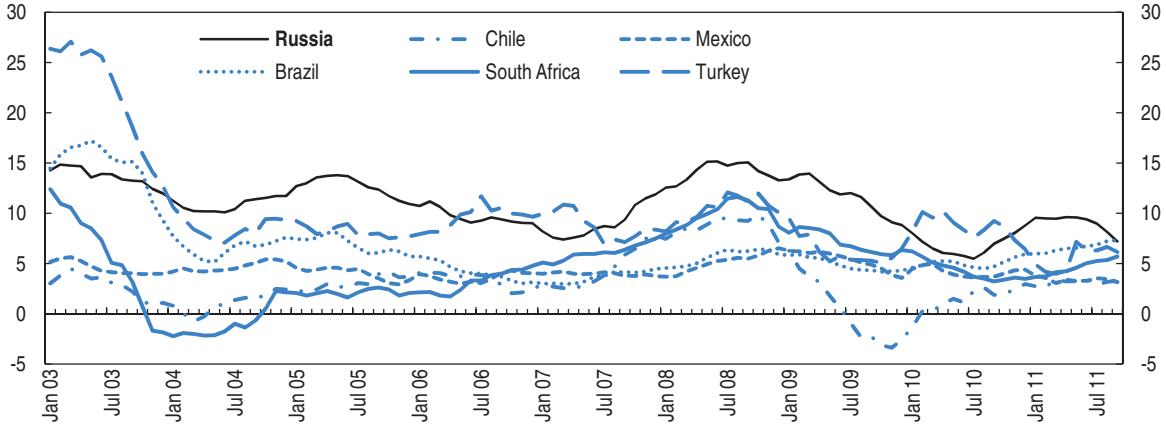
Consumer price inflation has been on a long downtrend since 1998, but Russia still experiences inflation rates that are well above those in advanced countries and relatively high among middle-income economies. The monetary policy framework in place until the onset of the global crisis combined inflation objectives with an aim of limiting real appreciation of the rouble, and the tension between these goals in an environment of large current account surpluses and occasionally strong private capital inflows resulted in a persistent tendency to exceed the inflation target. Since the global crisis, a new framework has emerged, featuring more exchange rate flexibility and increased emphasis on the CBR's policy rates. Communication of policy decisions has also improved. The CBR should build on recent achievements to move in the direction of a flexible inflation-targeting regime. Such a move would involve spelling out price stability as the primary objective of monetary policy, streamlining the unusually high number of CBR credit instruments, and further limiting foreign exchange interventions. Another important area for improvement is monetary policy transparency, where Russia still shows up poorly in international comparisons.

Progress in achieving sustained disinflation has been slow

After the first decade of transition, characterised by a generally unstable macroeconomic environment, Russia entered a calmer decade in the 2000s. Inflation has been contained at low double digit levels, and on three occasions December-on-December inflation fell to single digits. But Russian inflation rates are still well above those in advanced countries and high compared to most middle-income peers (Figure 4.1). Annual inflation, both as regards the headline rate and the CBR's core measure, also frequently overshot the Central Bank's own targets (Figure 4.2).

Figure 4.1. **Inflation: international comparison**

CPI year-on-year growth, %



Source: OECD, *Main Economic Indicators Database* and Statistics South Africa.

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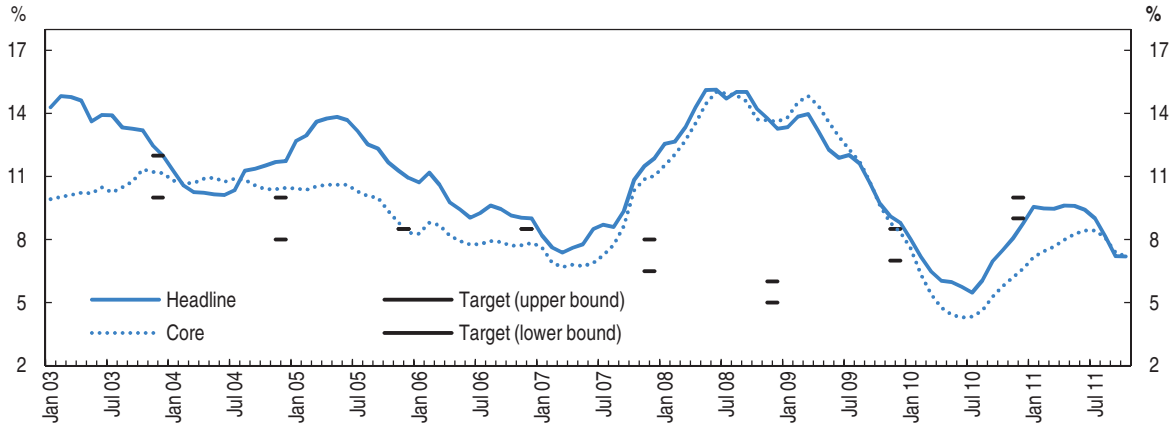
There are reasons to expect that inflation rates in Russia should be structurally higher than in advanced countries, reflecting the adjustment of relative prices that commenced at the beginning of transition but has not yet been completed. In particular, the relative price of energy in Russia is still low, although it has risen considerably. Achieving relative price shifts with somewhat higher inflation can be the best solution, given the difficulty of achieving absolute price declines without significant output costs.[1] The conduct of monetary policy has also been complicated by a number of other factors. Although fiscal policy had been generally supportive of disinflation until the mid-2000s, it became pro-cyclical afterwards, making the task of the monetary authorities in reducing inflation more difficult (Chapter 3). Given the high weight of food items in Russia's consumer price index, the upsurge in international food prices in 2007-08 had a strong effect on headline inflation (Figure 4.3). In a similar vein, a significant contribution to the most recent upturn in inflation that reversed a post-crisis disinflation trend came from food price increases. In this case, the price shock arose from damage to Russian grain harvests from the heat and drought in the summer of 2010.

Figure 4.2. **Consumer price index inflation**

Year on year percentage change

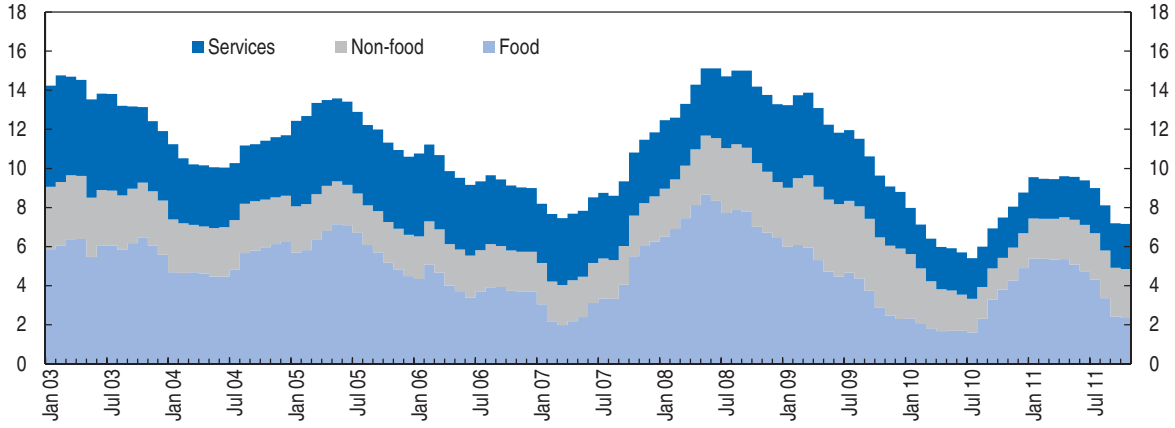


Source: Rosstat and Central Bank of Russia.

StatLink http://dx.doi.org/10.1787/888932539859

Figure 4.3. **Inflation decomposition**

Contributions to change in CPI growth



Source: Rosstat and OECD calculations.

StatLink http://dx.doi.org/10.1787/888932539878

Nonetheless, monetary factors have been an important driver of inflation, as the CBR has repeatedly emphasised in quarterly inflation reports. Various studies confirm that lagged money supply is a significant determinant of inflation in Russia, even though the relationship is not always stable due to changes in money demand (Beck and Barnard, 2009; Drobyshevskiy *et al.*, 2010). The monetary policy framework in place until the onset of the global crisis combined inflation objectives with an aim of limiting real appreciation of the rouble, operationalised by foreign exchange market intervention to restrict nominal appreciation. In an environment of large current account surpluses and occasionally strong private capital inflows, this resulted in a rapid expansion in the money supply that fed inflation. Less researched is the impact of what many believe are unanchored inflation expectations. Some experts, including a Deputy Central Bank Governor, attribute this to annual increases in regulated prices (Ulyukaev and Kulikov, 2009), while other see this as an outcome of a still-low level of trust of the population in the domestic currency and monetary institutions (Yudaeva, 2010). Taken together, this suggests that strengthening the monetary policy framework is essential for achieving sustained low inflation.

The CBR has for a number of years announced its intention to move towards an inflation-targeting regime, while acknowledging that this move would require greater flexibility of the exchange rate and eventually its full flexibility. It was not until mid-2008, shortly before the crisis hit, that it introduced some very limited flexibility, allowing the rouble to fluctuate in both directions within a narrow band, mainly to prevent the perception that speculating on rouble appreciation was a one-way bet. The crisis itself changed the operating environment for the CBR and triggered changes in the conduct of monetary policy. The new framework that has emerged features more exchange rate flexibility, assigns a greater role to interest rate policy and has brought more transparency in communicating policy decisions. It is important to build on these achievements. This chapter briefly reviews Russia's experience with the previous framework, discusses post-crisis developments and suggests ways to strengthen the new framework along various dimensions. The chapter argues that Russia should adopt a "flexible inflation targeting" regime to allow an adequate response to exogenous shocks, and discusses the role of the exchange rate in this regime. Capital inflows have not been an issue in Russia recently, but this can change, and an appropriate framework for responding to such inflows should be designed in advance.

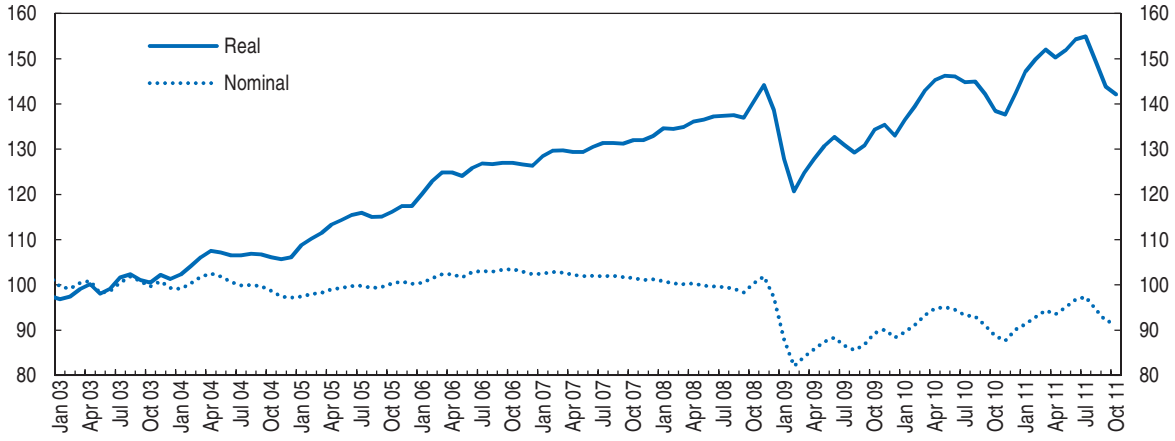
The tensions in the de facto exchange rate targeting framework became apparent in the mid-2000s

Russia's monetary policy framework after the collapse of the hard peg to the US dollar in August 1998 and until the global economic and financial crisis of 2008 can be broadly described as a *de facto* nominal exchange rate peg. This regime emerged in an environment of very low international reserves, low monetisation and public distrust of the rouble. Gradual monetisation, backed by the accumulation of international reserves, appeared to be a reasonable approach at that point. As the terms of trade continued to improve, the emphasis of policy shifted to limiting excessive real appreciation of the rouble to protect competitiveness of domestic producers. This policy had in-built tensions between this objective and that of disinflation. The CBR's interventions in foreign exchange markets restrained nominal appreciation, but the corresponding expansion of the money supply created inflationary pressures. The inflation differential relative to the country's trading partners pushed the real effective exchange rate up, which partly eroded the effect that the CBR was trying to achieve. As a result, while the nominal effective exchange rate was little changed between the beginning of 2003 and mid-2008,[2] the rouble appreciated in real effective terms by more than 40% (Figure 4.4).

The role of interest rate policy in this framework was very limited, as the CBR's policy rates had little impact on interbank money market rates in an environment of abundant liquidity. The refinancing rate and the one-day repo rate had no relevance in the absence of demand from banks for lending from the CBR. The CBR deposit rates played some role influencing liquidity absorption, but their increases were too small to have a significant impact on liquidity conditions. Interbank rates had been very volatile (Figure 4.5A), reflecting large fluctuations in liquidity conditions related to external factors. The interbank market was also relatively thin and segmented, with the top 30 banks dealing among themselves on an unsecured basis, and only limited operations taking place between the first and second tiers through collateralised repo transactions. Long-term retail rates were less volatile (Figure 4.5B), and only loosely related to short-term rates.

Figure 4.4. **Effective exchange rates**

2003 = 100



Source: OECD calculations based on Central Bank of Russia.

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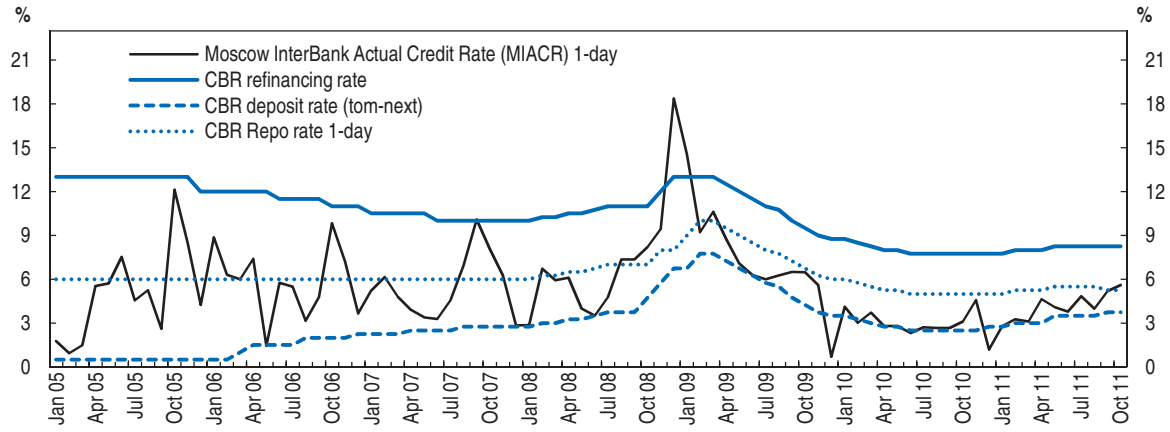
Finally, the government bond market remained thin, given the string of fiscal surpluses in the pre-crisis period.

Nevertheless, the framework allowed the build-up of foreign exchange reserves and gradually monetised the economy. Inflation rates were actually falling despite the rapid growth of the money supply, as the demand for money grew stgrongly amid the improved confidence in the rouble and corresponding de-dollarisation (OECD, 2006). Since the mid-2000s, however, it became increasingly difficult to balance the two objectives of exchange rate stability and disinflation in an environment of continuously rising terms of trade. But the major challenge to this framework came from a surge in private capital inflows that coincided with the full liberalisation of the capital account in July 2006. The full liberalisation of the capital account was not the major cause for this surge, as restrictions on cross-border capital flows had largely been removed by that time. Nevertheless, that liberalisation, which was symbolically brought forward by half a year from the originally planned date, eliminated some remaining restrictions and had an impact on sentiment (OECD, 2009). While current account inflows were partially sterilised via fiscal means (Chapter 3), there was no such mechanism for net private capital inflows which grew rapidly and exceeded the current account surplus in 2007 (Figure 4.6). The surge in inflows at that time was attributable largely to foreign borrowing by Russian banks and corporations benefiting from improved access to international capital markets, not least thanks to the improved creditworthiness of the Russian government. At the same time, enthusiasm for emerging markets in general and commodity plays in particular generated a growing appetite for Russian assets among foreign investors, and a combination of large interest rate differentials with advanced economies and expectations of future nominal appreciation stimulated the carry trade. Some role could also have been played by the recycling of exported Russian capital. FDI into Russia also increased significantly since 2006, but this was matched by a rise in Russian FDI abroad, so that the contribution of net FDI to capital inflows was small.

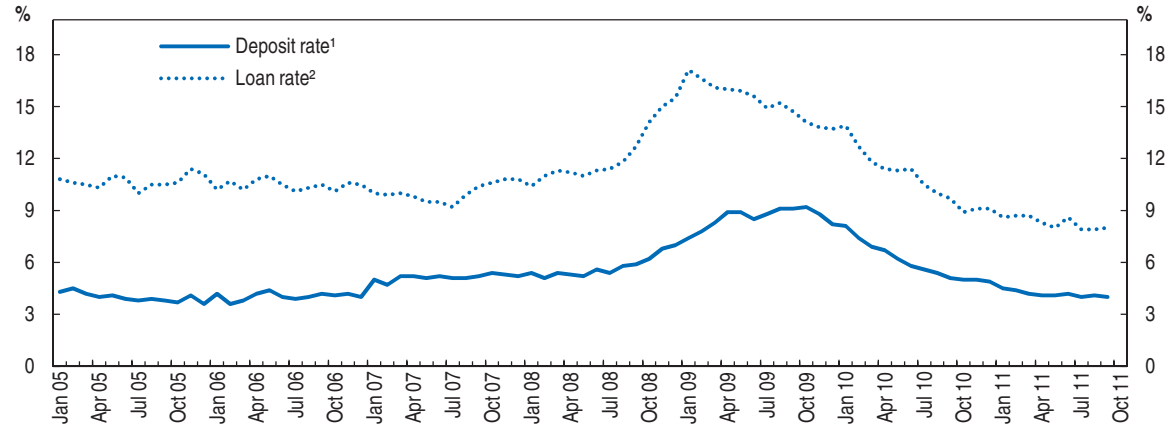
Faced with massive inflows of foreign currency via the current and capital account, the CBR engaged in large-scale foreign currency purchases, increasing its foreign currency reserves to almost USD 600 billion in August 2008 (36% of 2008 GDP, around 20 months of imports and more than 5.5 times the level of short-term external debt). Clearly, that was

Figure 4.5. **Interest rates**
End of period

A. CBR rates and inter-bank rate



B. Deposit rate and loan rate



1. Average-weighted rate on household rouble deposits with credit institutions for a term of up to one year.
2. Average-weighted rate on rouble loans to non-financial institutions with a maturity of up to one year.

Source: Central Bank of Russia.

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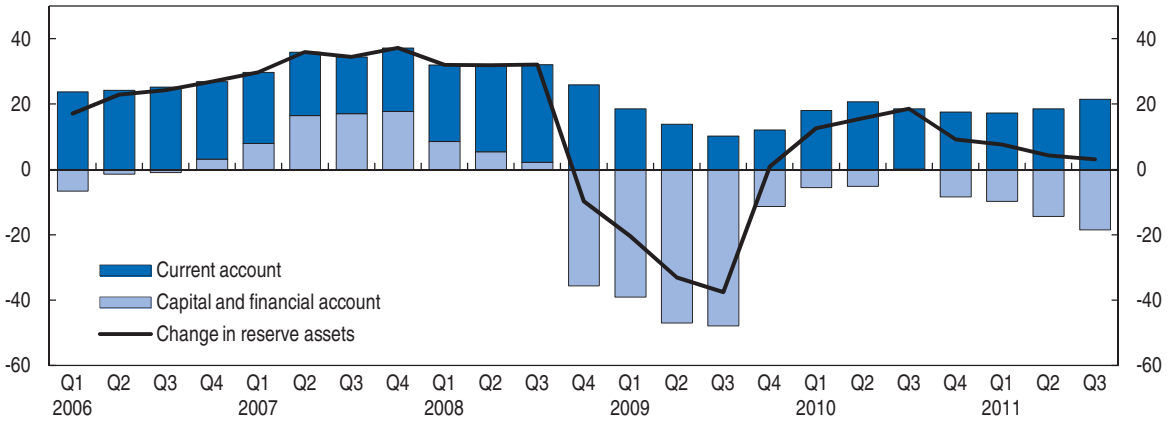
well above the level that could have been justified on precautionary grounds, even if views on what represents adequate reserve coverage from the self-insurance point of view have been evolving towards a need for high reserves (OECD, 2011a). The money supply (M2) increased by almost 50% in 2006, and by 43% in 2007 (Figure 4.7). While comparable increases were observed in some of the previous years, the 2006-07 surge was not matched by money demand growth, contributing to the reversal in the disinflation trend triggered by the increase in international food prices in mid-2007.

The evolution of the monetary framework since the onset of the crisis

The global economic and financial crisis completely changed the macroeconomic environment in which the CBR operated. Due to an adverse swing in the terms of trade and net capital flows, appreciation pressures gave way to strong depreciation pressures. The CBR first tried to defend the rouble, but as from November 2008 switched to a policy of pre-announced gradual depreciation. At the same time, as part of the broad-based anti-crisis measures, the CBR reduced reserve requirement ratios and started providing

Figure 4.6. **Balance of payments**
USD billion, 4-quarter moving average



Note: In 2006, a surge in private capital inflows was partially counterbalanced by the repayment of government external debt.
Source: Central Bank of Russia.

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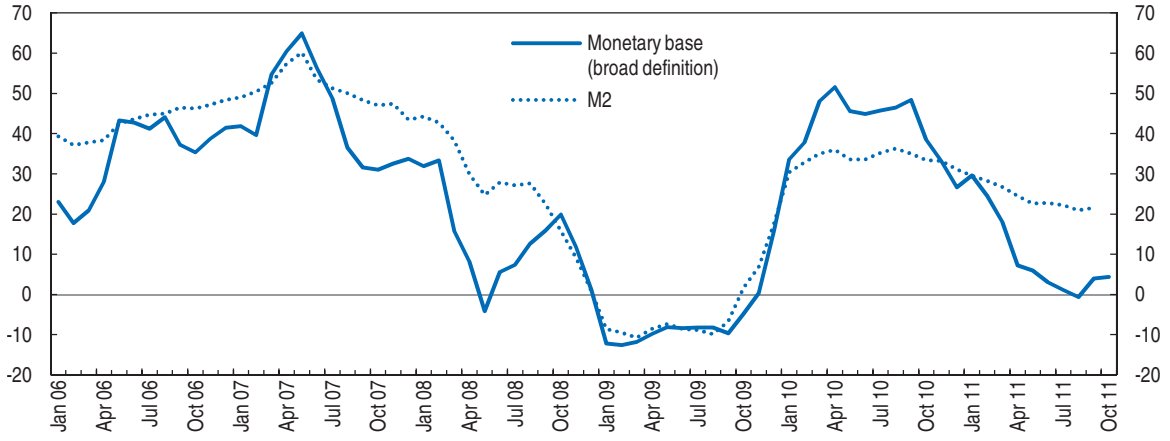
Figure 4.7. **Money supply growth**
Year-on-year growth, percentage change



Source: OECD calculations based on Central Bank of Russia.

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liquidity via collateralised repo operations and unsecured transactions. This led to a circle of liquidity finding its way into the currency market and creating further depreciation pressures. During the acute period of the crisis, inflation remained high despite the severe economic downturn. As oil prices fell by more than 70% from their peak, the factors underlying the pre-crisis inflationary pressures reversed, but the ensuing devaluation was passed through into higher consumer prices.

The emergence of a demand for CBR refinancing operations allowed policy rates to play a greater role, but in the crisis environment, their effectiveness was limited. At the end of 2008, the CBR engaged in a tightening cycle in an attempt to counteract depreciation and inflationary pressures (Figure 4.5A). This was in sharp contrast to the majority of the OECD central banks, which drastically reduced their policy rates at that time. The rise in interest rates was not sufficient to deter speculation against the rouble, as bets on depreciation were still seen as high-reward and low-risk. The CBR tried to counteract the speculative

attacks on the rouble with other tools, the main measure being issuing recommendations for banks to maintain a stable level of foreign assets and open currency positions. In the end the CBR spent more than a third of its reserves between August 2008 and January 2009, although part of this can be considered a transfer to the private sector to help address the foreign currency mismatches of some institutions. At the same time, the CBR's policies during the crisis helped to preserve financial stability. A run on the banking system was averted, deposit withdrawals and a shift from domestic to foreign currency deposits were short-lived, there was no major bank failure, and affected banks and corporations were able to acquire foreign currency at relatively favourable terms for subsequent external debt repayment.

One of the major weaknesses of the CBR's policies proved to be the predictability of exchange rate movements, whether as a gradual appreciation or a gradual depreciation trend, which created perceived one-way bets and amplified terms-of-trade movements. The CBR tried to address this weakness already during the crisis as well as in its post-crisis policies. By late January 2009, the CBR judged that the exchange rate was in line with fundamentals and there was no need to continue the series of step-wise devaluations. In February 2009 the CBR announced a new policy of greater flexibility of the exchange rate (Box 4.1), although since then it has at times continued to intervene in the foreign exchange market. According to the CBR, its interventions have pursued two objectives: smoothing exchange rate volatility and neutralising market expectations regarding exchange rate movements that are formed on the basis on terms-of-trade trends (CBR, 2011). However, exchange rate objectives no longer include resisting appreciation to protect the competitiveness of domestic goods, at least explicitly. Interventions to smooth volatility follow a pre-announced rule (Box 4.1), but so-called "targeted" interventions are discretionary and there is a certain ambiguity regarding them. This is likely intentional, as the CBR tries to counteract the predictability of exchange rate movements during episodes of persisting trends (for example, appreciation during rising commodity prices), and prevent the emergence of perceived one-way bets.

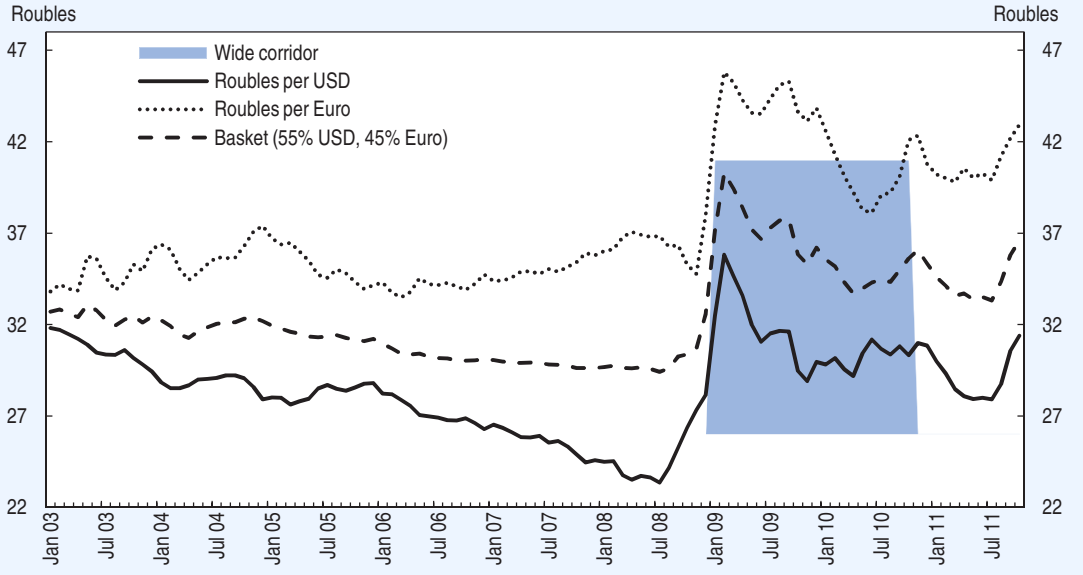
In line with the new policy, the scale of interventions has fallen considerably compared to the pre-crisis period (Figure 4.6). The scaling down of interventions led to a much more gradual reserve accumulation compared to the pre-crisis period. Nevertheless, between February 2009 and the beginning of August 2011, international reserves rose by almost USD 150 billion, implying that Russia rebuilt a significant part of the reserves that it had spent during the crisis. During a period of high volatility in global financial markets in August 2011, the CBR intervened in both directions, and it made significant sales of foreign exchange in September and October. Also reflecting the new policy, exchange rate volatility increased significantly between the pre-crisis and the post-crisis periods and is now comparable with countries with mainly or fully floating exchange rate regimes (Figure 4.10A and B).

Despite some signs of a recovery in the spring of 2009, real credit growth remained subdued and even turned negative on a year-on-year basis (Figure 4.11). With less liquidity provided to the economy from exogenous sources, the central bank has used its constellation of policy rates to achieve its objectives. The CBR started an easing cycle in April 2009, which lasted until June 2010 (Figure 4.5A). Over this period, the main policy rates – including the refinancing rate, the repo rate and the deposit rate – were lowered twelve times. The repo rate was brought down by a total of 500 basis points, while the refinancing rate and the deposit rate both fell by 525 basis points.

Box 4.1. **Exchange rate policy in Russia in the aftermath of the crisis**

On 23 January 2009, the CBR announced an exit from its policy of step-wise depreciation that it had pursued since November 2008. It simultaneously set a new wide exchange rate corridor at 26-41 RUR *versus* the USD-euro basket (Figure 4.8). The weights of the currencies in the basket, 55% USD and 45% euro, remained unchanged. Given the width of the corridor, the announcement was widely interpreted as a move to a more flexible exchange rate. At the same time, as the actual exchange rate was very close to the upper bound of the corridor, it was expected that the CBR would continue interventions to defend the rouble. However depreciation pressures abated with a turnaround in commodity prices in March 2009, and intervention to defend the currency proved unnecessary, as the rouble started to appreciate.

Figure 4.8. **Nominal exchange rates**



Source: OECD calculations based on Central Bank of Russia..

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The effectiveness of the CBR's policy rates continues to depend to a large extent on macroeconomic conditions, which have been changing over the past two years. The main instruments used by the CBR have been repo rates, deposit rates and issuance of OBRs (central bank bonds). Until the beginning of 2010, demand for CBR refinancing remained high, giving particular relevance to repo rates. However, as liquidity became abundant due to larger foreign exchange interventions, demand for refinancing almost evaporated. In this environment, the CBR started absorbing liquidity via the deposits of commercial banks at the central bank and issuing bonds (Figure 4.12). Correspondingly, the central bank's deposit rate assumed greater importance. Interbank rates became much less volatile and at times converged to the policy rate (Figure 4.5A).

For some time, the CBR seemed to find a balance between its objectives. It correctly judged that inflationary pressures were subdued, while credit activity and output growth needed to be supported. Inflation declined steadily on a year-on-year basis to reach 5.5% in July 2010, the lowest level since the beginning of transition. The disinflation trend was abruptly reversed in August 2010 following a large shock to domestic food prices from the loss of agricultural output caused by extreme weather conditions. Non-food inflation also accelerated over this period, but the magnitude was much lower. This can be attributed

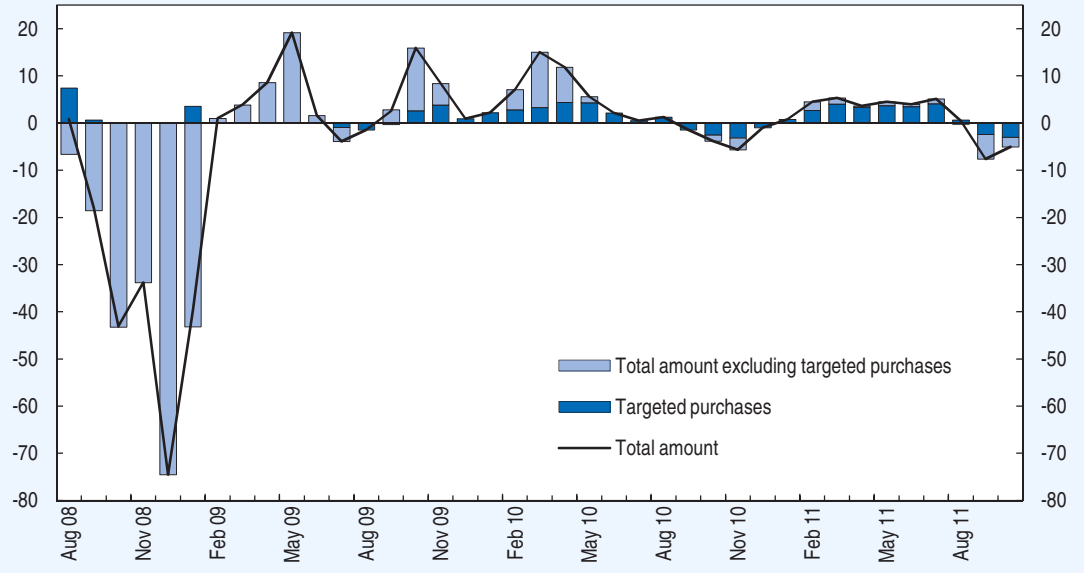
Box 4.1. **Exchange rate policy in Russia in the aftermath of the crisis** *(cont.)*

In February 2009, the central bank introduced a sliding "operational" corridor to complement the wide exchange rate corridor. The new policy allowed the exchange rate to fluctuate freely within a narrow corridor, the width of which was initially set at two roubles. The CBR intervenes to keep the rouble within the band, but the band's limits are automatically adjusted if interventions exceed a certain pre-set level. The CBR can also conduct so-called "targeted" interventions, which are not part of the intervention volumes that trigger an automatic shift of the band's limits. These "targeted" interventions aim to neutralise market expectations regarding exchange rate movements that might be formed on a basis on terms-of-trade trends (CBR, 2011). In deciding on the volume of these interventions, the CBR takes into account the balance of payment trends and the situation in domestic financial markets. Since mid-2009 targeted interventions have accounted for most of the total (Figure 4.9).

Over 2009-11, the CBR has gradually widened the operational corridor, from the original two roubles to five. In October 2010, it abolished the 29-41 RUB/bi-currency basket corridor. The threshold for interventions that triggers an automatic band adjustment has been periodically reviewed and as of August 2011 was USD 600 million. When this level is reached, the band is adjusted by 5 kopecks.

Figure 4.9. **Bank of Russia interventions on the foreign exchange market**

Net purchases of USD and euro, USD billion



Source: OECD calculations based on Central Bank of Russia.

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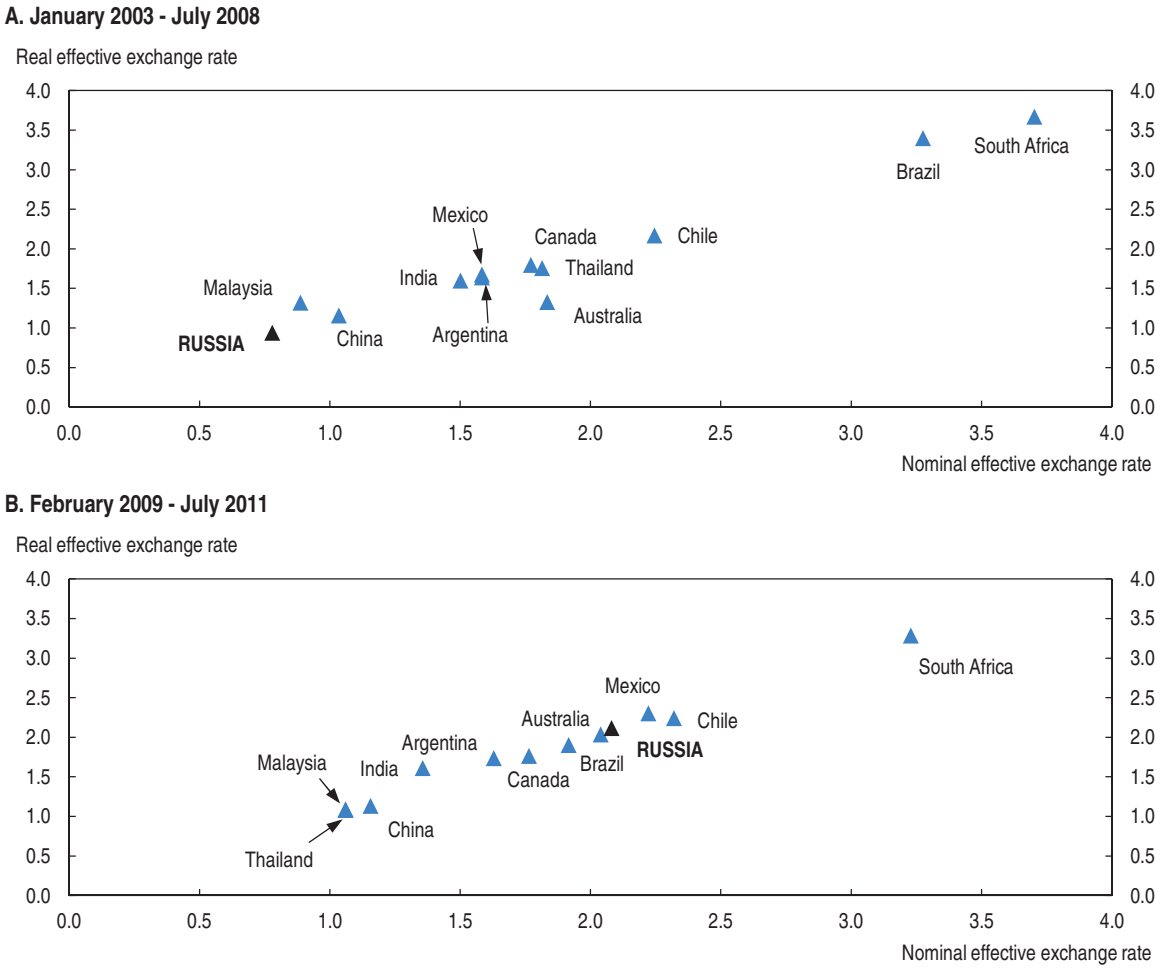
largely to second-round effects from higher inflation expectations, but monetary factors also played a role, as money supply growth turned out to be somewhat excessive. The initial response of the CBR was to "see through" the supply shock and not to tighten policies. In December 2010 it raised the deposit rates by 25 basis points, and in February and May 2011 tightened across the board. By that time, the food price shock began to fade away, aided by a number of policy interventions, such as an extension of a ban on grain exports, selling grain from reserves, and a temporary abolition of import duties on a number of vegetables. The strong harvest in 2011 is now supporting

Figure 4.10. **Nominal and real effective exchange rate variability**



Note: Exchange rate variability is measured as a standard deviation in monthly growth rates.
Source: OECD calculations based on IMF, *IFS Database*.

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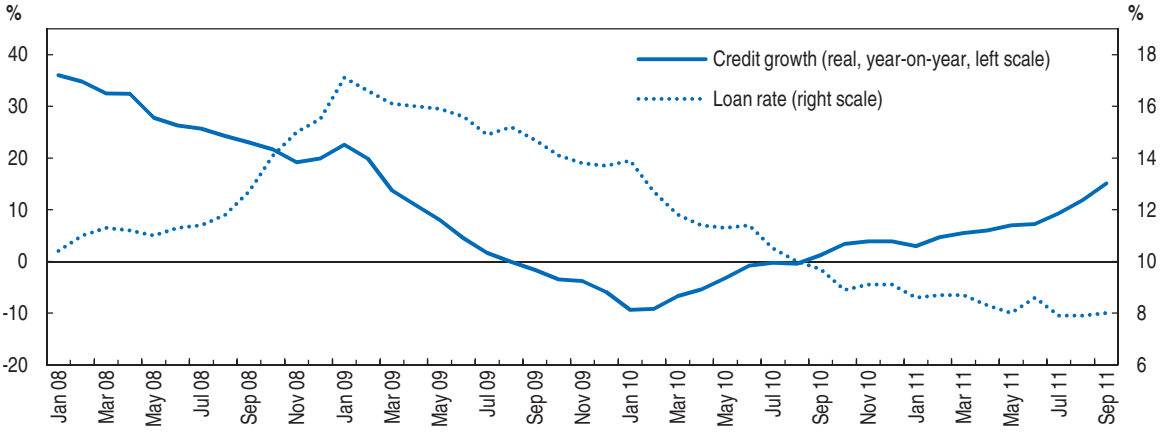
Figure 4.11. **Credit growth and loan rate**



Source: OECD calculations based on Central Bank of Russia and Rosstat.

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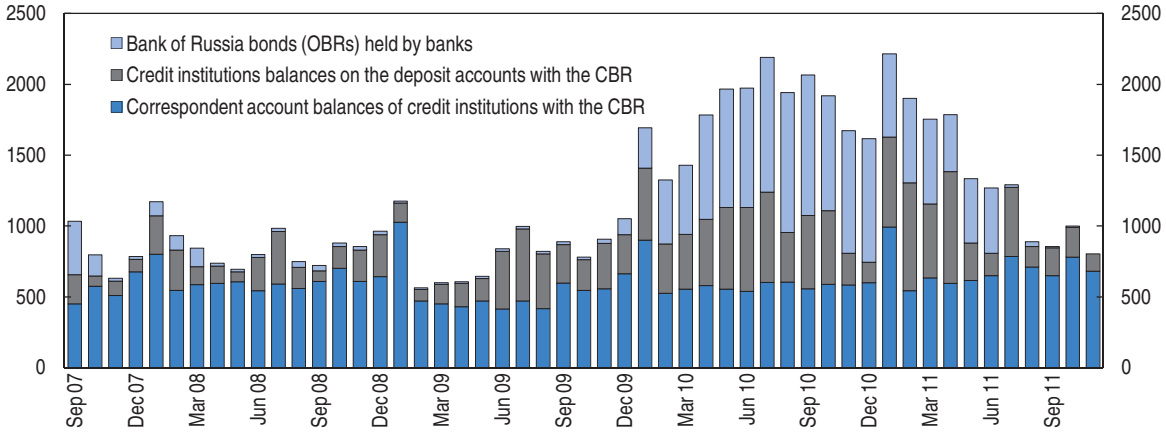
Figure 4.12. **Banking system liquidity and liquidity absorption**

Beginning of period, RUB billion



Source: Central Bank of Russia.

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disinflation, especially given the favourable base effect arising from the unusually poor harvest in 2010. Headline inflation has fallen from 9.6% in May to 7.2% in October.

Overall, the CBR appears to have been relatively successful in achieving its objectives over the last two years. The inflation target (even if not particularly ambitious) was met in 2010, and is on track to be met in 2011, given rapid recent disinflation. Credit activity has been picking up. Sharp exchange rate swings were avoided, but the exchange rate has become much more flexible, discouraging speculation. The more flexible exchange rate policy has not yet been tested by large private capital inflows, as Russia has experienced net capital outflows in 2010 as a whole and so far in 2011, despite the rise in commodity prices until spring 2011. A recent flight to perceived safe-haven assets triggered a renewed wave of capital outflows, and rouble weakness rather than excessive appreciation has become the main concern. The new policy framework is still not well established, and progress is needed on various fronts.

Building on recent achievements to establish a stronger framework for monetary policy

The new framework that emerged in the aftermath of the crisis can be viewed as a first step towards inflation targeting, a regime that the CBR continues to view as its medium-term goal. As discussed in the previous *Economic Survey* (OECD, 2009), the experience with inflation targeting in emerging markets in general and commodity exporters in particular has been generally positive, and this regime may work well in Russia, provided a number of preconditions in the institutional, technical, economic and financial areas are met (some of them may be endogenous, in the sense that they are more likely to be fulfilled after the regime is introduced). The section below builds on this discussion, paying attention to the areas where progress is needed, and taking into account the most recent experience of emerging markets, but also that of advanced economies.

The CBR should opt for a flexible inflation targeting framework

Exogenous shocks to headline inflation, such as the recent food price shock in Russia, pose a challenge for monetary policy. Between 2006 and mid-2008, and then again starting

in 2010, surging international prices for food and energy pushed up headline inflation in both emerging markets and advanced countries. Indirect tax increases implemented as part of fiscal consolidation have recently had a significant impact on headline inflation in many OECD economies, including inflation targeters, most clearly in the United Kingdom. Many central banks around the world chose to not to tighten their policies and instead have allowed headline inflation to be outside the target band for some time, in an expectation that the effect of these temporary factors will wane. For inflation targeters, such an approach has been referred to in the literature as "flexible" inflation targeting. Indeed, Svensson (2011) argues that inflation targeters only conduct monetary policy within a flexible inflation-targeting framework. Of particular importance to the success of this approach is the degree of central bank credibility. If expectations become unanchored, unfavourable exogenous price shocks are more likely to have second-round effects, and a tightening of policies may be required, with potentially strong negative consequences for growth. Given that headline inflation is likely to be affected by exogenous shocks from time to time, the CBR should implement inflation targeting flexibly. It has, however, to make significant progress in boosting its credibility to limit the second-round effects of exogenous shocks.

Strengthening institutional arrangements

Central bank independence is generally viewed as an important factor in implementing an inflation targeting regime. In a recent study, Trunin *et al*. (2010a) assess institutional independence of the CBR as relatively low. In their assessment they concentrate on areas such as the procedures for the appointment of the CBR governor and, more generally, the influence that the executive power and the legislature have on various aspects of monetary policy decisions and administrative matters. The authors also point to a decrease in the central bank's independence over the recent years. Generally, the degree of influence on the CBR on the part of the executive authorities has increased over the last decade, while the influence of legislative power has decreased. The study also concludes that the CBR is in the middle range of central banks in Central Europe and CIS countries in terms of other aspects of independence, such as political and economic independence. This is in line with the findings of Arnone *et al*. (2007) that the CBR has an average level of economic and political independence for countries with similar GDP per capita. The *de facto* degree of central bank independence may increase with the adoption of inflation targeting.

The CBR's interest rate decisions are made by the Board of Directors, including the members responsible for banking supervision. This is unusual, as in inflation-targeting countries, policy rates are usually set by a separate body that may include both the central bank's executives and independent members. The authorities should consider establishing such "Monetary Policy Council" (MPC) to take over the interest-rate setting role.

Improving the transparency of monetary policy

Empirical evidence confirms that transparency is an important factor underpinning the successful conduct of monetary policy. Monetary policy frameworks associated with better anchored inflation expectations and more stable inflation score high on transparency (Minegishi and Cournède, 2009), whereas among countries with higher inflation, those with greater transparency saw their inflation decline faster (Geraats, 2009). This suggests that significant gains in terms of improved inflation outcomes can be achieved by increasing the transparency of monetary policy. The CBR's transparency has steadily increased over the last two decades. Monetary and financial statistics and policy

documents are available at the CBR's website, with most of the information translated into English. Transparency about monetary policy, understood as "the openness of a central bank in stating monetary policy decisions and explaining the reasoning behind them" (Ferguson, 2001),[3] has also increased, in particular over the last two years. The IMF (2011d) reports that Russia now meets all criteria of the monetary policy transparency code. Comparative assessments suggest, however, that the CBR still lags behind major OECD central banks and emerging market peers in this area. Dincer and Eichengreen (2009) compiled an index of central bank transparency for 100 countries, covering a period from 1998 to 2006. Russia's central bank scored 2.5 out of 15 in 2006, a marginal improvement since 1998, which makes the CBR one of the most opaque central banks in the world, according to this methodology. Reflecting advances in transparency over the last years, it is likely that Russia's relative position has improved since the time that this evaluation was made. The OECD Secretariat's assessment, based on a methodology developed by Minegishi and Cournède (2009) that scores transparency along four dimensions (transparency about policy objectives, policy decisions, economic analysis and decision-making process), resulted in an overall transparency index score of 0.5 out of 1 (Table 4.1). This is still below the level for each of eleven OECD central banks in 2009.

Table 4.1. **Transparency of monetary policy in Russia and eleven major OECD central banks**

	Policy objective	Policy decision	Economic analysis	Decision-making process	Overall transparency
Russia	0.42	0.90	0.37	0.25	0.48
OECD average	0.80	0.89	0.73	0.56	0.74
OECD maximum	1.00	1.00	1.00	0.92	0.98
OECD minimum	0.33	0.60	0.41	0.17	0.55

Source: Minegishi and Cournède, 2009; and OECD calculations.

A wide gap between the CBR and the OECD central banks can be found in the area of transparency about economic analysis. The CBR has been publishing quarterly inflation reports since 2004, providing a comprehensive overview of the factors underlying past inflation dynamics. However, the reports do not contain inflation or output projections, as is common among OECD central banks. Annual output projections for three out-years appear in the annual Monetary Policy Guidelines, together with some underlying assumptions, but those are too infrequent for the public to get a good understanding of how the CBR views future economic developments. A forward-looking assessment of the economic situation is particularly relevant for inflation-targeting central banks as they focus their policy decisions on forecasts about future developments. However any framework that uses short-term policy rates to stabilise inflation and output in the medium term is similar to inflation targeting in this respect. If Russia intends to move to such a framework, the CBR should start publishing its own inflation and output projections on a regular basis.

Transparency about CBR's policy objectives is significantly below that of the majority of the OECD central banks for which the assessment was made. The CBR's mandate is enshrined in the Constitution as protecting and ensuring the stability of the rouble. This mandate is also set out in the Central Bank Law. Until recently, the CBR explicitly pursued two objectives, disinflation and limiting real appreciation, operationalised by foreign exchange market intervention to restrict nominal appreciation. Reflecting a move to

greater exchange rate flexibility, the CBR no longer explicitly refers to supporting the competitiveness of domestic producers as an objective of exchange rate policy, but rather defines it as smoothing fluctuations and neutralising market expectations regarding exchange rate movements that are formed on the basis of terms-of-trade trends. However, price stability is not clearly specified as the major objective of monetary policy. Regarding the quantification of the inflation target, there is a certain ambiguity as to the extent to which inflation numbers for the three out-years set out in the annual Monetary Policy Guidelines are also targets. The numbers always seem to involve convergence towards low inflation by the end of three-year period, but there is no accountability mechanism for the CBR if this profile is not achieved.[4]

Most major OECD central banks formulate their objective as price stability in a quantitative manner, and those operating within an inflation-targeting framework clearly define a time horizon over which this objective should be achieved. The latter is desirable both from the accountability point of view and to achieve flexibility, as it allows for a temporary deviation of inflation from the target due to exogenous shocks over which the central bank has no control. To establish an anchor for monetary policy, the Central Bank Law should be amended to clearly spell out price stability as the primary objective of monetary policy, and the CBR should formulate a quantitative target. It may be premature to announce a fixed objective before inflation approaches the level which the CBR would like to target on an ongoing basis, but annual inflation objectives in the Monetary Policy Guidelines should be used as a benchmark to assess the CBR's performance. The central bank should provide explanations for the deviation of actual inflation from the target in the Quarterly Inflation Reviews and spell out the time horizon over which the objective should be achieved.

Significant progress has been achieved in communicating policy decisions. In July 2009, the CBR started providing a comprehensive rationale for its decision, including in cases of no change in policy stance. It has also started to pre-announce the timing (a month, rather than the precise date) of its next Board of Directors meeting to review the policy rates. The statement usually contains some forward-looking guidance. This convergence with OECD practices is welcome. The CBR should build on these achievements and further increase the transparency of its policy decisions, by holding press conferences following policy meetings, or publishing minutes of the meetings and/or voting records.

Monitoring inflation expectations

To the extent that monetary policy works through the management of expectations, it is essential to monitor expectations on a regular basis. Senior CBR officials attest that inflation expectations play a large role in inflation outcomes, and often refer to trends in expectations, but the estimates they use are not public. The CBR should publish regular surveys of expectations. An innovation that would help clarify the picture as regards inflation expectations would be the development of a market for inflation-linked bonds. Major OECD countries issue investment-linked bonds, even if in some cases the limited liquidity of the market and some technical aspects make the interpretation of break-even inflation rates problematic (Garcia and van Rixtel, 2007).

Co-ordination with fiscal policy

Prudent fiscal policy and limited government debt are important preconditions for inflation targeting. The low level of Russia's public debt suggests that "fiscal dominance" of monetary policy is unlikely. Monetisation of the budget deficit is prohibited by law.

However, as state oil funds are held in the central bank, government actions regarding their accumulation and use have an impact on liquidity. This calls for co-ordination between monetary and fiscal authorities to avoid sharp fluctuations in liquidity. More generally, pro-cyclical fiscal policy can generate inflationary pressures and complicate the task of monetary authorities in achieving disinflation. A strong fiscal framework (Chapter 3) would therefore support the credibility of the monetary authorities.

Raising the effectiveness of interest rate policy

Inflation targeting, like any other framework that uses short-term policy rates to stabilise inflation and output in the medium term, requires a well-functioning transmission mechanism of monetary policy. Increasing the still-low level of financial intermediation is essential for this purpose but may be seen as a medium-term objective. A more immediate task is to create conditions for the CBR policy rates to have a meaningful impact on interbank rates. In the environment of abundant liquidity which re-emerged in 2010, CBR's repo rate decisions had more of a signalling effect, although the CBR deposit rates had an impact on interbank rates. Scaling down foreign exchange interventions to the point that they do not serve as a major exogenous source of liquidity is needed to create long-term demand for refinancing. Developing a deeper collateral market for the CBR refinancing operations is another priority that gives a rationale for financing part of the fiscal deficit with government bonds to raise the stock in circulation. One technical but significant issue in the design of the new framework is the actual choice of policy rates. Compared to other economies, Russia appears to have an unusually large number of credit instruments, differentiated by maturity and required collateral. A rate-setting meeting usually results in an announcement about some 20 interest rates. While it is legitimate to have different policy rates for liquidity provision and liquidity absorption, announcing decisions about such a large number of rates (that are sometimes adjusted at a different speed) is cumbersome and can send confusing signals to markets. One rationale offered by the CBR officials for the need to maintain a large number of credit instruments is that different instruments are demanded by various segments of the heterogeneous banking sector. This approach may, however, actually reinforce the fragmentation of the money market (IMF, 2011b). The unusually large number of credit instruments currently in use in Russia could be streamlined, with one or two identified as the main instrument(s) of monetary policy. The remaining instruments should be adjusted at the same speed. The CBR has announced its plans to narrow the corridor of policy rates and abolish some of them, which would be a welcome step.

The role of the exchange rate in the new framework

A move to greater exchange rate flexibility in Russia is an important step in a transition to a new monetary policy framework that focuses on price stability as the main target. As is emphasised in the literature,[5] exchange rate flexibility is a prerequisite for inflation targeting. A flexible exchange rate can also bring benefits in its role as an absorber of term-of-trade shocks, to which Russia is recurrently exposed. At the same time, paying attention to exchange rate developments is warranted. The exchange rate will continue to be an important macroeconomic indicator, which affects the economy through a number of channels. To start with, exchange rate pass-through is significant in Russia, implying that exchange rate fluctuations have a relatively strong direct impact on domestic inflation (Beck and Barnard, 2009). Moreover, exchange rate pass-through appears to be asymmetric, *i.e.* effects from depreciation feed through to domestic consumers to a greater extent than

appreciation, which may reflect weak product market competition (Chapter 2). In addition, despite recent deleveraging, balance sheet effects continue to be important in Russia. At the level of the economy foreign-currency-denominated debt is moderate, at about 25% of GDP, but it is significant for some banks and corporations. One impediment to full exchange rate flexibility is the reaction of the population to sharp swings in domestic currency, in particular depreciation. August 1998, when the rouble was sharply devalued and quickly lost 75% of its value, is not that long ago, and households remain vigilant to the signs of a possible large depreciation. Of course these expectations are partially endogenous, and one can expect that greater flexibility would eventually change perceptions, as depreciation would not be viewed as an irreversible event.

The concern about the relative price competitiveness of domestic producers that can be undermined by rising terms-of-trade also warrants monitoring of real exchange rate developments within an inflation-targeting framework. In particular, the cost of prolonged overvaluation may be significant. Estimates of the equilibrium exchange rate in commodity-exporting countries are surrounded with uncertainty, not least because of the ambiguity with respect to what represents an equilibrium level of commodity prices. This may lead to a controversy not only with regard to the degree but also the direction of misalignment. As an illustration, Ivanova (2007) finds that the Russian currency was undervalued in real terms in 2007 (which should signal CBR's success in stemming real appreciation). IMF (2007) arrives at a similar conclusion, estimating the degree of undervaluation of the rouble between 1 and 20% depending on the model. However Trunin *et al*. (2010b) find that the rouble was overvalued in the years preceding the crisis.[6] Trunin *et al*. also conclude that the real depreciation of the rouble during the crisis may have been excessive relative to fundamentals, and the post-crisis appreciation partially compensates for this effect. The latest IMF Article IV concludes that as of mid-2011 the rouble was somewhat undervalued relative to medium-term fundamentals (IMF, 2011a).

Notwithstanding the difficulties in estimating the equilibrium exchange rate, there are reasons to believe that prolonged episodes of real appreciation may have a lasting negative effect on the sectors open to international competition, which may persist even if the trend is reversed (Krugman and Baldwin, 1987; Blanchard *et al*., 2010). In the light of these concerns, it is not surprising that most inflation-targeting commodity exporters (and also other inflation-targeting emerging market countries) appear to have chosen to follow a "mixed strategy", taking into account both inflation and real exchange rates when setting policy rates; indeed, this may be a theoretically preferable strategy for commodity exporters subject to large real exchange rate shocks that can affect potential output (Aizenman *et al*., 2008). The CBR could consider adopting this strategy, but this will require a thorough understanding of the effects of CBR policy rates on the exchange rate.[7] The CBR's main instrument for counteracting exchange rate pressures has so far been via partially sterilised foreign exchange interventions. Such approach may help mitigating the pressures on the exchange rate in the short term, leaving the policy rate to control domestic objectives (Blanchard *et al*., 2010). There is no obvious reason for Russia to accumulate additional reserves for self-insurance, and costs of sterilisation to the CBR should be weighed against the costs of overvaluation. In any case, interventions in foreign exchange markets should only be conducted to the extent that they are consistent with the primary objective of price stability.

Dealing with large and volatile capital flows

The exchange rate dilemma is even more acute if appreciation pressures arise from large sentiment-driven capital inflows. Unlike in the case of rising terms of trade, the appreciation brought on by such inflows would not reflect a fundamental shift in relative prices and therefore would represent a misalignment relative to fundamental parameters. Apart from a risk of excessive appreciation, other macroeconomic risks, such as a rapid international transmission of shocks, overheating and credit and asset boom-and-bust cycles are associated with large volatile capital flows (OECD, 2011a). Capital flows in emerging markets in general and commodity-exporting countries in particular tend to be pro-cyclical (Frankel, 2011) and thus amplify the effects of commodity booms. Indeed, this was Russia's experience during the last commodity cycle, as discussed earlier.

For a number of reasons, the most recent upward move in commodity prices has not been accompanied by large net capital inflows into Russia. In fact, Russia experienced net capital outflows in 2010 as a whole, and so far in 2011 (Figure 4.6 and Table 4.2), despite a surge in oil prices in 2011 in particular. This mainly reflects the decision of Russian corporations and banks, scarred by the experience of the global financial crisis, to improve their net foreign asset positions. In addition, net FDI has turned negative since 2009, reflecting growing outward direct investment. Russia's recent experience is in contrast with that of other emerging markets. Many have seen significant inflows (Table 4.2), which in some cases have exceeded pre-crisis levels.

It may well be that the CBR's efforts to discourage the perception that exchange rate speculation was a one-way bet have paid off, and despite a large interest rate differential, for many economic agents the exchange rate risk makes it unattractive to borrow abroad. Perhaps a perpetual rise in commodity prices is no longer taken for granted, affecting the perceptions of currency risk. The CBR also introduced a number of prudential measures aimed at discouraging foreign borrowing, for example, higher reserve requirements on liabilities to non-residents (apart from individuals), effective from February 2011. This may have had an effect at the margin. Finally, the weakness of net private capital flows despite high oil prices may have reflected uncertainty associated with the parliamentary elections in December 2011, presidential elections in March 2012 and the composition and direction of the new government following the presidential elections.

Nevertheless, given that ultra-low interest rates in advanced economies are expected to last, the balance of risk and returns may shift so that Russia again attracts large capital inflows, especially if the business climate improves. There is a growing recognition worldwide that capital inflows, despite their many benefits, may be associated with serious risks for emerging markets, so that a balanced policy response is justified. The nature of the optimal response remains a matter of debate, although it is generally agreed that allowing appreciation of the currency (provided that it is not overvalued initially) and fiscal tightening should be the first line of defence (IMF, 2011c). Sterilised interventions are generally viewed as less desirable. The policy rate response is seen as the most controversial, for the reasons already discussed in the context of appreciation pressures caused by rising terms of trade.

Macro- and micro-prudential measures aimed at limiting excessive risk-taking can usefully complement macroeconomic policies. The authorities discussed the possibility of introducing monitoring of the foreign borrowing of state-owned companies, but it is not clear what if any actions will be taken on limiting such borrowing. Temporary market-based disincentives for short-term capital inflows could also be considered, preferably under

Table 4.2. **Capital flows**

	2007	2008	2009	2010	H1 2011
USD billion					
Net FDI	9 157	19 408	–7 165	–9 630	–9 919
FDI into Russia	55 073	75 002	36 500	42 846	23 432
FDI abroad	–45 916	–55 594	–43 665	–52 476	–33 351
Net portfolio flows and financial derivatives	5 885	–36 807	–5 424	–3 502	1 442
Liabilities	13 115	–38 081	–4 939	–8 872	–1 060
Assets	–7 230	1 274	–485	5 370	2 502
Net other flows	79 689	–114 276	–19 044	–12 823	–17 861
Liabilities	139 751	63 239	–25 185	10 011	18 541
Assets	–60 062	–177 515	6 141	–23 834	–36 402
Total net flows	94 731	–131 675	–31 633	–25 955	–26 338
% of GDP					
Net FDI	*0.7*	*1.2*	*–0.6*	*–0.7*	*–1.2*
FDI into Russia	*4.2*	*4.5*	*3.0*	*2.9*	*2.8*
FDI abroad	*–3.5*	*–3.3*	*–3.6*	*–3.5*	*–4.0*
Net portfolio flows and financial derivatives	*0.5*	*–2.2*	*–0.4*	*–0.2*	*0.2*
Liabilities	*1.0*	*–2.3*	*–0.4*	*–0.6*	*–0.1*
Assets	*–0.6*	*0.1*	*0.0*	*0.4*	*0.3*
Net other flows	*6.1*	*–6.9*	*–1.6*	*–0.9*	*–2.1*
Liabilities	*10.8*	*3.8*	*–2.1*	*0.7*	*2.2*
Assets	*–4.6*	*–10.7*	*0.5*	*–1.5*	*–4.3*
Total net flows	*7.3*	*–7.9*	*–2.6*	*–1.8*	*–3.1*
Total net flows – selected emerging markets					
% of GDP					
Brazil	*6.5*	*1.7*	*4.4*	*4.7*	*5.7*
Mexico	*2.1*	*2.5*	*2.6*	*3.4*	*4.0*
South Africa	*7.6*	*4.2*	*4.7*	*3.0*	*3.4*
Turkey	*7.5*	*4.7*	*1.6*	*7.9*	*12.1*

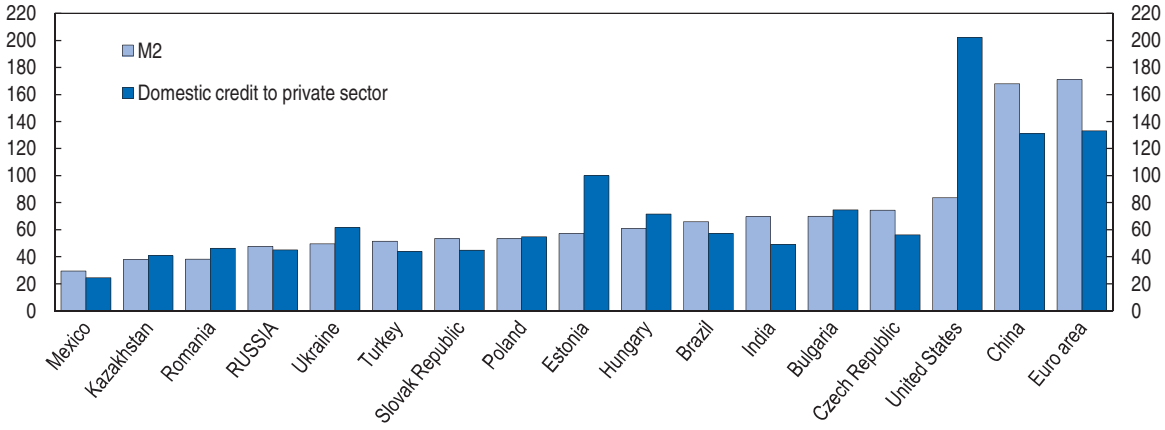
Source: IMF *International Financial Statistics Database and* central banks of Brazil, Mexico, Russia, South Africa and Turkey.

multilateral surveillance within international frameworks, such the OECD *Code of Liberalisation of Capital Movements* (OECD, 2011b). Russian officials have on several occasions reconfirmed Russia's commitment to the free movement of capital, and re-introducing restrictions on cross-border capital movements does not currently seem to be part of the policy debate.

In the longer term, structural policies can play a significant role in helping to reap the benefits of capital flows while reducing the vulnerabilities associated with them. Reforms aimed at financial deepening are of particular importance. The level of monetisation in Russia has increased but remains low in international comparison (Figure 4.13). Financial markets have been developing fast, but lag behind the OECD economies and some emerging markets with respect to a range of products and as a source of investment financing. This limits the capacity to absorb large inflows and redirect them to the most productive use. Competition-friendly reforms of product markets, while important in their own right (Chapter 2), may also be instrumental in achieving the objectives related to capital flows. While less restrictive product market regulation can lead to more capital inflows, there is evidence that it is associated with a more stable composition of inflows, *i.e.* more FDI and less debt (Furceri *et al.*, 2011).

Figure 4.13. **Level of monetisation**

Percentage of GDP, 2010 or latest year available[1]



1. 2008 for Slovak Republic.

Source: World Bank, *WDI Online Database.*

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Box 4.2. **Recommendations on monetary policy**

Stepping up preparations for inflation targeting

Foreign exchange interventions should be conducted only to the extent that they are consistent with the primary objective of price stability.

Designate one or two policy rates as the main instrument(s) of monetary policy.

Consider establishing a Monetary Policy Committee with a mandate to set policy rates.

Improving monetary policy transparency

Clearly spell out price stability as the primary objective of monetary policy by amending the Central Bank Law. The time horizon over which the objective should be achieved should also be specified.

Hold press conferences following policy meetings and publish minutes of the meetings and/or voting records.

In conjunction with the planned move to an inflation-targeting regime, publish the Central Bank's own projections of inflation and output, together with underlying assumptions, for the period over which the inflation target should be achieved.

Publish regular information about inflation expectations. Consider developing a market for inflation-linked bonds.

Developing a framework to deal with large-scale capital inflows

In the event of a surge of large short-term capital inflows leading to excessive pressure for appreciation of the rouble, a range of policy responses should be considered, including fiscal tightening, macro- and micro-prudential measures, sterilised interventions and temporary market-based disincentives for such inflows. Structural reforms aimed at financial deepening would increase the capacity to absorb large inflows and direct them to the most productive use, while pro-competition reforms of product markets can alter the composition of capital inflows in favour of FDI, which is less prone to instability than other forms of inflow.

Notes

1. The Russian government has set a timetable for gradually increasing regulated prices, including for gas, electricity tariffs for households and utilities, which implies their annual adjustment above projected inflation levels. For example, gas tariffs for households increased by 24% in 2009 and 17% in 2010.
2. From 2005, the CBR targeted the exchange rate of the rouble *vis-à-vis* a USD-euro basket. The weight of the euro gradually increased from 10 to 45%. Over 2006-07, the CBR allowed a gradual appreciation of the rouble *vis-à-vis* the basket, but in nominal effective terms it has depreciated slightly, reflecting bilateral exchange developments with other trading partners, including the CIS countries.
3. As cited in Minegishi and Cournède (2009).
4. Part of the ambiguity for Russia is that the country has never had a year with the level of inflation that a central bank would sensibly target on an ongoing basis. So the CBR's inflation numbers in the three out-years are always on a downward slope to get to that point. Other countries generally have fixed targets (whether a point or a range), in which case projections can be differentiated and compared with those.
5. See, for example, Mishkin (2000).
6. These authors also claim that the CBR's methodology of calculating the real exchange rate underestimates the degree of real appreciation before the crisis.
7. The optimal response would depend on the nature of the exchange rate shock. The CBR's attempts to stem depreciation pressures during the crisis with interest rate hikes were not particularly successful.

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Chapter 5

Increasing energy efficiency as a means to achieve greener growth

Although energy use has declined substantially in absolute terms since the Soviet era, Russia still has one of the most energy-intensive economies in the world. The high degree of energy intensity, combined with relatively carbon-intensive energy use, results in Russia accounting for a disproportionately large share of global carbon emissions: it is the sixth largest economy in the world in PPP terms but the fourth largest emitter of greenhouse gases. Moreover, low energy efficiency contributes to poor air quality, and Russia has one of the highest rates of premature mortality attributable to air pollution in the world. The scope for profitable energy efficiency investment in Russia is huge, and indeed a good deal is already happening, but a number of constraints and market failures make this process slower than optimal. This means that improving energy efficiency should be a top priority for government policy in Russia. Ambitious official targets for energy efficiency gains have been established, but so far the policy measures identified appear insufficient to meet them. The clearest imperative is to remove government interventions that result in below-market prices and to introduce new policy instruments to ensure that negative externalities associated with fossil fuel combustion are reflected in prices. The installation of meters for energy use should also be speeded up, and there is scope for greater sophistication in tariff structures to allow marginal costs to be better reflected in prices facing consumers. A number of other complementary measures may be warranted, but should be subject to careful cost-benefit analysis.

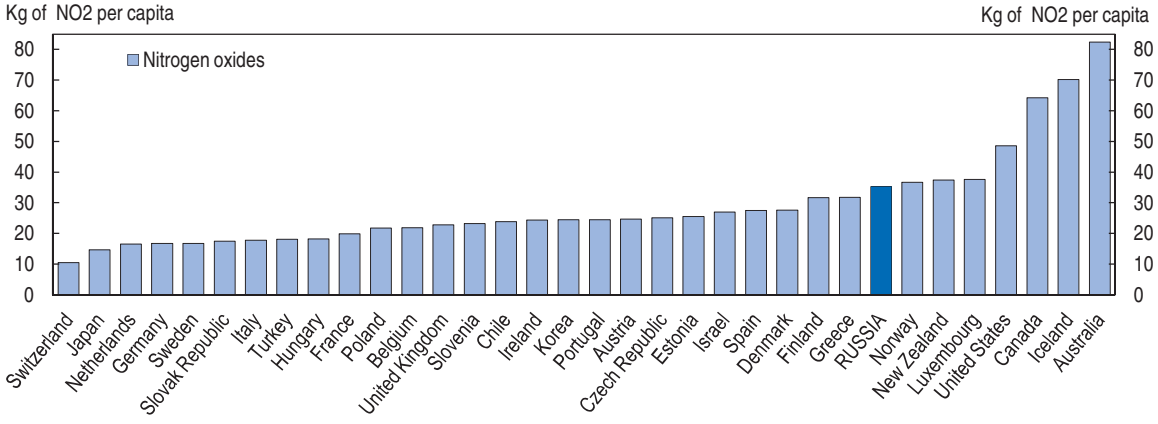
The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

The case for focussing on policies to raise energy efficiency in Russia

Russia's production and consumption of energy is closely bound up with its generally poor environmental indicators. In large part as a legacy of economic policies under the Soviet Union, Russia has relatively high levels of pollution. Decades of emphasis on heavy industry as a means to development resulted in a distorted economic structure and significant environmental damage. According to Yablokov (2007), 11% of the land of Russia's residential areas is contaminated by dangerous metals, with much higher proportions in some regions, while nearly 30% of samples of surface water used for drinking exceed permissible levels of pollutants. As to air pollution, while international comparisons on available indicators of air quality do not suggest an extreme problem (Figure 5.1), the maximum permissible concentration of harmful substances in the atmosphere is exceeded in 185 cities and industrial centres in which over 60 million people live (Eurasian Development Bank, 2009). Vehicle traffic, which was not a major issue during Soviet times, is now the main cause of air pollution in major cities, although in some of the most polluted sites fixed-point industrial sources remain the most important factor. According to the Blacksmith Institute (2007), five of the 30 most polluted places in the world are in Russia, with industrial air pollution a major cause in sites like Norilsk and Magnitogorsk. Air pollution is estimated to be responsible for 17% of the morbidity rate in children and 10% in adults, and the rate of premature mortality attributable to air pollution is among the highest in the world (Figure 5.2).

Figure 5.1. **Emissions of air pollutants**

Nitrogen oxides (NO_x) man-made emissions per capita, 2008[1]



1. 2007 for Korea and 2006 for Chile.

Source: OECD, *Environment Database*, emissions of air pollutants.

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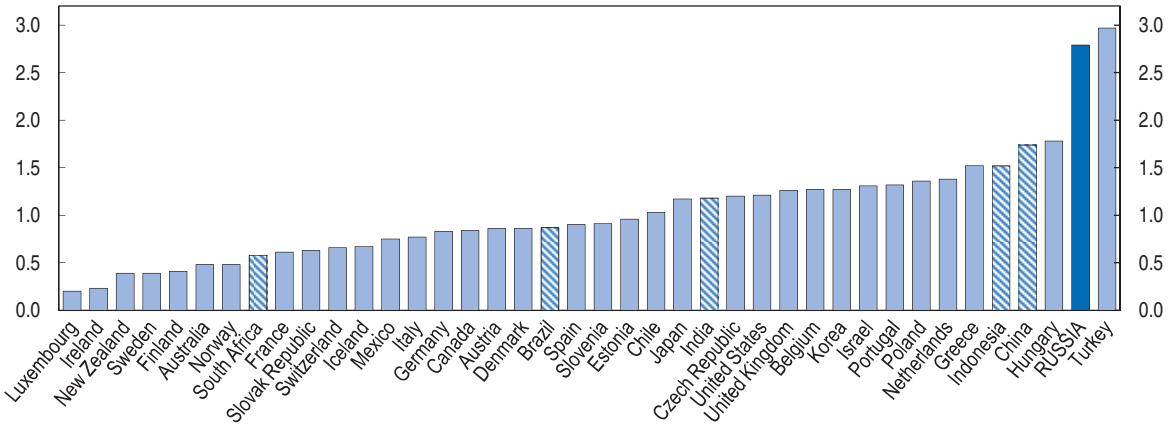
Figure 5.2. **Burden of disease attributable to outdoor air pollution**

DALYs per 1 000 capita, 2004[1]



1. Disability-Adjusted Life Years (DALYs) is a summary measure of population health that combines the years of life lost (YLL) as a result of premature death and the years lived with a disease (YLD). In the case of outdoor air pollution, the DALYs consist in the YLL part only, as there is currently no adequate information on the morbidity part.

Source: WHO, *Global Health Observatory Data Repository*.

StatLink http://dx.doi.org/10.1787/888932540106

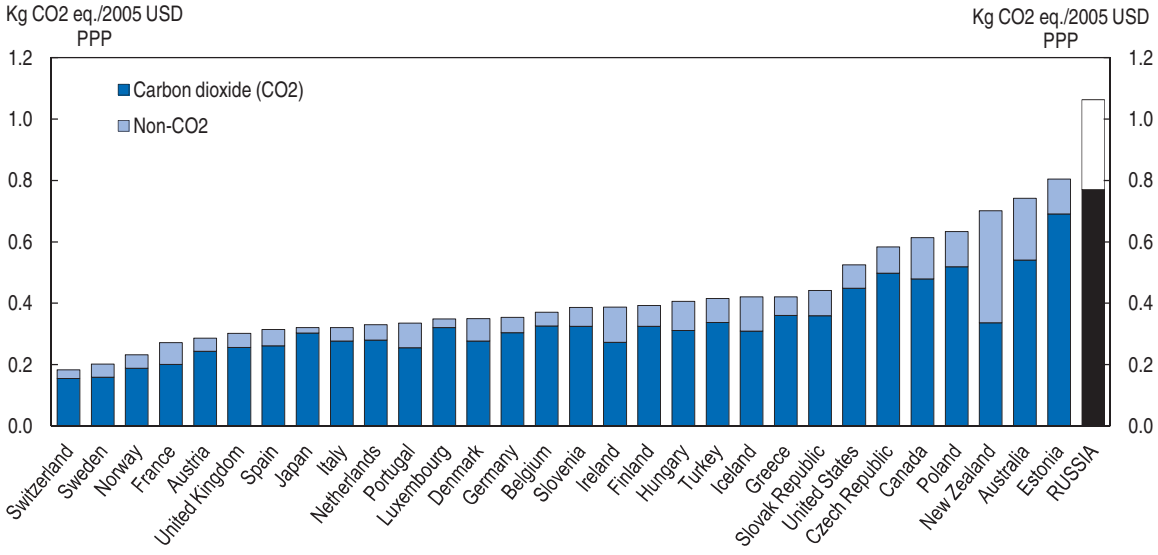
Russia's economy is also very carbon-intensive: greenhouse gas (GHG) emissions per unit of GDP are higher than in any OECD economy (Figure 5.3). Despite its relatively low income per capita levels, Russia is the fourth largest overall emitter of GHGs in the world. Climate change is likely to prove costly to Russia. Minister of Natural Resources Yuri Trutnev has stated that the effects of climate change could reduce the level of GDP by up to 5%, while the cost of dealing with extreme weather events will amount to around RUB 60 billion (approximately 1% of 2011 GDP) annually. In particular, permafrost melt could damage infrastructure in large parts of the oil- and gas-producing regions and places such as Norilsk (the centre of nickel production in Russia) and Novoye Zemlya, where there are radioactive waste sites. It also endangers the integrity of water supply and sewer systems.

The largest single factor behind the high level of air pollution and GHG emissions is energy consumption. Russia continues to have a very energy-intensive economy (Figure 5.4). This suggests that substantial environmental gains could be achieved by reducing the energy intensity of Russia's economy. Detailed analysis of the technical potential for energy savings, comparing Russian average consumption in various sectors to the lowest average levels elsewhere and the best available technologies, suggests that Russia's energy efficiency potential is about 45% of primary energy consumption (Bashmakov, 2011). Thus, the technically feasible energy savings in Russia for a given output is similar to the primary energy consumption of France or the United Kingdom. This assessment does not take account of the costs of achieving the energy efficiency gains. What makes the case for prioritising energy efficiency particularly compelling is that the net present value in monetary terms of most energy-saving projects is positive at current energy prices. According to CENEf, of the 294 mtoe in technical energy efficiency potential, some 200 mtoe was estimated to be profitable at 2010 energy prices.

The apparent abundance of profitable opportunities to raise energy efficiency in Russia raises the question of the extent to which policy action is needed. If waste is so extreme and monetary gains from reducing it so potentially large, standard economic

Figure 5.3. **Greenhouse gas emissions**

Per unit of GDP, 2008



Note: Data for GHG emissions are excluding emissions/removals from LULUCF (Land Use, Land-Use Change and Forestry).

Source: OECD calculations based on United Nations Framework Convention on Climate Change (UNFCC), *Greenhouse Gas Inventory Data*, *IEA Database* and World Bank, *WDI Database*.

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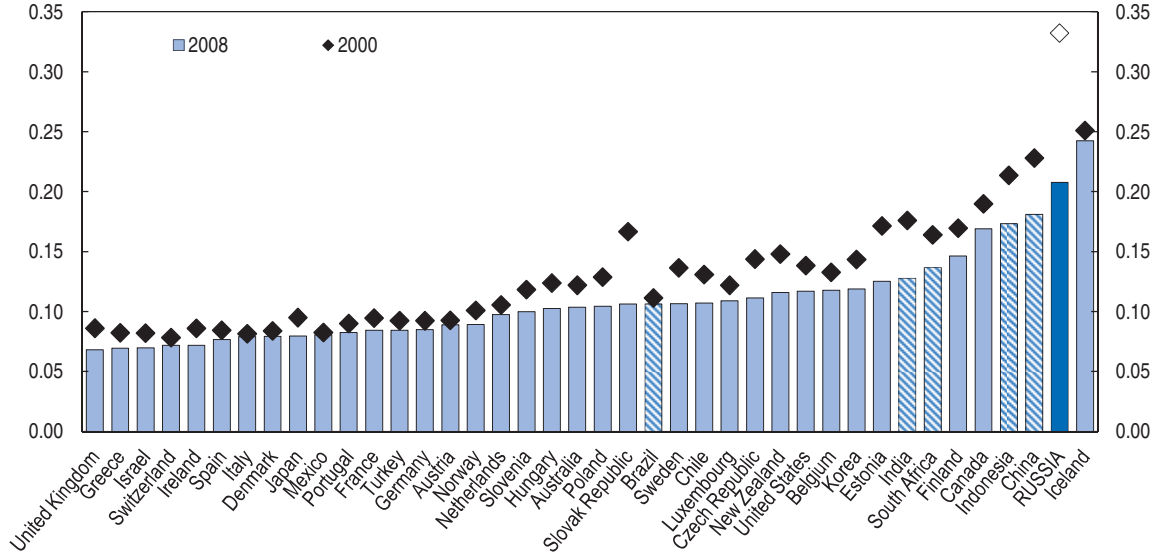
Figure 5.4. **Total energy consumption per unit of GDP**

Tonnes of oil equivalent (toe) per thousand 2005 US dollars of GDP calculated using PPPs



Source: IEA, *World Energy Statistics Database* and World Bank, *WDI Database*.

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theory would suggest that the necessary changes will come about spontaneously. Indeed, improvements have been occurring and continue even in the absence of policy interventions, as the private sector undertakes profitable energy efficiency investment. But to the extent that there are market failures, such changes may be inefficiently slow and smaller than socially optimal. In the case of energy consumption, there are numerous

possible market failures at play, and some of these may be particularly acute in Russia. Information is incomplete, with households, firms and government less than fully aware of the potential gains from energy efficiency investments. Even where information is available, private discount rates may differ from the social discount rate (for various reasons including risk pooling and non-additivity of individual utilities), or agents may be subject to habit persistence or other forms of incomplete rationality. Various capital market imperfections may arise, such as a lack of access to lending for some potential borrowers, either because they don't have collateral or because lenders are not confident of being able to enforce contracts. Also, lenders may not be geared to energy efficiency lending, partly because of a lack of training to evaluate loans. Infrastructure decisions may create lock-in effects, whereby inefficient technologies are maintained because the cost of switching to efficient ones is greater than the expected payoff. Also, externalities can drive a wedge between market prices and social gains. In addition, apart from identifiable market failures, the availability of rents, whether from natural resource extraction and/or weak competition, may allow some firms to survive despite wasting energy. Furthermore, there may be a case for policy intervention where there is a small risk of catastrophic outcomes, for example arising from climate change. Combining the positive externalities of reduced energy use, including the contribution to global efforts to mitigate climate change, with the potential pecuniary savings suggests that reducing energy usage should be a top priority of government policy in Russia.

Energy efficiency is closely connected to Russia's aspirations to modernise the economy. With low energy efficiency, Russian tradables have either to compete through other cost advantages, such as low wages, or to rely on subsidised energy prices, which encourages overconsumption and worsens environmental outcomes. Raising energy efficiency is therefore key to improving living standards in the long term. Achieving an energy efficient economy will require modernisation of technology, policies, and attitudes. Given the scale of investments needed to significantly improve Russia's energy efficiency, the scope for output and employment in a range of related activities is substantial. Such activities include the construction of energy efficient buildings and the, manufacture of energy efficient boilers, heaters, motors, equipment, lighting, meters, pipes and, insulation materials, as well as the exploitation of renewable energy sources. There is also a great need for services such as energy audits and energy efficiency consulting, together with education and training in these areas.

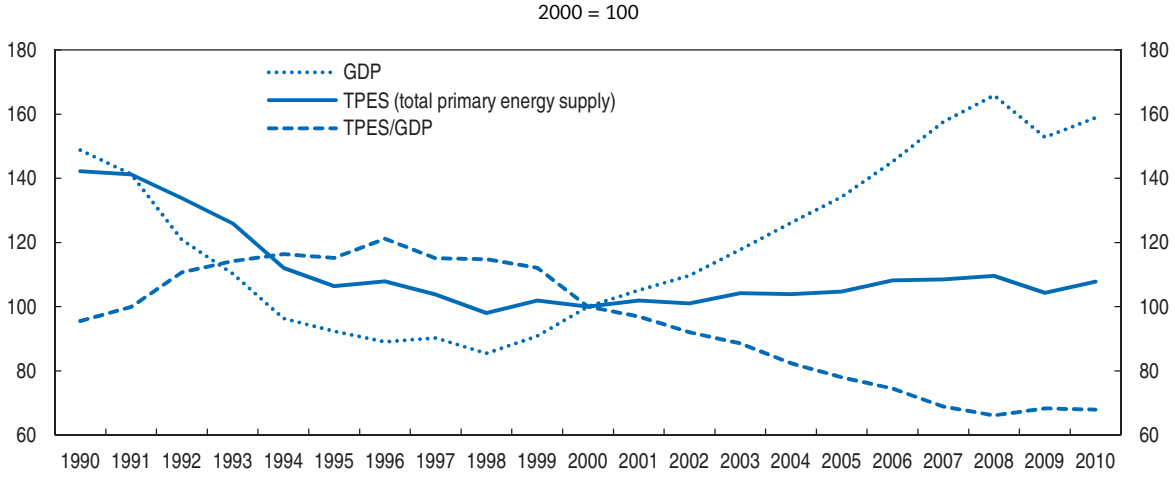
The challenge of improving energy efficiency is also tied in with the need to improve the business climate, discussed in Chapter 2. High prices of equipment to monitor energy use and improve efficiency are partly due to the weakness of competitive pressures in Russia and the cost-inflating effect of corruption; for example, Mosgorexpertiza estimated that the cost of meters was three times as high as it should be, owing in part to corruption (Livchak and Zabegin, 2011). In addition, weaknesses in the rule of law hinder investment, particularly where long payoff times are needed. Some profitable energy efficiency projects may therefore not be undertaken because of the sub-optimal investment climate.

Investments in energy efficiency are broadly analogous to investments in energy production, and in an oil-, gas- and coal-producing country like Russia, this can be thought of in terms of additional exploration and development of hydrocarbons. A reduction in domestic consumption of a million tonnes of oil equivalent means an extra million tonnes of oil equivalent available for export, just like the discovery and development of a million-tonnes of oil. Particularly given an initial situation in which export prices for oil and gas

exceed domestic prices, the switch from domestic consumption to export of that amount of energy raises national income over and above the reduction in costs for the energy saver. In fact, however, for any given cost of investment, energy saving is more beneficial than additional energy production, since energy production and consumption convey negative externalities in terms of environmental impacts. Production of renewable energy is similar to energy savings in that, relative to fossil fuel energy production, it reduces negative externalities.[1] Higher energy efficiency on the part of firms also increases their international competitiveness, other things equal.

The energy intensity of the Russian economy has, in fact, already declined considerably from its peak in 1996. Beginning from extremely high levels at the end of the Soviet era, energy consumption fell rapidly during most of the 1990s as economic output collapsed. The decline in energy usage was, however, less dramatic than the fall in output – in some sectors, notably households, energy usage is not very sensitive to economic activity, while some industrial energy use is of an "overhead" nature and therefore relatively inelastic to changes in output – so that the energy intensity of the economy actually rose during this period. When economic growth resumed in 1999, the previous pattern was reversed, with a gradual increase in absolute energy consumption, but a steady fall in energy usage per unit of GDP (Figure 5.5). That trend was interrupted by the recession in late 2008 and the first half of 2009, but has resumed since then. GHG emissions followed the same profile, with the result that although Russia has achieved a very large reduction in absolute emissions (Figure 5.6), the fall in the carbon-intensity of GDP since the beginning of transition does not stand out compared to other countries, since the rise in GDP over the period 1990-2009 was relatively modest.

Figure 5.5. **Evolution of Russian GDP, primary energy consumption and energy intensity of GDP in 1990-2010**



Source: CENEf. Data on primary energy consumption were assessed by CENEf based on energy balances developed in line with the IEA methodology. Data on energy consumption for 2010 are preliminary.

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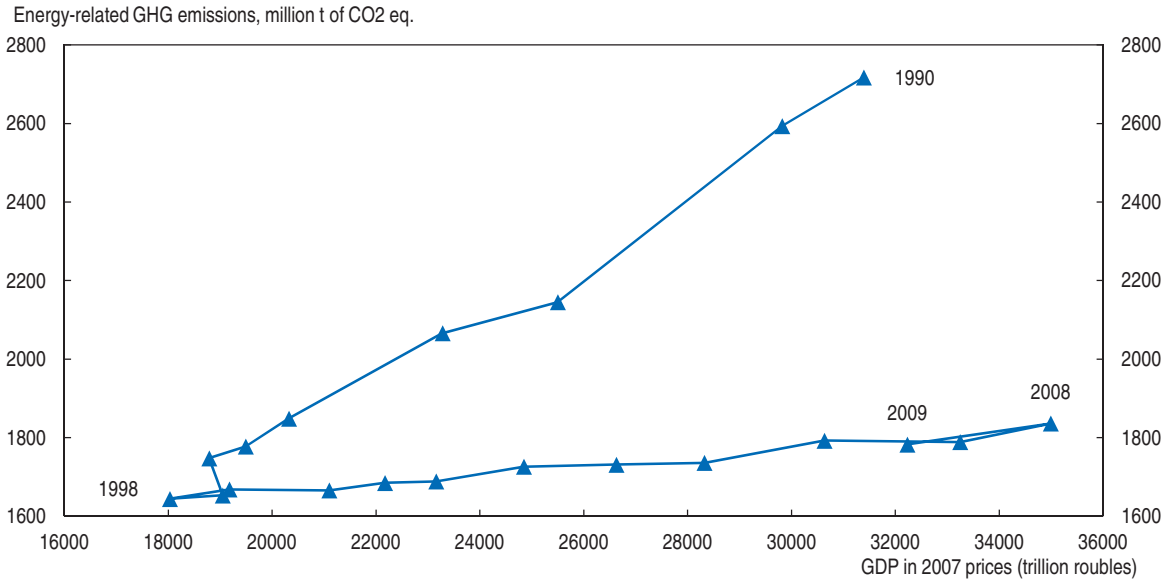
A decomposition of primary energy consumption from 2000 to 2009 allows the contributions of different sectors and factors to be discerned. With a 15-sector breakdown of the economy, transportation was the main contributor to the growth of energy consumption, accounting for 54% of additional consumption in 2000-09. Power generation

Figure 5.6. **Evolution of Russia's energy-related GHG emissions and GDP, 1990-2009**



Source: CENEf based on data from Russia's *GHG inventory report to UNFCCC*.

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was the second largest contributor, followed by non-energy use (use of energy products as feedstock for the production of other goods such as plastics) and the residential and commercial sectors. Industry contributed to the growth of energy consumption until 2008, but a sharp fall in industrial output during the crisis meant that over the period 2000-09 its contribution was insignificant. Other factors restrained the growth of energy consumption: for example, there was a decline in losses in the transmission and distribution of electricity and in the generation of heat.

At this level of sectoral aggregation, structural changes and within-sector energy intensity both contribute negatively to energy demand growth from 2000 to 2009 (by 116.2 million tonnes of oil equivalent (mtoe) and 116.6 mtoe, respectively), but these factors are slightly outweighed by the effect of the growth of activity (+261.2 mtoe). Overall energy demand therefore grew by a fairly modest 29 mtoe or around 5%.

In a more detailed analysis the 15 sectors were more finely divided into 44 subsectors: 24 subsectors for manufacturing, 4 for transport, and 3 for the residential sector, with the other 12 sectors remaining unchanged. At this level of aggregation, the contribution of energy intensities to the growth of energy demand was –79 mtoe, while the negative contribution of structural change at the sectoral level rose to 154 mtoe. Thus, structural changes (shifts between sectors) accounted for two thirds of the reduction in the energy intensity of GDP between 2000 and 2009, with just one third resulting from within-sector changes in energy intensity. Most of the latter (an estimated 64.5 mtoe or 82%) corresponds to changes in technology – an upgrading of the energy efficiency of plant, equipment, vehicles and residences but other factors include the effects of variations in weather and energy prices, changes in the share of heated space in residences and variations in capacity load: as some energy use (*e.g.* lighting and heating) is insensitive to changes in output, energy intensity tends to decline as capacity utilisation increases. Improvements in technology accounted for a 10% reduction in the energy intensity of GDP between 2000 and 2009. This was similar to the decline in OECD countries, meaning that Russia did not

achieve any catch-up in technical efficiency over this period, despite the large decline in the energy intensity of GDP. Most of the decline in Russia's energy intensity of GDP was attributable to other factors, especially changes in the sectoral composition of GDP and industrial product mix. As to what drove such technical efficiency gains as did occur, much of it just reflects replacing worn-out equipment with the latest vintage, but given the absence of any significant policy efforts at the level of the federal government specifically to raise energy efficiency in that period (or before), it is likely that much of the improvement that occurred was due to the rise in energy prices. In turn, most of that rise in energy efficiency reflected the increase in international oil and gas prices rather than policy action, although there was also a narrowing of the gap between domestic and international prices.

Causes of Russia's high energy intensity

One important explanatory factor for energy consumption, both across countries and through time in Russia, is income. Given that Russia is a middle-income country, however, this factor is actually holding down Russia's energy consumption relative to most OECD countries. If Russia were to achieve OECD average per capita income without a decline in energy consumption per unit of GDP, its per capita energy consumption would be higher than that of the United States.

One factor pushing up energy usage in Russia is the harsh climate. Even compared to other cold-climate countries, however, energy consumption and GHG emissions per unit of GDP are high. Russia's GDP energy intensity is 180% higher than in Norway, 100% higher than in Finland and 68% higher than in Canada. Nor can climate explain the deterioration in Russia's energy efficiency over time. In the mid 19th century Russia may have been the most energy efficient country, despite its severe climate (Putnam, 1953). The Russian stove in a wooden house was the most efficient energy system of that time, and cross-country comparisons of weighted average technical energy efficiency for the most widely used energy-consuming systems suggest that energy efficiency in 1860 in Russia was 3-4 times higher than in France, Germany and the United States.

Another important factor is industrial structure. Energy-intensive industries like mining and heavy industry account for a relatively large share of Russian GDP, while the share of services is smaller (Table 5.1). While industrial structure is partly a function of exogenous factors like natural resource endowments, it also depends in part on policy decisions, including importantly decisions affecting the pattern of relative prices in the economy. It is true, however, that Russia inherited an economic structure from the Soviet era that was skewed towards energy-intensive activities. The energy intensity of the national income of the former Soviet Union was nearly double that of Western Europe (Bashmakov and Beschinsky, 1990), while the gap in industrial energy intensity was even larger: the level for the USSR was 3 times higher than that of the United States (with industrial structure accounting for 45% of the gap).

The age and inefficiency of the capital stock in Russia is a third reason for the high energy intensity of the economy. For example, 39% of Russia's fossil-fuel based power plants were more than 40 years old in 2010, compared to 28% in the United States, 22% in the EU and 12% in Japan (McKinsey, 2009). Electricity transmission infrastructure is also relatively old, contributing to transmission losses about double those in the United States. The high average age of Russia's capital stock is due in large part to the deep recession of

Table 5.1. **Gross value added by activity**
As a percentage of total value added, 2009

	EU27	Japan	United States	Russia
Agriculture, hunting and forestry, fishing	1.7	1.4	0.9	4.7
Mining and quarrying	0.7	0.1	1.7	8.9
Manufacturing	14.9	17.6	12.3	14.5
Of which:				
Food products, beverages and tobacco	1.9	2.6	1.5	3.0
Textiles and leather products	0.6	0.3	0.2	0.3
Pulp, paper and paper products; publishing and printing	1.2	1.4	1.7	0.6
Coke, refined petroleum products and nuclear fuel	0.2	1.2	0.9	2.6
Chemical, rubber, plastic and other non-metallic mineral products	2.9	2.6	2.2	2.1
Basic metals and fabricated metal products	2.1	2.0	1.2	2.2
Electrical, optical and transport equipment, machinery and equipment n.e.c.	5.5	7.3	4.6	3.5
Manufacturing n.e.c.	0.6	0.4	0.7	0.8
Electricity, gas and water supply	2.4	3.3	1.9	4.0
Construction	6.3	6.1	3.8	6.2
Services	74.0	71.5	79.4	61.6

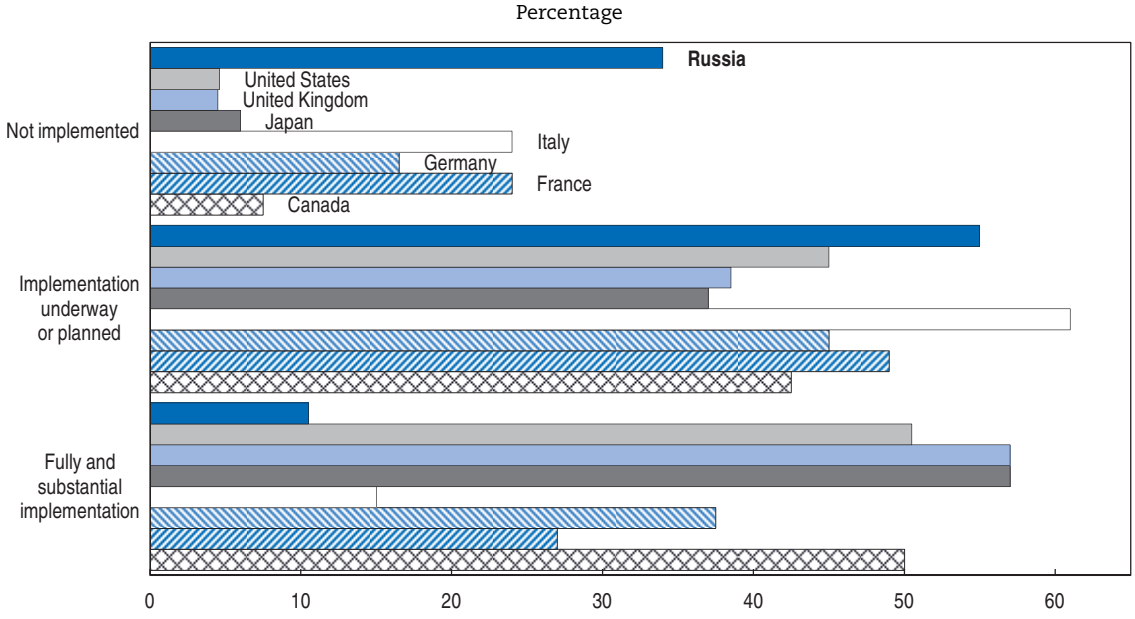
Source: OECD calculations based on Eurostat, *OECD STAN Database* and Rosstat.

the 1990s, which left capacity utilisation at very low levels, inhibiting investment even when output rebounded from 1999 onward. Until recently there was a good deal of spare capacity in many industries. Thus the replacement of old energy-inefficient plant and equipment was slow to occur. In addition, the Soviet era capital stock reflected non-market decisions and a resource-intensive approach to development. Even for its time, it was relatively energy inefficient: Bashmakov and Beschinsky (1990) estimated that less efficient technologies accounted for 35% of the gap in industrial energy intensity *vis-à-vis* the United States.

An important aspect of the contribution of the capital stock to the energy intensity gap between Russia and other countries is the energy industry itself. In addition to the high losses in electricity transmission noted above, large amounts of associated gas are still flared off owing to a number of technical and economic problems with getting that gas into the pipeline network – notably, failure to ensure genuine third party access to the Gazprom-controlled pipeline network. There are no precise numbers for gas flaring, but according to estimates of the US National Oceanic and Atmospheric Administration (NOOA), Russia flared more than 40 billion cubic meters of natural gas in 2008, more than any other country (NOOA, 2009). This amount is equivalent to about a quarter of gas exports to Western Europe, representing potential additional exports of some USD 12 billion a year (0.8% of GDP). Losses of gas in transmission and distribution are also thought to be high, owing in large part to ageing and poorly maintained networks (IEA, 2006). Energy losses in heating generation and distribution are even larger. District heating supplies about 70% of homes with heat and accounts for about a third of total energy consumption in Russia, and many district heating systems have exceeded their designated operational lifetimes (IEA, 2004). Moreover, technical design, as well as the quality of boilers, pipes and insulation are all lower than in the West, with the result that production and distribution losses are much higher than in OECD countries. Meyer and Mostert (2000) estimate that domestic hot water consumption in Russia is as much as 6 times that in Western Europe, mainly because of water losses in heat distribution.

While truly exogenous factors such as climate and semi-exogenous ones like industrial structure can explain a good deal of Russia's high energy intensity, policies have also played an important role, including in the post-Soviet era. In an IEA evaluation of G8 countries as regards their performance *vis-à-vis* the IEA's list of 25 energy efficiency policy recommendations for different sectors, Russia ranked last as regards the number of areas in which there was "full and substantial implementation of policies", and first on the number of recommendations scored "not implemented" (IEA, 2009). Across all the three scales Russia scored last not only for all policy recommendations (Figure 5.7), but also for each sector. At the same time, it may be noted that as a non-member of the IEA Russia is not requested to meet the same standards as member countries. Also, given the numerous steps taken since 2009, Russia would undoubtedly fare better if the comparison were re-done.[2]

Figure 5.7. **Proportion of relevant recommendations by level of implementation: all G8 countries, all recommendations**



Source: OECD/IEA (2009), *Progress with Implementing Energy Efficiency Policies in the G8*.

In particular, to an extent that has varied over the last twenty years and across different users, Russia has subsidised energy for domestic consumers. According to IEA estimates, Russia accounted for nearly 10% of the USD 558 billion in global fossil fuel subsidies in 2008, with gas subsidies accounting for about three fifths of the total and electricity subsidies the rest. Measuring the extent of energy subsidies, whether in Russia or elsewhere, is not straightforward, and the OECD Secretariat has been holding expert workshops with its member countries to improve estimates of support to fossil-fuel production and consumption. The most common approach to measuring gas subsidies (used by the IEA, for example) is to treat the gap between the domestic price and the export price net of transportation costs as a subsidy. In the case of a large gas producer like Russia, however, switching gas from the domestic market to exports, in order to equalise the profitability of the marginal unit in both markets, would mean lower export prices than otherwise. That does not imply an absolute fall in export prices, since European demand

for Russian gas is expected to grow, in part because of the phasing out of nuclear power in some countries. Multiplying domestic sales volumes by the current gap between the export netback price and the domestic price therefore overstates the size of the subsidy. On the other hand, there can be other forms of subsidisation than the setting of domestic prices below the international price (corrected for transport and distribution costs). Tariffs, regulations, tax advantages, transfers and subsidised credits are among the other instruments that can be used by governments to reduce the domestic cost of energy. Domestic energy consumption in Russia has been subsidised in various ways, including the use of export tariffs on oil, differential domestic-*versus*-export pricing for gas, and prices for electricity, gas and heating that have at times been held below cost-recovery levels. As of 2009 Russia's prices for petrol, fuel oil, gas and electricity remained lower than in any OECD economy, including those with lower per capita incomes (Figure 5.8). There are also budgetary transfers to low-income households to buy energy, and artificially low domestic gas prices have held cost-recovery price levels for electricity and heating below marginal social costs. All these forms of subsidisation, whether explicit or implicit, have encouraged overconsumption of energy, including by reducing the incentive for firms to replace old energy-inefficient plant and equipment or for households to improve the energy efficiency of their homes and transport.

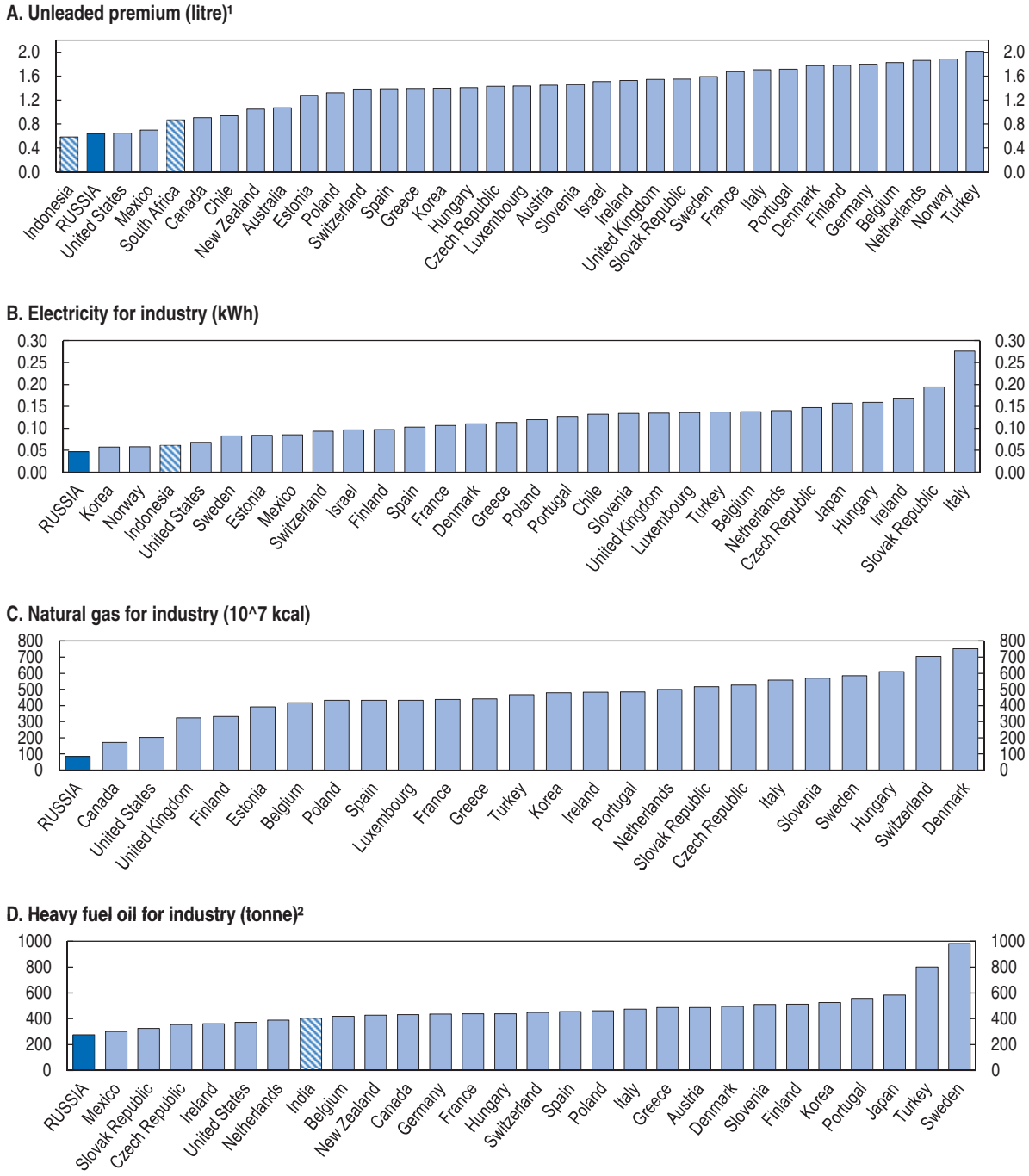
In addition, even now many consumers do not face a price mechanism at all for their marginal consumption. Especially for heating, metering is not done at the level of the individual residence: apartment buildings were billed for the total usage of the building, so that most individual households have not borne the marginal cost of their consumption and consequently also do not benefit from energy saving investments or changes in their consumption pattern. According to the Ministry of Energy, metering of households' electricity consumption was above 90% as of 2009, but for water this was only 60% and for heating 30%.

While energy prices have often been below market levels in Russia, in other countries prices facing consumers are usually deliberately set above the market equilibrium in order to correct for negative externalities such as climate change and air pollution. Some countries have adopted a carbon tax or cap-and-trade regimes for carbon emissions, both of which raise the equilibrium price of coal, oil products and natural gas. Other "green taxes" such as fuel or vehicle taxes are also used to varying extents in OECD countries, and in a number of countries high feed-in tariffs are used for renewable electricity production. Russia has yet to introduce a carbon tax or cap-and-trade system for emissions, and makes relatively light use of other environmental taxes There are as yet no feed-in tariffs for renewable energy in Russia.

Apart from measures to raise the price of energy above market levels, OECD economies tend to use a range of other policy instruments to lower the cost of achieving energy efficiency improvements and/or reducing hydrocarbon use. These instruments are generally employed to a lesser extent (and in some cases not at all) in Russia. One example is subsidies or tax deductions for renewable energy or energy efficiency projects. Russia also has lower levels of awareness of energy efficiency issues than most OECD countries, in part because energy has traditionally been seen as abundant, so not worth economising.[3] In a survey of managers of 625 industrial companies across Russia, the IFC (2006) found that savings from energy efficiency projects were greatly underestimated, and that many companies did not seek financing for energy efficiency investments. Nearly a quarter of surveyed managers did not believe that their company's electricity consumption could be

Figure 5.8. **Retail energy prices**

USD per unit, 2009



1. Unleaded premium gasoline (95 RON).
2. Low sulphur fuel oil. High sulphur fuel oil for Canada, Ireland, Mexico, New Zealand, Turkey, United States, Russia and India.

Source: IEA, *Energy Prices Database*.

StatLink http://dx.doi.org/10.1787/888932540201

reduced at all. The behavioural economics literature demonstrates the importance of habit-persistence and the influence of the behaviour of peers, underlining that the failure of ingrained views and behaviour to change immediately in new circumstances can have significant and long-lasting effects. Russia has lagged many OECD countries when it comes to projects for disseminating information about how to save energy and the gains from doing so, as well as in areas like eco-driving and fuel efficiency standards.

Another aspect of policy failures to date in this area is the variation across regions in implementing energy efficiency initiatives. While some regions, most notably Moscow, were pioneering energy efficiency activities well before the federal government became active, policy efforts were very uneven, and in the absence of impetus from the centre, by 2008 (before the renewed push from the federal government for energy efficiency measures) some programmes were faltering or winding down, while other regions never initiated any. Since 2010 all regions have been required to come up with an energy efficiency programme, and in 2011 subsidies from the federal government have become available.

Capital constraints may also be a factor explaining the failure of energy efficiency in Russia to converge more quickly on OECD levels. Compared to most OECD countries, Russia has a higher proportion of low-income households, and low-income households have tighter budget constraints and often cannot access capital markets to invest in energy efficiency. Moreover, Russian financial institutions have little experience or expertise in lending for energy efficiency investments. Bank lending to households in general, though it has grown rapidly in the past ten years, remains underdeveloped compared to OECD economies, and loans are generally of short duration, ill-suited to investments in energy saving projects with payback periods of several years. Such capital constraints can result in an amount of energy efficiency projects that is inefficiently low from an economic perspective.

Policy responses to date

Russia was a late starter as regards policy efforts on energy efficiency in particular and environmental issues more generally, but it has become much more active in recent years. Although a first law "On Energy Conservation" was adopted as long ago as 1996, this framework law was very general and failed to launch real mechanisms to promote energy efficiency. Its main positive effect was to give some impetus to policies at the regional level. The next significant step was in February 2003, when new federal building codes were established to reduce specific energy consumption for space heating in buildings by 40%. In the same year the government released its energy strategy to 2020, which provided for an increase in energy prices which was "economically-warrantable and acceptable for consumers", the creation of financial incentives for energy saving and a range of administrative measures to foster energy efficiency. However, other than the increase in gas and electricity prices, which was arguably motivated less by energy efficiency concerns than by the need to provide for adequate returns for energy companies to invest in new capacity, there was little follow-up in the following few years.

President Medvedev made energy efficiency a priority of his administration early on, linking it to the need to modernise the economy. As he said in an address to the Federal Assembly in November 2009:

> "[W]e also need to think about the natural resources that we can preserve and pass on to future generations. This is why I think that increasing energy efficiency and making the transition to a rational resource consumption model is another of our economy's

modernisation priorities. We can resolve this task only if each of us reflects on our personal responsibility for energy saving, as people are now doing throughout the globe."

A presidential decree in June 2008 called for a 40% reduction of energy intensity by 2020, and this was followed up in November 2009 by the adoption of Federal Law No. 261 "On energy saving and improving energy efficiency", pursuant to which a number of laws have subsequently been amended and more than 30 new regulations enacted. Among other things, the law requires metering of energy use, setting energy efficiency classes and mandatory energy efficiency labelling for buildings, phasing out incandescent light bulbs, a 3% annual reduction of specific energy consumption in public buildings and the offering of packages of energy efficiency measures to residents by housing companies. A new institution, the Russian Energy Agency, was created in 2009 as the main body responsible for implementing the energy efficiency strategy through 2020, and energy efficiency was listed as the first of five priorities in the work of the recently created Commission on Modernisation and Technological Development of the Economy. A major effort is being put into creating reliable and detailed indicators of energy efficiency. For example, Rosstat's National Household Income Survey has begun to collect data on the amount, age and energy efficiency ranking of large household appliances and the type of light bulbs used.

Another important step was the issuance of Government Resolution No. 2446-r in December 2010, which committed federal funding to support energy efficiency activities in the framework of the federal programme "Energy Conservation and Energy Efficiency to 2020". The federal government allocated RUB 70 billion over the period 2011-20 to this end. Most of this amount will go to co-finance regional energy efficiency programmes, with regions competing for federal co-financing based on their scores on development and implementation of the programme. The remainder of the federal allocations (14-25%) is to be used for the development of the information system to support monitoring of energy efficiency activities, educational activities and research and development. A government decree outlining procedures for ranking the regions and identifying volumes of co-financing came into force in September 2011. Eligible regions will be able to receive matching funding from the federal budget for allocations from the regional budget for the implementation of energy efficiency programmes, up to a limit of RUB 500 million. It is expected that 40 to 60 regions will be eligible for assistance each year. Consolidated regional and municipal budgets are expected to provide a much larger amount than the federal government, a total of RUB 625 billion over the period 2011-20. Thus overall public allocations are projected to be RUB 695 billion, which would represent about 7% of the overall spending expected under the programme: the bulk of projected expenditure will be by the private sector.

An important source of energy efficiency gains is renovation and replacement of the housing stock. Pursuant to a 2007 law on reforming the housing and utility sector, Government Resolution No. 1050 of December 2010 identifies budget sources and the structure of financial packages for multifamily apartment buildings over the period 2011-15. The federal energy efficiency programme sets annual building renovation targets: 2% per year for residential buildings and 4% per year for public buildings.

Each year the government sets ceilings for the increase of regulated energy prices over a three-year period. Generally, the ceilings have been set to allow increases in real terms of energy prices, although the rationale has not been encouraging energy efficiency *per se* but

rather to ensure the financial viability of energy producers. In 2011, however, the government decided to limit regulated electricity prices to the rate of inflation for 2012-14. For gas, a 2007 decree targeted the equalisation of profitability from exports and domestic sales by 2011, but the time-frame was extended to 2014 after the spike in oil prices (to which most gas export prices are linked) in 2008 and the recession of 2008-09.

The 2009 law on energy efficiency provides for the introduction of long-term electricity tariffs and a new methodology for tariff-setting based on allowed rates of return on the regulatory asset base (RAB), which is designed to let public utilities keep savings generated by gains in energy efficiency. The law allows for the cost of implementing energy efficiency measures to be integrated into regulated tariffs. It also requires that there be a time-of-day pricing option on the price menu to smooth power load curves, resulting in a more efficient distribution of the supply of power through the day and less need for capacity than otherwise. For heating, guidelines on the application of RAB methodology were approved in September 2010.

The 2009 energy efficiency law and the regulations pursuant to it require that appliances and buildings be labelled by energy efficiency class. The law also requires the development of a federal information system on energy conservation and energy efficiency, while the federal energy efficiency programme to 2020 allocates RUB 2.45 billion over the period 2011-20 for data collection and monitoring. Government Resolutions No. 391 of June 2010 and No. 20 of January 2011 set out the development of the information system and reporting rules for government agencies and regions. The information system is to collect all information on "energy passports" which are to be based on mandatory or voluntary energy audits.

The energy efficiency programme through 2020 also commits RUB 2.3 billion over the period 2011-20 for training energy efficiency experts and another RUB 4.1 billion to foster energy-efficient behaviour in the general public.

The government sees the energy efficiency programme as making a substantial difference to the growth profile of Russia's greenhouse gas emissions. The cumulative reduction in greenhouse gas emissions foreseen in the energy efficiency programme to 2020 relative to a no-programme scenario is projected to amount to 2.4 billion tonnes of CO_2-equivalent over the period 2011-20, more than 10% of total emissions over that period. In December 2009 at the COP-15 meetings in Copenhagen, Russia committed to keep its 2020 emissions at 15-25% below the 1990 level, although that still represented an increase from 2010.

Assessment of current policies and recommendations

Although many steps in the right direction have already been taken, it is too early to say how well these steps are being implemented, in part because of shortcomings in data, as well as the fact that most measures are very recent. In any case, overall, the current strategy still appears to fall short of what is needed. Notably, the energy strategy to 2030 foresees continued large increases in overall energy consumption (48% from 2005 to 2030), with substantial increases also in greenhouse gas emissions (26.5% between 2015 and 2030).[4] Moreover, in the assessment of the IEA, measures already identified will not deliver the target of a 40% decrease in energy intensity of GDP by 2020 (IEA, 2011). In their New Policies scenario, Russia does not achieve the 40% target until towards 2030.

The New Policies scenario reflects current policy commitments, with some adjustments for likely shortfalls in implementation, given implementation shortfalls with the previous, abandoned, energy efficiency programme for 2002-05. It is also taken into account that the financial resources allocated by the government appear insufficient to deliver the official targets for energy savings. When the energy efficiency programme to 2020 was created, it was foreseen that there would be RUB 481 billion in allocations from the federal budget plus RUB 300 billion in guarantees, but in the end the amounts committed were just RUB 70 billion for programme measures and RUB 100 billion in guarantees. Given that federal money leverages regional outlays, a cut of RUB 411 billion relative to the original plan can result in overall programme expenditures being as much as RUB 2 trillion lower. Similarly, a rouble of government guarantees can generate several roubles in loans, so the final effect of a cut in guarantees is much larger than the amount of the reduction. The contribution of government co-financing for energy efficiency projects in the regions is therefore likely to be much smaller than originally envisaged. Another reason for adjusting downward the effects of policies on energy efficiency is shortages in expertise and institutional capacity. There is already evidence that these constraints are binding. For example, mandatory energy audits are required by end-2012 for about 200 000 firms – public utilities and energy producers, government-owned industrial enterprises, and private firms with energy costs over RUB 10 million. This would require that the Russian Energy Agency approve nearly 700 audits a day through the remainder of 2011 and 2012, which is beyond its capacity. Moreover, there are not enough energy audit companies to conduct all the targeted audits.

With stronger policies and fewer slippages in implementation, modelled in the IEA's "450" scenario – countries' GHG emissions in this scenario would be consistent with limiting atmospheric CO_2 concentrations to 450 parts per million – Russia achieves the same trend economic growth rate (3.6% a year on average through 2035) with roughly flat energy consumption and a reduction in CO_2 emissions from current levels (such that the upper end of the Russian target range for reducing CO_2 emissions relative to 1990, 25%, is met). More ambition on energy-saving and emissions reduction appears both feasible and warranted. To achieve this, Russia's policy initiatives in this area should rely less on administrative measures and put more emphasis on financial incentives, which allow agents to make their best choices.[5] Crucially, there is not yet a sufficient recognition of the extent to which the relative price of energy should rise in Russia and why this is important.

The first point in this regard is that substantial energy subsidies remain in place, and there is no policy commitment to eliminate all of them. While there are plans to raise domestic gas prices to export netback levels over time (in the IEA's New Policies scenario this is assumed to happen by 2020), there is no intention to replace export duties on oil and oil products with taxes that are neutral as between domestic sales and exports, and regulated electricity prices have recently been capped in real terms over the next three years. Moreover, the date on which annual tariff increases are to occur is being switched from January to July, which means that households will have had no increase in electricity tariffs over the 18-month period between January 2011 and July 2012. Subsidised energy for low-income households is used as an anti-poverty measure, with no plan to replace these measures with potentially more efficient measures, such as means-tested transfers.[6] Clearly, in a country with a harsh climate like Russia, care needs to be taken to ensure that all citizens have electricity and heat, as a matter of survival. Within that constraint, however, Russia should work towards a system in which regulated tariffs are set

to achieve economic efficiency, while low-income households are assisted via the tax and benefit system. For example, low-income households could be issued heating (and perhaps also electricity and gas) coupons to buy energy at the market rate. Brazil is one country where fuel subsidies have been replaced by transfers: the Bolsa Familia cash transfers to low-income families were supplemented by an extra amount to compensate the removal of subsidies on LPG, commonly used for cooking by the poor (Grosh *et al.*, 2008). Also, the social impact of raising energy prices can be mitigated by public investment in energy efficiency, reducing fuel consumption.

The other important dimension of the need for higher relative prices for energy is that energy generated by fossil fuels should be priced *above* the market level, to take due account of the negative externalities associated with burning hydrocarbons. There are no concrete plans in Russia to impose a carbon tax or introduce a cap-and-trade system for carbon emissions. This is particularly unfortunate given the size of Russia's energy system and its importance as a player in international negotiations on addressing climate change. Russia is a major participant in the Kyoto protocol, the third largest CO_2 emitter, and the largest national terrestrial carbon sink. It therefore has an important role to play in negotiations on the global arrangements beyond the end of Kyoto in 2012. Current projections suggest that Russia's GHG emissions will only stabilise and fall back if Russia adopts a mechanism to appropriately price emissions: for example, the IEA's 450 scenario involves the introduction of an emissions trading system from 2020. Under other scenarios emissions carry on rising. Moving forward quickly to create such a mechanism would advance the goal of energy efficiency and facilitate an ambitious global agreement. Russia could also make increased use of various green taxes to provide financial incentives to further energy efficiency and environmental objectives. Such taxes not only make energy use and/or polluting activities more costly, resulting in substitution to other less harmful ones; the OECD report *Greening Household Behaviour* (OECD, 2011), based on a survey of more than 10 000 households in a selection of OECD countries, confirmed the findings of other studies that higher fuel costs reduce car use in OECD economies. Moreover, green taxes can encourage the development of environmentally sound and/or energy-saving technologies. Environmental charges could also be useful in addressing the serious problem of traffic jams in Moscow – a congestion charge along the lines of the one adopted by London and a number of other cities could help to improve air quality, reduce fuel consumption, cut congestion and thereby increase average driving speeds in the capital, thus providing a good example of how environmental objectives and economic efficiency can go together.

As is recognised by the government, it is essential that end-users of energy bear the full economic cost of their consumption. This means first of all full metering of end-users of energy in various forms – electricity, gas and heat – as well as water. This is a key means to ensure that demand responds to higher prices. The *Greening Household Behaviour* report found that price-based incentives encourage energy and water savings. For instance, OECD households charged for their consumption on a volumetric basis consume about 20% less water than those who are not charged, and are more likely to install water-efficient equipment at home. The government programme for energy efficiency includes full installation of meters in households, but the timetable has slipped from 2012 to 2017. The government should provide financial incentives to speed up the process, ensuring that all parties have an interest in installing meters. Consumers must also be able to regulate their consumption, which in the case of heat in particular is not yet always the case, although the situation in this respect is improving. Another aspect to reflecting marginal

costs in prices is to ensure that energy consumers are offered multi-level tariffs differing by time of day. This has begun, but is still far from universal. Where possible, lower tariffs for interruptible electricity service should also be offered, so that power can be shut down to some customers when capacity limits are reached. A related point is that investment in energy storage is sometimes a lower-cost alternative to building additional capacity for electricity generation, but is generally neglected.

In order to assess progress and permit the sharing of gains from energy efficiency improvements, there is a great need for better measurement of energy use. The collection of data on energy consumption, although improving, remains inadequate, in part linked to other shortcomings, such as incomplete metering. Rosstat prepares an annual energy balance for the whole country, albeit not yet on the basis of internationally accepted methodology, but there are no equivalent balances at the regional level. Trudeau and Murray (2011) assess Russia against the IEA's energy efficiency indicator template and confirm that the availability of data at a disaggregated level is relatively poor in Russia. The transport sector, which has been the major source of energy demand growth in Russia, is a particular weak point. In this respect it would be useful to better monitor the vehicle stock through the mandatory car registration and review process. It may be that the demands for data collection in the current strategy are too broad and need to be prioritised to allow speedy and effective implementation. The government agencies involved in implementing the energy efficiency strategy should work with Rosstat and energy efficiency experts to arrive at a streamlined list of high-priority indicators of energy efficiency. The government should also put more resources into the collection of energy statistics.

Apart from the key and multifaceted problem of achieving energy pricing conducive to increasing energy efficiency and discouraging negative externalities, there are several other ways the government strategy could be improved. It should be noted, however, that some of the shortcomings that have become apparent in the policy framework are a function of the speed with which Russia has sought to catch up to more advanced countries as regards energy efficiency policies. This is perhaps inevitable given the shortage of energy efficiency experts and the lack of experience among policy-makers and implementing agencies with such policies. OECD countries have generally developed their policies over decades, whereas most measures in Russia have been put in place in the past three years. It highlights the need for Russia to train officials in energy efficiency policies, such as via secondments of officials to energy efficiency agencies in OECD countries.

One lacuna in the existing strategy is that although transportation has been the main driver of energy consumption growth in Russia over the past decade, the energy efficiency programme to 2020 contains relatively few measures in this area. If prices properly reflect marginal social costs, there is no strong rationale for other measures targeted at particular sectors, but at least until that is the case, some additional instruments may convey net benefits, yielding energy efficiency gains in a cost effective way. Among the measures in wide use in the OECD which could be considered in Russia are mandatory fuel efficiency standards for cars and trucks, programmes for eco driving, development of traffic management and road infrastructure, and support for small, hybrid and electric cars. The latter could be combined with a congestion charge for Moscow, with the application of reduced charge rates for hybrids and electric cars from the charge. Transport is also an area where information on energy use is lacking.

Industry, which accounts for over one quarter of energy use, is another relatively neglected area in the 2020 strategy. As with transport, the strategy established many indicators, but few policy instruments to achieve them. The main focus in this area is on energy audits, where, as noted earlier, current resources appear inadequate to meet the objectives. One approach that might help to reap energy efficiency gains in industry would be to remove obstacles to the emergence of energy service companies specialising in such areas as lighting systems, electric motors, and steam systems. Relatedly, there is considerable scope to develop financial services to support energy efficiency projects and the financing of energy service companies.

There may also be a case for encouraging innovation (whether domestic or imported) to lower the cost of energy efficiency improvements and/or greenhouse gas abatement. In general, any such inducements should be technology-neutral, to avoid political or technological lock-in to particular high-cost technologies. Cutting import tariffs on goods related to energy efficiency would be one promising means to this end, which would have the additional advantage of also increasing competition domestically. As regards encouraging domestic innovation efforts, it will generally be better to avoid conflating the different externalities that lead to inefficiently low innovation (of all sorts) and inefficiently high environmental damage. A broad innovation strategy can address the former, including as regards environmental technologies, while taxes and other environmental policy instruments will usually be sufficient to deal with the latter (OECD, 2010).

Other possible high-return measures include the development of instruments to mobilise financing for the renovation of housing stock and speeding up the rate of renovation and implementing passive building demonstration projects, given that building-owners may not always have the right incentives to upgrade energy efficiency. These activities have a relatively low risk attached to them, but usually require some co-ordination among agents or heavy upfront investment. There may be a case for some provision of loan guarantees.

Energy efficiency is an area where, beyond price mechanisms and regulation, behavioural "nudges" may be effective and cheap. A growing number of OECD economies are using such non-coercive mechanisms in a variety of policy areas, including to encourage saving and healthy lifestyles. An example of a "nudge" to help reduce primary energy consumption would be to offer electricity tariffs including renewable sources – a "green tariff" – as the default option. Customers would have to opt out of the green tariff to pay the standard rate, which would correspond to wholly non-renewable generation, and which would tend to be lower, as the cost of electricity production via renewables remains higher than traditional generation. Customers could be further encouraged to choose the green tariff by referring to the growing number of people in their region who are doing likewise. Another way of exerting this sort of peer pressure for energy saving would be for electricity, gas, and heating bills to be accompanied by scores indicating how the household's consumption compares to their neighbourhood. Beyond such measures, well designed publicity campaigns can help establish a social norm of energy efficiency, helping to undo traditional energy-wasting attitudes. Real-time electricity monitors, subsidised or given away free, can give colour-coded information on current consumption.

As can be seen from the foregoing, there are a great many measures that could be taken to improve energy efficiency, and several channels to influence behaviour. It would be easy to overstretch administrative and financial resources via an overly fragmented

approach, and the risk of relying too heavily on command-and-control measures is omnipresent, particularly in Russia. To assist in prioritisation it would be useful to expand the use of cost-benefit analysis to evaluate different approaches and projects. In so doing, it would be important to include not just pecuniary considerations but all social costs and benefits, such as the benefits of avoided GHG emissions and other environmental impacts, as well as energy security (the risk of system failures if infrastructure is not modernised). Monitoring and evaluating programmes and, discontinuing those that are not effective, will also be important to maximise the net benefits of the strategy.

Box 5.1. **Recommendations on increasing energy efficiency as a means to achieve greener growth**

Ensuring that energy users face the full marginal social cost of their energy consumption

- Phase out all subsidies for domestic energy use. Work towards a system in which regulated tariffs are set to achieve economic efficiency, while low-income households are assisted via the tax and benefit system.
- Speed up the installation of meters for all forms of energy and water, including via the use of financial incentives.
- Introduce mechanisms (such as a carbon tax or a cap-and-trade system for GHG emissions) to price in the negative externalities of fossil-fuel-based energy.
- Expand the use of green taxes to reduce energy consumption and discourage environmentally harmful activities.
- Ensure that all energy consumers are offered multi-level tariffs differing by time of day, and introduce lower tariffs for interruptible service.

Improving other aspects of the energy efficiency strategy

- Use cost-benefit analysis to evaluate and monitor different approaches and projects, including all social costs and benefits, such as the benefits of avoided GHG emissions and other environmental impacts.
- Require that government agencies involved in implementing the energy efficiency strategy work with Rosstat and energy efficiency experts to arrive at a streamlined list of high-priority indicators of energy efficiency.
- Create specific policy packages to help small and medium-sized enterprises improve their energy efficiency.
- At least until energy prices adequately reflect marginal social costs, implement a number of measures in the transport sector, such as mandatory fuel efficiency standards for cars and trucks, programmes for eco driving, and development of traffic management and road infrastructure. A congestion charge for Moscow should also be considered, with the application of reduced charge rates for hybrids and electric cars from the charge.
- Reinforce policies to improve industrial energy efficiency, such as removing obstacles to the development of energy service companies specialising in such areas as lighting systems, electric motors, and steam systems.
- Develop instruments to mobilise financing for the renovation of the housing stock and speed up the rate of renovation.

Notes

1. See Livchak and Zabegin (2011).
2. Production of renewable energy is similar to energy savings in that, relative to fossil fuel energy production, it reduces negative externalities.
3. The importance of entrenched habits and attitudes may help to answer the question of why, if policies leading to overconsumption of energy have resulted in inferior welfare outcomes they were adopted and maintained anyway. Under Communism physical production tended to be overvalued. In addition, both in the Soviet period and afterwards, policies have sometimes been based on the mistaken belief that the advantage of being an energy exporter should be used to subsidise domestic industry.
4. While reducing the overall consumption of energy is key to realising economic and environmental objectives, the composition of energy use is also important. The government's energy strategy to 2030 foresees a large increase in coal combustion, with no provision for incentives to install pollution-reducing equipment (OECD, 2008).
5. The drawbacks of administrative measures to change behaviour are perhaps illustrated by the reaction to the first stage of the mandated phase-out of incandescent light bulbs. When 100 watt bulbs were prohibited as from 2011, Russian producers began to make 95 watt bulbs.
6. Russia does provide financial support to families paying more than 22% of their income on housing services (excluding rent) and communal bills (water, sewage and energy). This threshold is too high to help all families in need, however – one result is that many choose not to pay.

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