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BETTER POLICIES FOR BETTER LIVES

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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 29 October 2013, revised in the light of the discussions and finalised on 9 December 2013. The draft report was prepared for the Committee by Artur Radziwill and Lilas Demmou under the supervision of Andreas Wörgötter. Wide-ranging background research was provided by Yana Vaziakova with more specific inputs by John Earle, Maria Godunova, Alexander Kolik, George Kopits, Anna Kurguzova, Hartmut Lehmann and Natalia Tourdyeva. Excellent research assistance was provided by Corinne Chanteloup. Efficient secretarial support was provided by Josiane Gutierrez and Mikel Iñarritu.*

This is the ninth OECD Economic Survey of the Russian Federation. *The previous one was issued in December 2011. 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, 2012

(Numbers in parentheses refer to the OECD average)[a]

LAND, PEOPLE AND ELECTORAL CYCLE

Population (millions)	143.3		Population density per km²	8.3	(34.5)
Under 15 (%)	15.6	(18.1)	Life expectancy (years, 2011)	69.0	(80.0)
Over 65 (%)	12.9	(15.3)	Men	63.2	(77.3)
Foreign-born (%, 2010)	7.8		Women	75.1	(82.8)
Latest 5-year average growth (%)	-0.1	(0.6)	Last presidential election	March 2012	

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	2017		Primary	3.9	(2.5)
In current prices (billion RUB)	62 599		Industry including construction	36.0	(27.7)
Latest 5-year average real growth (%)	1.8	(0.6)	Services	60.1	(69.8)
Per capita, PPP (thousand USD)	23.6	(37.2)			

GENERAL GOVERNMENT

	Per cent of GDP				
Expenditure[b]	37.0	(42.6)	Gross financial debt[b]	10.9	(102.4)
Revenue[b]	37.4	(36.2)			

EXTERNAL ACCOUNTS

Exchange rate (RUB per USD)	31.035		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	18.558		Mineral fuels, lubricants and related materials	70.3	
In per cent of GDP			Manufactured goods	9.5	
Exports of goods and services	29.4	(53.7)	Commodities and transactions, n.e.s.	6.6	
Imports of goods and services	22.1	(50.2)	Main imports (% of total merchandise imports)		
Current account balance	3.7	(-0.4)	Machinery and transport equipment	31.5	
Net international investment position	6.6		Commodities and transactions, n.e.s.	16.7	
			Manufactured goods	12.8	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate (%) for 15-64 year olds	69.0	(65.0)	Unemployment rate (15 and over) (%)	5.5	(7.9)
Men	73.6	(73.1)	Youth (15-24) (%)	14.8	(16.2)
Women	64.7	(57.0)	Long-term unemployed (1 year and over) (%)	1.7	(2.7)
Average worked hours per year	1 982	(1 766)	Tertiary educational attainment 25-64 year-olds (%, 2011)	53.5	(31.5)
Gross domestic expenditure on R&D (% of GDP, 2011)	1.1	(2.4)			

ENVIRONMENT

Total primary energy supply per capita (toe, 2011)	5.1	(4.2)	CO_2 emissions from fuel combustion per capita (tonnes, 2011)	11.0	(10.2)
Renewables (%, 2011)	2.4	(8.5)			
Fine particulate matter concentration (urban, PM_{10}, $\mu g/m^3$, 2010)	14.5	(20.1)	Water abstractions per capita (1 000 m^3, 2010)	0.5	(0.9)
			Municipal waste per capita (tonnes, 2010)	0.5	(0.5)

SOCIETY

Income inequality (Gini coefficient, 2008)	0.43	(0.31)	Education outcomes (PISA score, 2012)		
Relative poverty rate (% below 50% of median income, 2008)	17.0	(10.7)	Reading	475	(497)
			Mathematics	482	(494)
Public and private spending (% of GDP)			Science	486	(501)
Health care (2011)	6.2	(9.5)	Share of women in parliament (%, July 2013)	12.1	(25.3)
Pensions (public only, 2009)	9.2	(7.8)	Net official development assistance (% of GNI, 2011)	0.03	(0.4)
Education (primary, secondary, post sec non tertiary, 2010)	2.1	(4.0)			

Better life index: *www.oecdbetterlifeindex.org*

a) Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exists for at least 29 member countries.

b) 2011 for the OECD.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Executive summary

Main findings

Structural reforms to improve the business climate are key to raising potential growth and economic resilience. As energy prices stagnate and labour and capital become fully utilised, growth is falling behind pre-crisis rates. Making the economy stronger, more balanced, and less dependent on rents from natural resource extraction is therefore a key challenge. This requires higher productivity growth and greater energy efficiency, both driven by competition, stronger investment and better matching of skills and jobs. The sequencing, political economy and implementation of structural reforms are all important.

Strengthening the macroeconomic framework

The strong macroeconomic framework needs further improvements. The new fiscal rule has anchored budgetary policies, but there are loopholes due to the possibility of tapping into oil funds, providing guarantees and shifting unfunded spending obligations on regions. Increasing attention is being paid to public sector efficiency. The monetary policy framework benefits from the transition to inflation targeting and a flexible exchange rate regime, although the importance of administered and food prices in inflation increase transparency requirements. The banking sector is stable but a consumer credit boom poses risks.

Establishing a transparent, coherent and predictable business climate

Improving the business climate is most urgent. The authorities seem to have become more energetic on fighting corruption and strengthening the legal protection of businesses. However, capital outflows and the low market valuation of Russian companies suggest that business is not yet fully convinced. Law enforcement appears to be uneven, whistleblower protection is weak, and civil society organisations and non-aligned media face constraints. Red tape has been reduced, and recently adopted federal initiatives tackle many administrative barriers. There has been less progress on the regional level. Governance of state-owned enterprises has improved somewhat, but privatisation plans were recently downsized. Notwithstanding WTO accession in 2012, market opening is meeting resistance. Transport system bottlenecks pose barriers to more geographically balanced growth.

Strengthening skills and innovation

Stronger and more sustainable growth is not possible without better use of skills and stronger innovation. Considerable resources are employed in low-productivity activities. Lifelong learning, activation programmes and temporary income support remain underdeveloped. Excessive labour turnover undermines on the job learning and contributes to the low level of innovation activities. Social partner institutions are weak and the enforcement of collective agreements is limited. While education enrolment rates are very high, insufficient quality and poor links with the business sector limit the supply of employable skills. Public spending on education is low and the high inequality of educational opportunities adds to the problem. Despite a long tradition of scientific excellence, Russia performs worse than most OECD countries in term of scientific output and patents, which is partly linked to the unfinished reform of the public R&D sector. Firms rarely see innovation as part of their business model. Innovation policies have recently become more focused at firms but results are not yet visible.

Key recommendations

Strengthening the macroeconomic policy framework

- Further strengthen the medium-term fiscal framework by stricter control of guarantees, regional spending and the use of oil funds. To reduce ageing-related spending increases, raise women's retirement age to men's and increase both in line with rising life expectancy, while implementing other measure to increase the effective retirement age.
- Continue transition to inflation targeting, while improving transparency of monetary policy decisions. Develop macro-prudential instruments to rein in excessive growth of consumer loans as part of regulatory and supervisory reforms. Improve monitoring and processing of non-performing loans. Resolve the potential conflict of interest at the central bank, which is the majority owner and supervisor of the largest Russian commercial bank.

Establishing a transparent, coherent and predictable business climate

- Continue the current anti-corruption campaign with stronger focus on transparency and accountability mechanisms in the public sector. Improve legal protection of whistleblowers and do not restrict the scope for media or civil society organisations to publicise violations of the law.
- Strengthen judicial independence through greater transparency in appointment and promotion processes, better pay and rotation of judges, while avoiding even the appearance of political interference in court cases. Make law-enforcement agencies more transparent and accountable.
- Continue reducing administrative barriers, and widen federal initiatives to regional and local levels. Extend regulatory impact assessments to legislative draft considered by the State Duma. Push ahead with privatisation of state-owned banks and other state-owned enterprises (SOEs). Further improve governance of SOEs and foster a level playing field between public and private companies.
- To strengthen the impact of WTO accession, refrain from introducing entry barriers. Shorten the list of strategic sectors with prior approval required for foreign investment and streamline the approval process.
- Tackle transport bottlenecks by improving the efficiency of infrastructure spending, promoting competition in the transport sector and ensuring better policy co-ordination to address urban transport challenges.

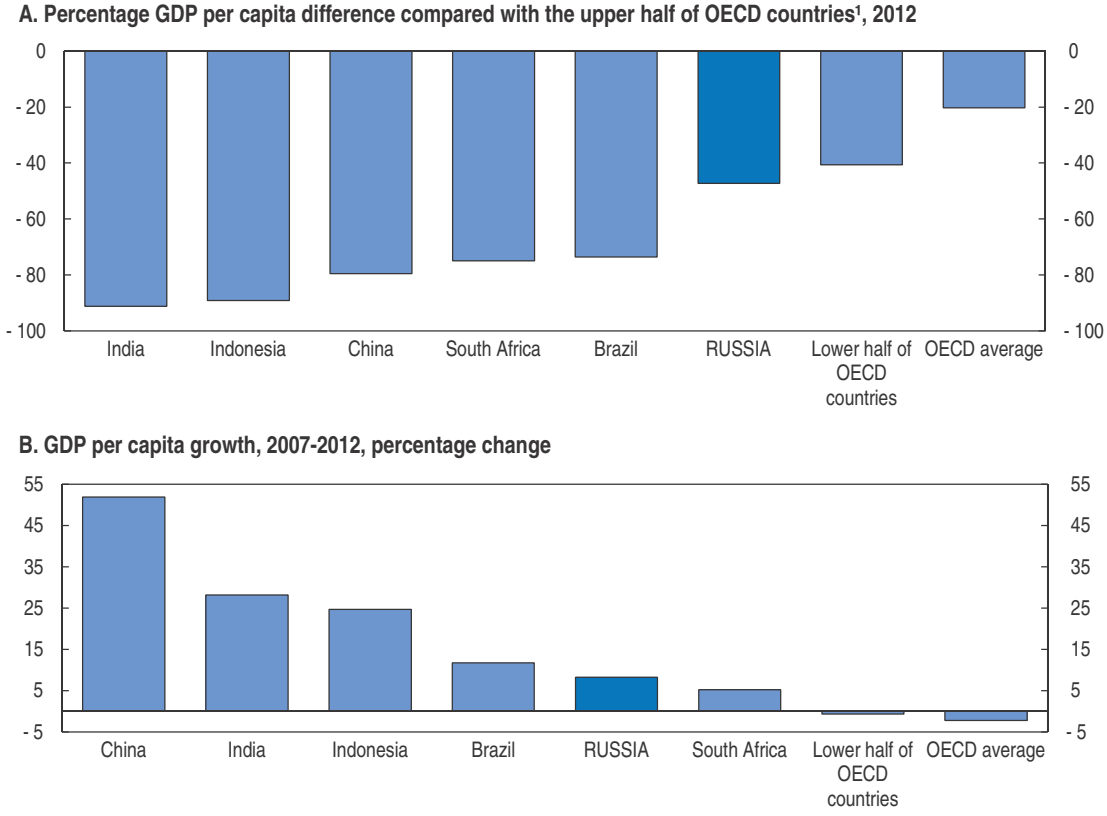
Strengthening skills and innovation

- Strengthen life-long learning through incentive for firms and workers, such as training vouchers. Increase spending on active labour market programmes and temporary income support to unemployed. Widen the scope for negotiating collective agreements on the enterprise level.
- Increase overall education funding, in particular in poor regions, while continuing to restructure education institutions. Link remuneration of teachers with their performance. Strengthen the co-operation between education institutions, business and trade unions and continue updating professional standards for vocational education. Reconsider school fees for optional courses in primary and secondary education to reduce access inequalities.
- Continue broad-based support for innovation and the adoption of new technologies, in particular to improve energy efficiency. Finalise the reform of public R&D by shifting more research from the Academy of Science to universities, increasing the share of competitive grant funding and streamlining state-owned branch research institutes. Evaluate innovation policies more systematically.

Assessment and recommendations

Russia made major strides in the decade before the 2008 crisis, helped significantly by oil and gas revenues. But productivity and living standards are still well below those of the most advanced market-oriented countries, and the speed of convergence since the crisis was lower than in most BRIICS countries (Figure 1). Moreover, growth has slowed since 2012, partly for cyclical factors but mainly because potential output growth has slowed. The Ministry of Economic Development slashed in November 2013 its projected long-term average growth to just 2.5% down from 4.3% projected in April, warning that Russian growth until 2030 would lag behind the global average. Making further sustainable advances and fulfilling the presidential decree of May 2012 to increase labour productivity by 50% by 2018 and create 25 million highly productive jobs by 2020 will require a new pace of reforms.

Figure 1. **Gap in GDP per capita**



1. Compared to the average of the highest 17 OECD countries in terms of GDP per capita in 2012, based on 2012 purchasing power parities (PPPs). The OECD average is based on a simple average of the 34 member countries.

Source: OECD estimates and World Bank, WDI online database.

StatLink http://dx.doi.org/10.1787/888932979215

The key long-term challenge is to reduce dependence on the volatile revenues from exhaustible natural resources, and strengthen sustainable, productivity-driven, regionally balanced and broad-based growth, as discussed in the *2011 Economic Survey of the Russian Federation*. Meeting this challenge requires: *i)* further strengthening macroeconomic policy settings; *ii)* substantial improvement in the business climate, and *iii)* greater investment in infrastructure, human capital and innovation. Among those, structural reforms improving the business climate, in particular strengthening the rule of law and fighting corruption, are the most crucial but also most difficult to implement. The current growth slowdown has however contributed to the increasing support for such reforms both among policy-makers and larger public.

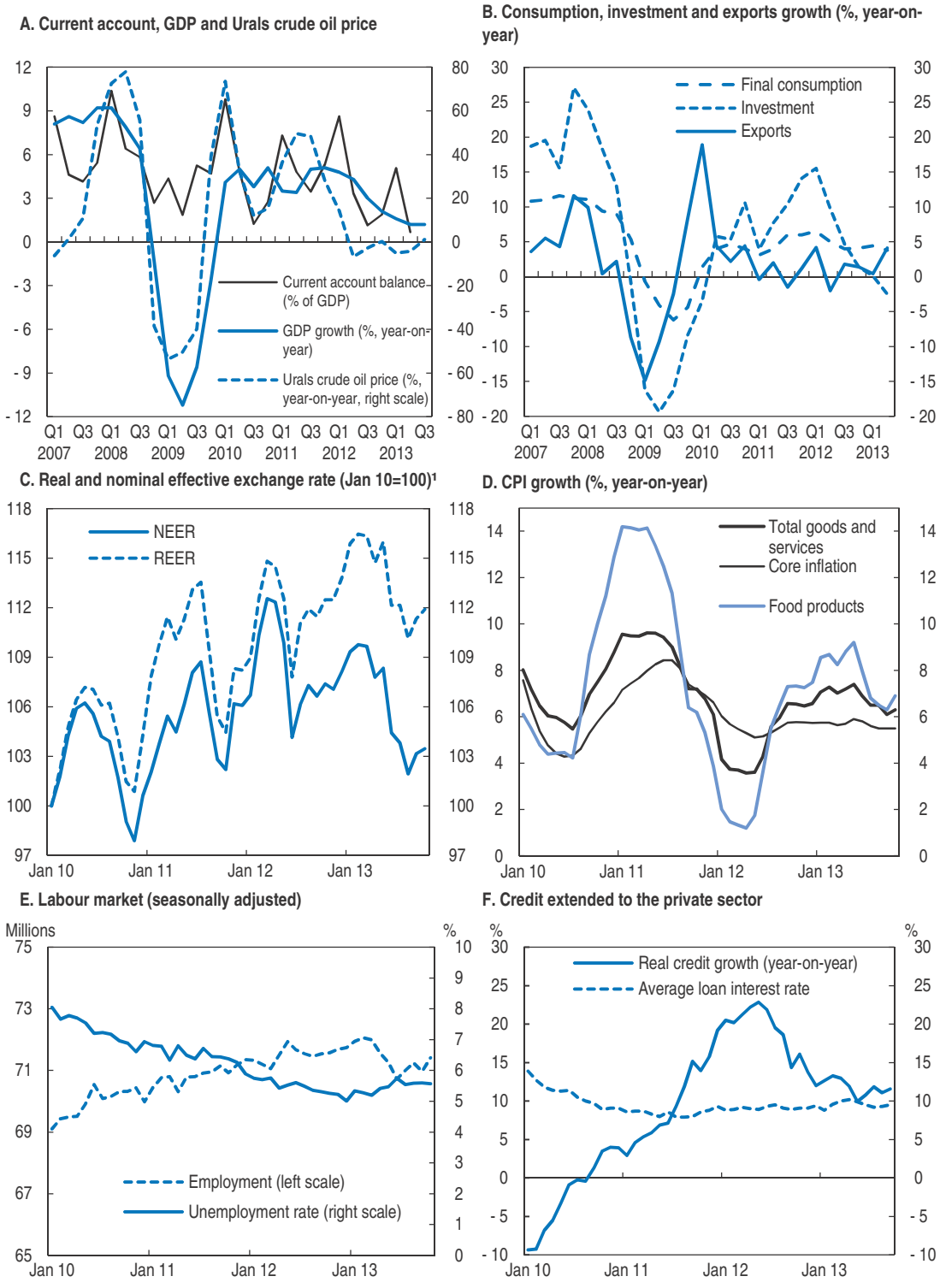
The slowdown is of both temporary and structural nature

Broad-based weakness appeared in late 2012 and into 2013 (Figure 2), triggered by stagnant terms of trade, the end of some temporary factors that had boosted growth in 2012, and uncertainty related to the world economy and domestic political developments. Investment growth came to a halt, driven mostly by natural resource related sectors and public infrastructure spending, and mining output declined. Private consumption growth is partly financed by increasing household debt.

Nevertheless, employment and capacity utilisation rates are near their pre-crisis boom records. The unemployment rate is still close to record lows because of employment gains, a shrinking labour force, high wage flexibility and extremely low unemployment benefits. Inflation rose above the central bank target range of 5-6%. Although this rapid rise was driven mostly by high food prices due to the poor 2012 harvest and headline inflation in the second half of 2013 was on a downward trend, core inflation and inflation expectations are sticky. These factors suggest the slowdown reflects to some extent structural limits to growth. Indeed, potential growth seems to have slowed to below 3%, which is reflected in the latest long-term projection by the Ministry of Economic Development. This is well below the average growth of 7% achieved between 1999 and 2008 and the 5% medium-term growth objective set by the authorities. Growth is projected to gradually strengthen in 2014 beyond the temporary boost from the good harvest as a moderate recovery in the euro area improves the outlook for exports and investment in extractive sectors. Inflation is likely to decline towards the policy target range as the impact of administrative price increases fade and a good harvest will reduce food prices. The current account surplus will continue to diminish (Table 1).

There are important risks to the projection. A resurfacing euro area crisis, a further slowdown in emerging market economies, particularly in China, and rising non-conventional oil and gas supply could put downward pressure on oil and gas prices. This would hurt exports and budget revenues, as well as investment in new extraction projects. The impact would spill over into other sectors of the economy through reduced incomes. Even though the strong fiscal position, current account surplus and low corporate leverage make Russia less exposed than most other emerging economies to increases in global interest rates, a sudden deterioration in financial market sentiment and a global flight to quality could lead to much larger capital outflows, tightening financial conditions in Russia. Uncertainty about domestic policy priorities could also prevent the projected investment recovery. The excessive consumer credit growth is another risk to the outlook, in the context of increasing household indebtedness.

Figure 2. **Key macroeconomic indicators**



1. Higher values correspond to appreciation.

Source: Rosstat, Datastream and Central Bank of Russia.

StatLink http://dx.doi.org/10.1787/888932979234

Table 1. **Macroeconomic indicators and projections**

	2010	2011	2012	2013	2014	2015
Real GDP growth	4.5	4.3	3.4	1.5	2.3	2.9
Inflation, period average	6.9	8.4	5.1	6.6	5.7	4.5
General government fiscal balance (per cent of GDP)	-3.4	1.5	0.4	-0.7	-1.0	-0.9
Current account balance (per cent of GDP)	4.4	5.1	3.6	2.5	2.4	2.2

Source: *Economic Outlook 94* projections.

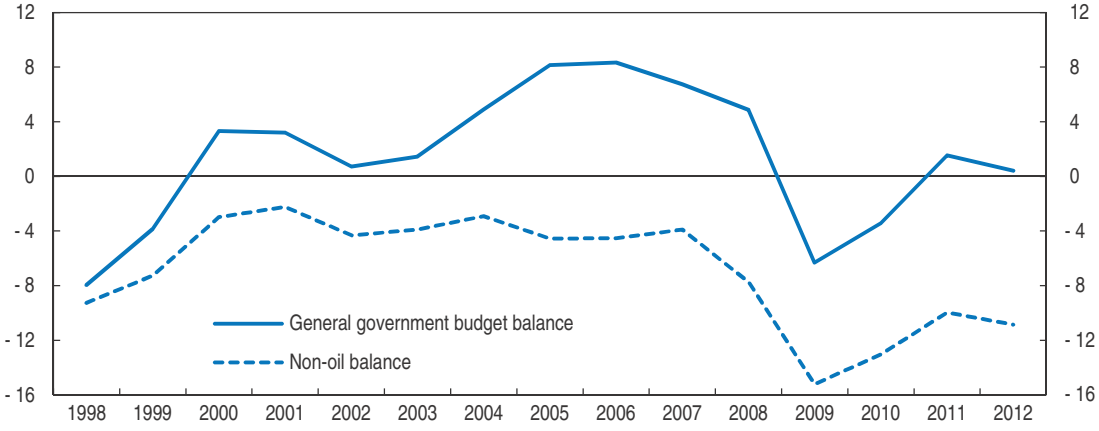
Stable and sustainable growth requires a stronger macroeconomic policy framework

The new budget rule strengthens the fiscal policy framework

The fiscal rule introduced in December 2012 limits the projected budgetary use of oil revenues to that calculated at a benchmark five-year average of past oil prices (to be gradually increased to a ten-year average by 2018), which is currently USD 91 per barrel. The medium-term federal expenditure envelope is then determined on a rolling basis for three following years as the sum of these oil revenues, projected non-oil revenues and a maximum budget deficit of 1% of GDP. The introduction of the rule follows a surge in the non-oil deficit during the crisis, which has so far been only partly reversed (Figure 3), and it increases the predictability and reduces the volatility of aggregate spending. The rule does not control for investment lending out of oil and extra-budgetary funds, for shifts of spending to fiscally weak regions without providing additional resources, and for the use of guarantees. But it does impose a fiscal spending envelope that implies some gradual medium-term fiscal tightening. Therefore, hard choices will have to be made, especially given large spending commitments in the context of the presidential elections, including social expenditure, infrastructure investment and army modernisation. It is important that pro-growth spending, including on investments in human capital and infrastructure, is prioritised. Currently, the country spends less than the OECD average on health and education, and more than the OECD average on defence and subsidies.

Figure 3. **Overall and non-oil general government balance**

Percentage of GDP



Source: IMF, *World Economic Outlook Database*, October 2013.

StatLink http://dx.doi.org/10.1787/888932979253

Oil revenues above the benchmark prices are directed to the Reserve Fund until it reaches 7% of GDP, and then at least half are directed to the National Welfare Fund, while the rest can be spent on infrastructure investment. The Reserve Fund cushions the effect of oil price fluctuations on the budget. The impact on budgetary revenues in roubles is further reduced because a decline in oil prices is usually associated with depreciation. Automatic stabilisers are allowed to work, as under-performing non-oil revenues can be compensated by reduced within-the-year transfers to the Reserve Fund. So given the minimum expenditure commitments already predetermined in the medium-term fiscal framework for 2014 and 2015, a continued economic slowdown would imply higher deficits and little accumulation in the Reserve Fund. While justifiable, it has to be seen in the context of the projected fall of overall oil revenues as a share of GDP in medium-to-long run.

The National Welfare Fund is accumulating funds to cover future pension spending. However, a stimulus package announced in July 2013 envisages using money already accumulated for profitable infrastructure investment projects and for bank lending programmes for small businesses. This creates a potential risk for net public sector financial assets, which may undermine funding for future pension payments. Appropriate governance and control mechanisms are therefore needed to secure the expected returns, as the inefficiencies of public investments are well-known (McKinsey & Company, 2009).

Within the fiscal spending envelope of the rule, increasing the efficiency of public spending will be of paramount importance. The successful introduction of programme-based budgeting within two years, as planned, will be an essential step forward. It requires careful analysis of problems encountered with some existing pilot schemes, including an appropriate choice of monitored indicators. There are also plans to streamline government agencies, outsource activities and decrease the number of civil servants by 20%. This is a particularly good time for such reforms, as the private sector needs skilled workers. A recently adopted law on public procurement offers more transparency throughout the entire project cycle, and implementation should be carefully monitored to allow for corrections as necessary.

The pension age in Russia, at 60 years for men and 55 years for women, is very low in international comparison, and life expectancy at retirement will rise further, responding positively to higher incomes and lifestyle improvements. Raising women's retirement age to men's and increasing both gradually along with life expectancy would be the most effective way to contain future pension spending increases, although such changes have been explicitly ruled out by the current administration.

A number of changes are planned to increase the effective retirement age and improve the sustainability of the pension system: recalibrating the pension benefit formula, including by introducing a points-based system; lengthening required service periods; reducing early retirement opportunities; tightening indexation with a closer link to the revenues of the pension system; and increasing the contribution of the self-employed. The financing burden of special pensions is to be partly shouldered by employers, providing them with incentives for improvements in working conditions. The planned reforms are an opportunity to address the need to diversify risks in retirement saving and performance problems of the defined-contribution pillar, including high administration fees, by strengthening regulation and supervision. However, contributions to the defined

contribution pillar are now planned to be, by default, diverted to the defined benefit pillar, which will weaken the diversification of retirement incomes.

Russia has made major improvements to its taxation structure: tax bases have been broadened, rates cut, and compliance enhanced. Nonetheless, oil and gas taxation could better capture economic rents and promote exploration and investment by improved accounting for legitimate exploration, development and production costs of individual projects and fields. Alcohol taxes are relatively low and tobacco taxes are lower than in any OECD or major emerging country, even as high alcohol and tobacco consumption contribute to excessive mortality in Russia (OECD, 2012c). Russia also has scope to increase property taxes, and raising green taxes holds the promise of raising revenue and promoting the transition to cleaner and sustainable production and consumption patterns.

The transition to inflation targeting is proceeding

Inflation targeting is to be introduced in 2015. For the transition, the main goal of monetary policy is currently stated in terms of end-of-year inflation declining from 5-6% in 2013 to 5% in 2014, 4.5% in 2015 and 4% in 2016. The transition is made difficult by the large share of volatile food prices and of regulated prices in Russia. High pass-through from exchange rate to inflation in the commodity-based economy could also be a complicating factor. Reflecting concerns about inflation volatility, the Central Bank of Russia (CBR) decided to state an inflation target with a relatively wide acceptance band of 1.5 percentage point in both directions. But high inflation volatility could raise communication challenges in building the credibility of the inflation targeting regime.

Exchange rate interventions have been significantly reduced and are now guided by clear rules aimed at preventing excessive exchange rate volatility but without an explicit or implicit exchange rate target. This allows the exchange rate to play its role as a shock absorber, notably by facilitating import substitution and supporting budgetary revenues when oil prices decline. Recent studies show that the adoption of inflation targeting tends to offset the increase of exchange rate volatility associated with floating by reducing unexpected monetary shocks and the pass-through (Floerkemeier, 2013).

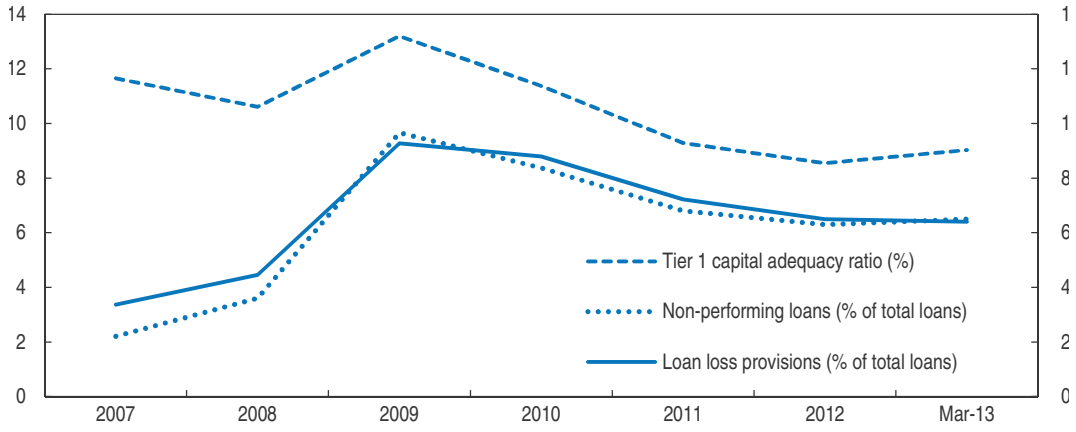
The move to inflation targeting involves prerequisites, including central bank independence and transparency. Establishing a Monetary Policy Committee could more clearly separate various CBR's functions and therefore strengthen monetary policy independence, accountability, and credibility. To explain the basis for its monetary policy decisions, the CBR publishes press releases following each policy meeting and, starting in 2013, quarterly monetary policy reports outlining its key policy considerations. The CBR should regularly publish information about inflation expectations and its macroeconomic projections, especially its inflation outlook. The transparency of the decision making process would be enhanced if the CBR published its policy meeting minutes, as many central banks now do. In another positive step in line with recommendations from the previous *Economic Survey*, credit instruments were streamlined, and the interest rate on one-week liquidity provision and absorption was clearly indicated as the key interest rate.

The banking sector is financially solid while structural changes are ongoing

The banking sector is stable and well capitalised and has solid profit margins, a manageable stock of non-performing loans and adequate provisioning (Figure 4). But better alignment with international standards of measuring non-performing loans, in particular through including doubtful loans, would instil additional confidence in the financial

Figure 4. **Key banking sector indicators**

End of period



Source: Central Bank of Russia.

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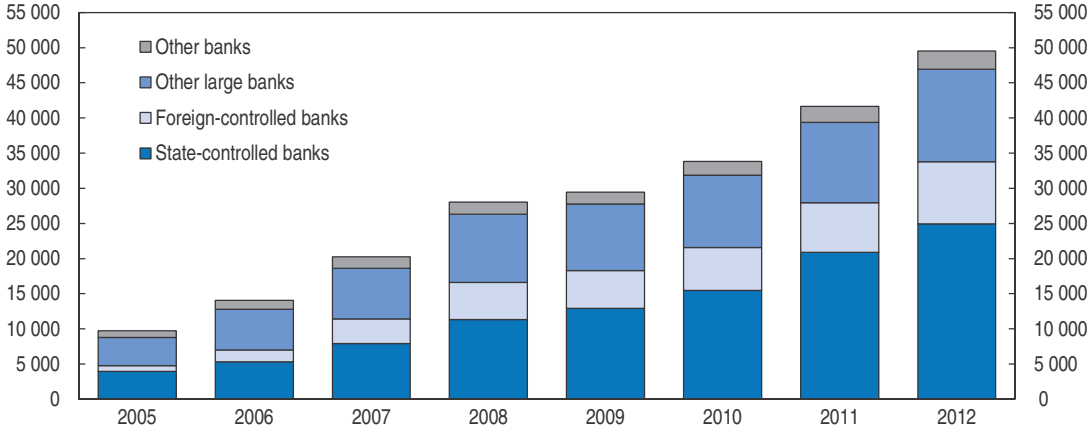
system and greater stability in the long-term. Large commercial banks are financed mostly through deposits, but the small stock of market collateral leads to a segmented inter-bank market, so auctions for provisions of loans at floating rates secured by non-market assets, which were introduced in 2013, will continue to play a significant role in providing liquidity. Recent CBR stress tests, which assume a major decline in oil prices and a 5% decline of GDP, suggest no immediate systemic risks.

The sector is dominated by state-owned banks (Figure 5). The CBR is the majority shareholder in Sberbank, which accounts for nearly half of retail deposits and almost one third of bank assets, although its share is declining. This unusual situation exposes the CBR to conflicts of interest, even though the regulatory and ownership roles are separated within the CBR. This situation needs to be resolved, also because it discourages new players, including foreign banks, from entering the market. While the authorities frequently confirm their commitment to privatise banks and have already sold shares of

Figure 5. **Structure of the banking system**

Banking sector assets, RUB billion, end of period



Source: Central Bank of Russia.

StatLink http://dx.doi.org/10.1787/888932979291

Sberbank and diluted state ownership of VTB, the second largest Russian bank, the most recent medium-term privatisation programmes retains majority state control of these two banks until at least 2016.

Consumer credit grew at an annual rate of over 40% through most of 2012, driven mainly by unsecured consumer loans, rather than mortgages or car loans. The refinancing of consumer loans through international wholesale financing is currently very profitable, but may develop into a systemic risk. The CBR has recently implemented measures, such as higher provisions and higher risk weights attached to consumer lending, to slow credit growth, and indeed it did slow marginally to 35% in the first three quarters of 2013. The CBR has also proposed the introduction of a cap for effective interest rate on consumer loans. However, despite ongoing discussions, the CBR toolkit still does not allow it to limit loan-to-value and debt-to-income ratios. The planned wider agenda of regulatory changes should include such measures. The Russian Banking Sector Development Strategy stipulates legislative amendments to implement the Financial Stability Board and Basel recommendations for capital adequacy, leverage, liquidity requirements and management of systemic risks. In particular, a new capital definition and adequacy ratios will come into force in January 2014.

The supervisory landscape in financial markets has also changed with the creation in August 2013 of a mega-regulator, which folded the Federal Financial Market Services, the supervisor of securities and insurance, into the Central Bank of Russia, the banking supervisor. This reform is to strengthen independence and, given the prevalence of lending to related parties, to strengthen capacity to carry out consolidated supervision. At the same time, the CBR after the merger will be responsible for monetary policy, financial stability, and supervision and regulation of the whole financial sector.

Box 1. **Recommendations for strengthening the macroeconomic policy framework**

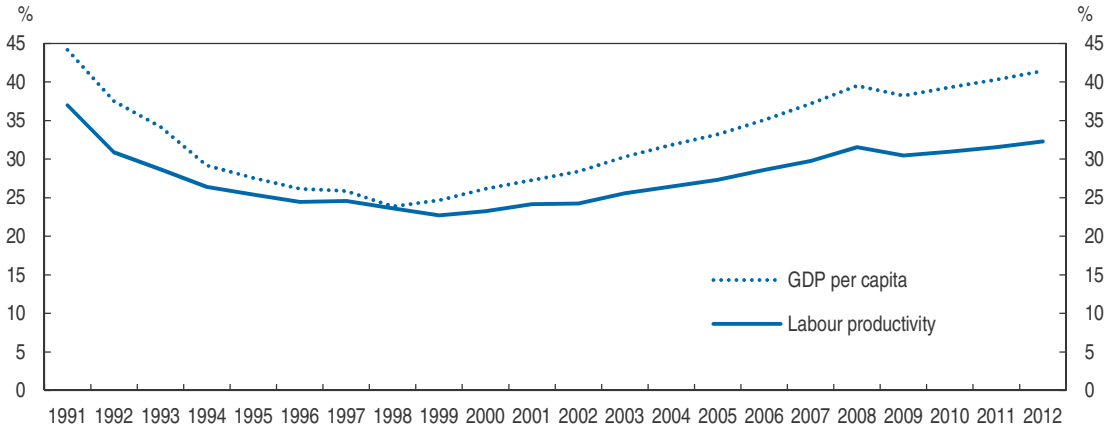
- Further strengthen the medium-term fiscal framework by stricter control of guarantees, regional spending and the use of oil funds. To reduce ageing-related spending increases, raise women's retirement age to men's and increase both in line with rising life expectancy, while implementing other measures to increase the effective retirement age.
- Continue transition to inflation targeting, while improving transparency of monetary policy decisions. Develop macro-prudential instruments to rein in excessive growth of consumer loans as part of regulatory and supervisory reforms. Improve monitoring of non-performing loans. Resolve the potential conflict of interest at the central bank, which is both the majority owner and the supervisor of the largest Russian bank.

Low growth is linked to distortions, low energy efficiency, demography and regional barriers

Enhancing sustainable growth is the most important medium-run policy challenge. High GDP growth from 1998 to 2008 resulted in some catching up with top economic performers (Figure 6), but was driven by rapidly increasing oil and gas revenues and mining investment. Terms-of-trade gains also led to rapid expansion in the non-tradable sector. This growth burst was possible because of the large unused capacity that emerged in the

Figure 6. **GDP per capita and labour productivity**

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



Note: Labour productivity is measured by GDP per hour worked.

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 estimates.

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aftermath of the post-transition recession, the removal of bottlenecks inherited from Soviet times, and the adoption of modern managerial and technological practices. However, these factors appear to have run their course.

Productivity growth varies substantially across sectors (Table 2) and, according to an in-depth micro study of labour productivity at the level of specific sectors, inefficiencies are driving these large productivity gaps (McKinsey & Company, 2009). Inefficient business processes, obsolete capacity and production methods seem to play a primary role, and they are linked to the intensity of competition, the burden of regulation, problems with availability of skilled managers and specialists, and credit constraints for modernisation. Productivity dispersion among firms is rising (Bukowski and Earle, 2014), while inefficient companies manage to avoid exit mostly by forming defensive networks (Huber and Wörgötter, 1998) and therefore prevent resources from moving to more productive uses (Brown and Earle, 2008).

Table 2. **GDP decomposition (1995-2008)**

	Value added share (current prices)		Annual real growth rates (%)			
	1995	2008	Value added	Labour input	Capital input	MFP
Total economy	100.0	100.0	4.61	1.30	3.22	2.27
Market economy	86.1	84.0	4.82	1.27	2.89	2.56
Goods	25.6	18.3	2.92	-1.01	0.51	3.23
High skill-intensive	3.6	3.6	3.92	-2.54	-0.18	5.57
Low skill-intensive	22.0	14.8	2.72	-0.71	0.64	2.78
Services	40.4	41.0	5.82	1.72	3.92	3.14
High skill-intensive	5.1	11.2	10.70	1.20	2.78	8.97
Low skill-intensive	35.3	29.8	4.60	1.85	4.20	1.69
Extended mining	20.1	24.7	4.87	2.67	3.35	0.84
Non-market economy	13.9	16.0	3.41	1.52	5.12	0.60

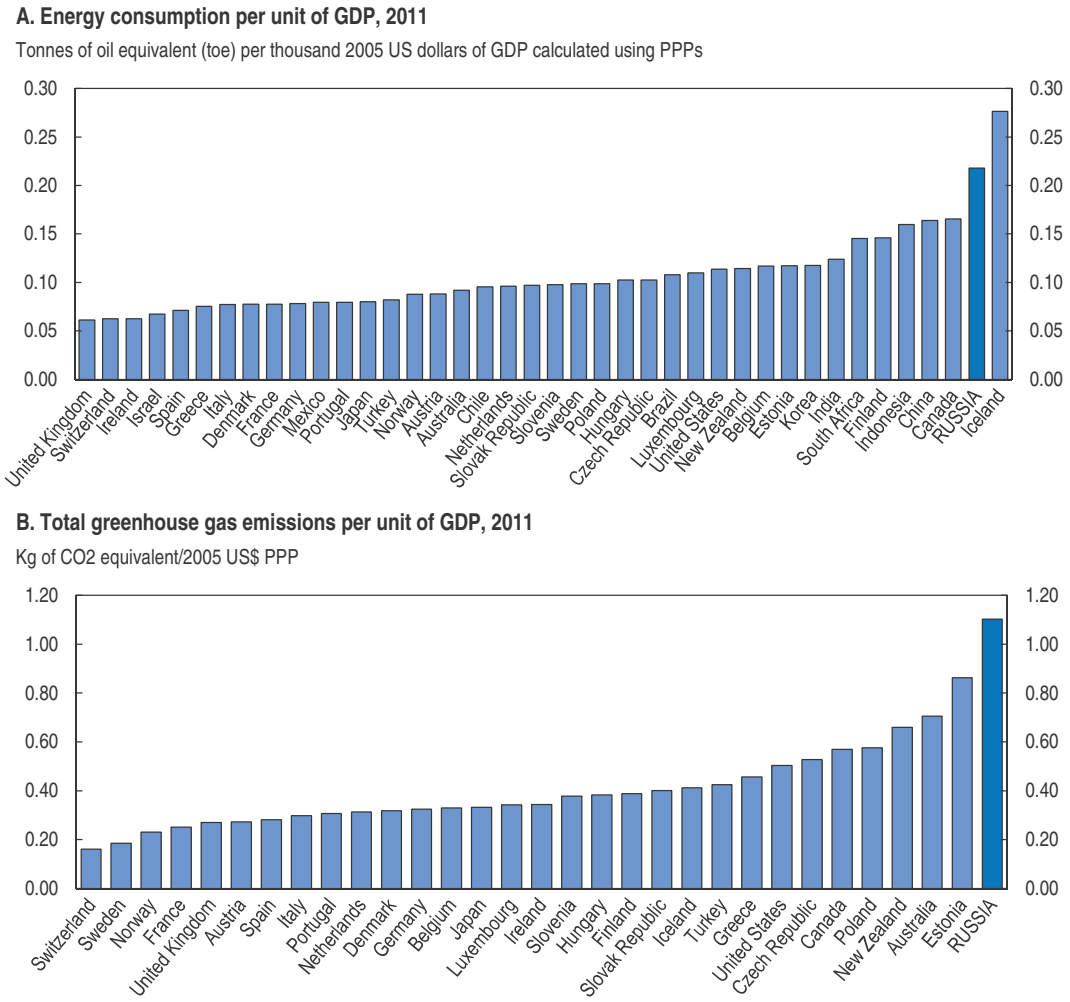
Source: Timmer and Voskoboynikov (2013).

Energy efficiency is very low

Despite substantial progress since the start of the transition, Russia remains one of the most energy-intensive economies in the world (Figure 7). As the country is dependent on carbon-intensive energy sources, it is also the world's fourth largest emitter of greenhouse gases. Energy inefficiency contributes to local air pollution and the rate of premature mortality attributable to low air quality is among the highest in the world (WHO, 2013). Saved energy is also a valuable economic asset: if Russia used energy as efficiently as its OECD peers, it could save 30% of consumed energy which could then be exported or saved for future generations (IEA, 2011).

Improving energy efficiency is therefore rightly among the top government priorities. In 2008, the authorities set a strategic goal to reduce energy intensity of GDP by 40% by 2020 through energy saving, improving efficiency and eliminating regulatory constraints, to be

Figure 7. **Energy intensity**



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*; World Bank, *WDI Database*; and IEA (2013), *World Energy Indicators* and *World Energy Balances*.

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complemented later by specific targets for energy-intensive industries. The main policy instruments adopted in subsequent federal and regional programmes included tax credits, state subsidies and loan guarantees for efficiency improvement projects. However, implementation of these initiatives was uneven and delayed. Effective mechanisms to monitor achievement of programme objectives were also absent, partly because target indicators were often not well-specified (Zaytsev and Saykina, 2013).

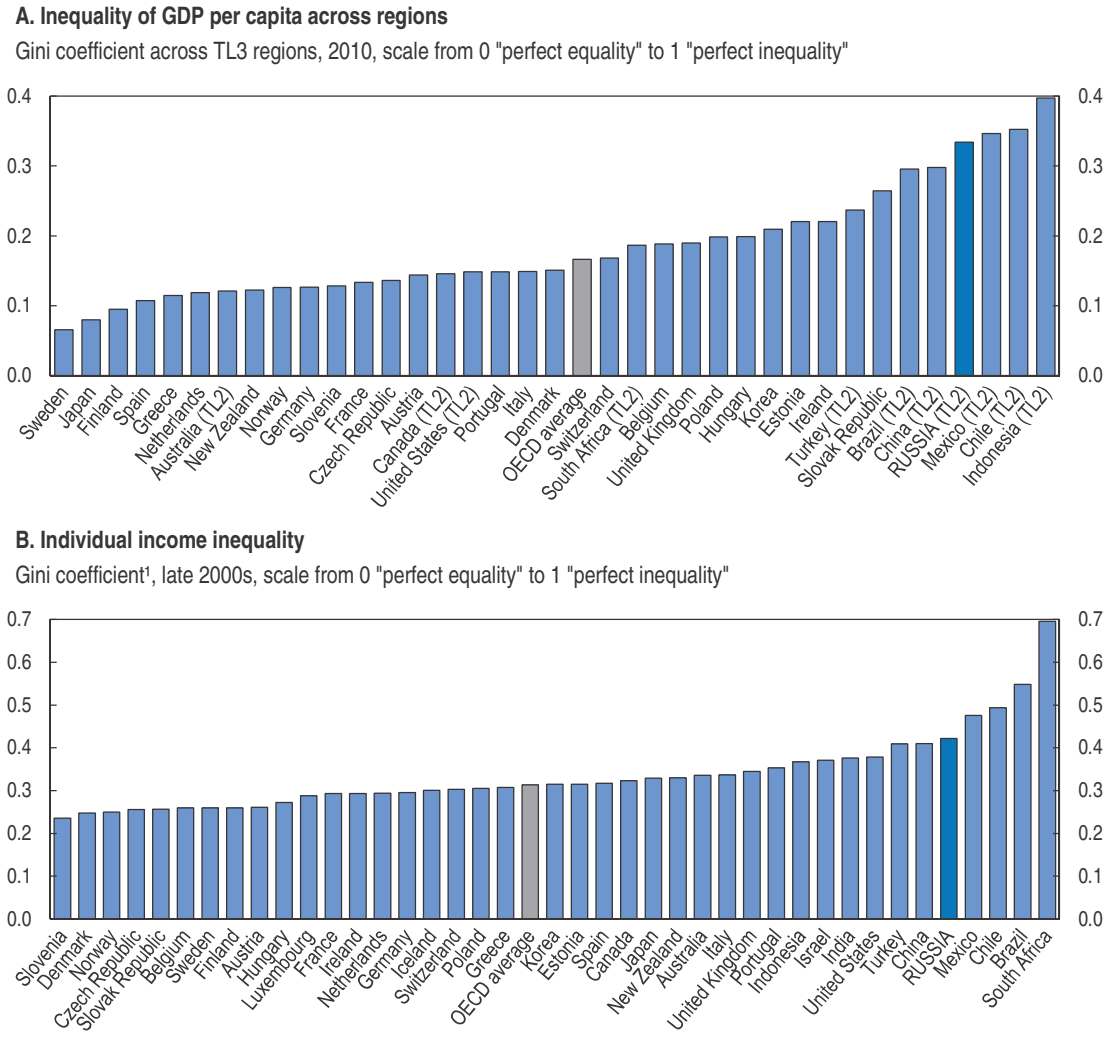
Fuel production and consumption subsidies in Russia, which are evaluated at more than 2% of GDP (IEA, 2012a; OECD, 2013a), should be gradually reduced. The Chapter on energy efficiency of the *2011 Economic Survey* identified a disparity between domestic energy prices and marginal social cost of energy consumption as the most important challenge for improving energy efficiency, and this remains a missing element of the existing policy framework. In the wake of the economic slowdown, the government seems to be reconsidering its earlier plans to reduce cross-subsidisation reflected in the gap between low domestic and higher export gas prices. Indeed, domestic prices of utilities, including electricity, are to be either frozen or increased more slowly than inflation in the next three years. On the other hand, a new government decision foresees an increase in prices above newly introduced consumption norms for households. This initiative was launched in pilot regions and is to be expanded to all regions in 2014. While energy consumption meters are legally required, only 40% of residential houses and 20-25% of apartments have them installed so far. Non-metered consumption is to be subject to higher tariffs starting in 2015.

The *2011 Economic Survey* recommended measures to improve efficiency in transport, housing and industry. In transport, mandatory fuel efficiency standards for cars and trucks and improving traffic management were recommended. After several delays, more ambitious efficiency standards have been introduced, but the motor fuel quality monitoring system remains ineffective. Tax changes to encourage the use of natural gas in transport are being discussed, but have not yet been adopted. Progress is slow in introducing traffic management, partly due to popular opposition against road charges. The renovation of the housing stock remains challenging, as owners do not always have the right incentives to improve efficiency and projects with the financial support for regional governments are rare. Although the Housing and Public Utilities Fund has recently become responsible for accelerating this process, public financial support for the construction of energy efficient housing is still under discussion. To facilitate efficiency improvements, the *2011 Survey* recommended removing obstacles to the development of energy service companies (ESCOs). Newly adopted legislation addresses some obstacles, but the rights of the contractual partners are still not defined clearly enough and ESCOs continue to face difficulties in obtaining bank financing (Garbuzova and Madlener, 2012).

Regional disparities signal low hanging fruits for growth

Another unused growth opportunity is linked to high inter-regional inequality, which contributes to overall inequality (Figure 8). Regional inequality hardly changed during the last decade, despite increased labour and capital market integration and several programmes directed at convergence. Social, education and health services still do not have the expected equalizing impact on regional income (Lehmann and Silvagni, 2013). This is mainly due to barriers to convergence that include large differences in natural resource endowments, the legacy of Soviet production location choices, poor transport, weak infrastructure in many regions, and remaining barriers to interregional mobility.

Figure 8. **Inequality**



1. For non OECD countries, Gini coefficients are not strictly comparable with OECD countries as they are based on per capita incomes except India and Indonesia for which per capita consumption was used.

Source: OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*, Table A1.1, Figure 0.2; OECD estimates.

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Business surveys increasingly also point to regional differences in the quality of institutions and the business environment (EBRD, 2012). Therefore, increasing attention is needed on local implementation of structural reforms, and regions should be more strongly encouraged to experiment with local business improvement initiatives, for example as part of the National Entrepreneurial Initiative.

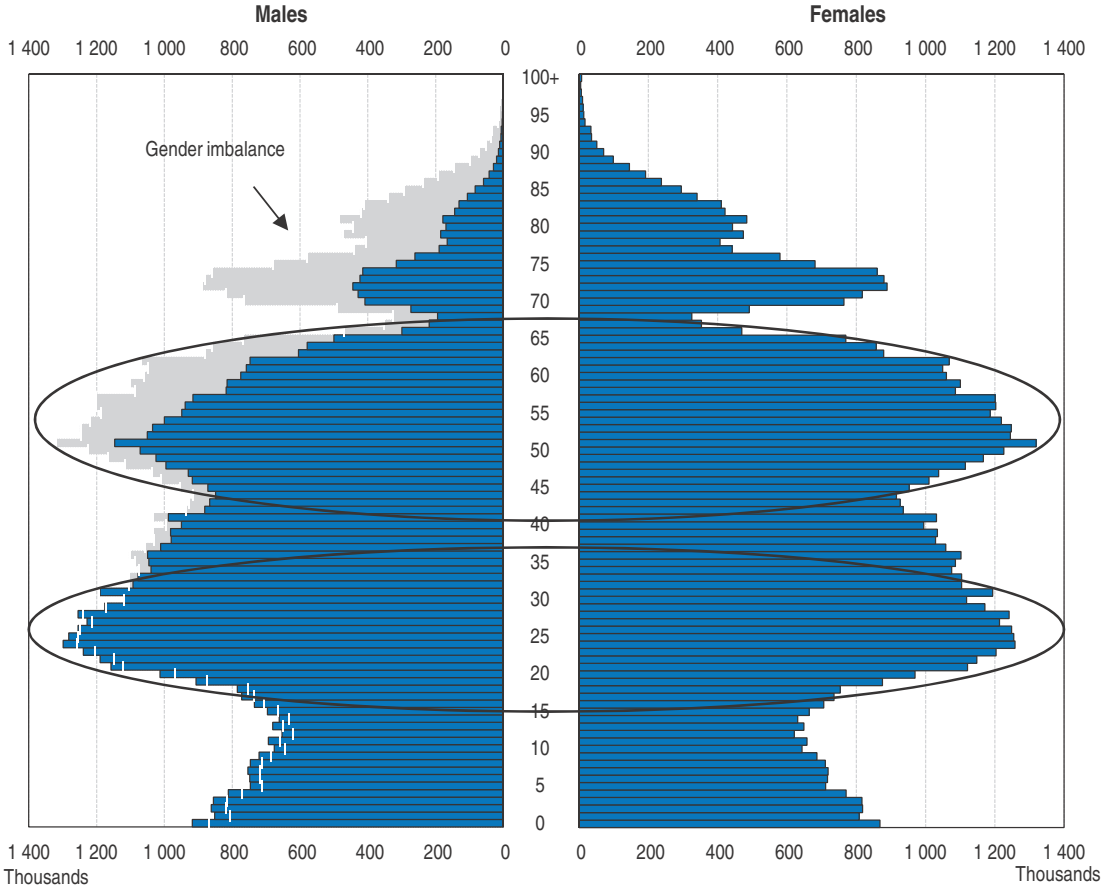
Demographic changes play an important role

Low fertility rates, high premature mortality rates, particularly among males, and early retirement all contribute to the long-term decline in the labour supply. The government has put in place programmes providing significant incentives for families to have more children. The success of these measures should be closely monitored, but OECD experience suggests that the impact on fertility of support provided around the time of birth is most likely temporary, as it only accelerates but does not increase the number of

childbirths (OECD, 2011c). But demographic changes with two large demographic waves (indicated by the two ovals in Figure 9) also offer an opportunity to promote structural change, because employment in the low-productivity enterprises dating from the Soviet era is concentrated in those born in the large post-war demographic boom (upper oval). They will retire in the next 10 years and be gradually replaced by the large generation (lower oval) with record-high educational attainment (Belanovsky et al., 2011). It is of vital importance to create conditions for these entrants to find their way into sectors and enterprises that can productively use their skills, or to encourage entrepreneurship by launching own firms.

Figure 9. **Population by age and sex**

January 2012



Source: Rosstat, *The population of the Russian Federation, by sex and age.*

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Improving the business climate

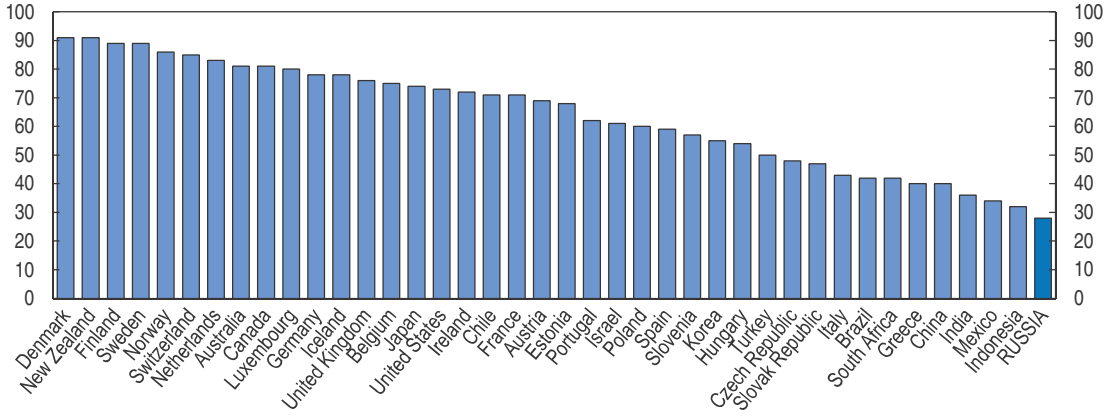
Corruption and rule of law are still a big problem

Endemic corruption is considered to be one of the main obstacles to market entry and sustainable growth (Mauro, 1995), including in Russian regions (Pushkarev, 2007). Particularly worrying is corruption in law enforcement, which accounted for a quarter of all corruption cases brought to the courts in 2012. According to the Transparency International, corruption perception is very high (Figure 10), although the international

ranking of Russia improved since 2010. The survey of the Institute of Contemporary Development (2013) identifies corruption as the second biggest problem for Russians (after housing but ahead of bad roads), although the survey by Public Opinion Foundation (2013) reports that bribes have become less frequent since 2005. Only 10% of entrepreneurs have never come across corruption, although the cost of bribes has apparently fallen in recent years (OPORA, 2012). In a number of regions, corruption is so widespread that firms consider it a convenient alternative to legal and administrative compliance (EBRD, 2012).

Figure 10. **Transparency International Corruption Perceptions Index**

Corruption Perception Index 2013 Score, scale from 0 (highly corrupt) to 100 (very clean)



Note: CPI 2013 Score relates to the degree to which corruption is perceived to exist among public officials and politicians by business people and country analysts. Score ranges between 100 (highly clean) and 0 (highly corrupt).
Source: Transparency International, *Corruption Perceptions Index 2013*.

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Responses to these challenges include the ambitious National Anti-Corruption Action Plan for 2012-13, and the introduction of amendments on combating corruption to the Criminal Code of Russia and the Code on Administrative Violations. Russia also ratified the OECD Anti-Bribery Convention, banning bribes to foreign officials. The review by the OECD Working Group on Bribery in October 2013 revealed progress, but also urged strengthening legislation, law enforcement and awareness campaign against foreign bribery. The new law on public procurement adopted in April 2013 aims at increasing transparency and openness at all stages of the procurement process. A working group headed by the Minister of Economic Development and bringing together business and public authorities was established in October 2011 to develop anti-corruption measures in business and investment areas leading to the implementation of the *Anti-Corruption Charter of Russian Business*.

Commissions to consider cases of violation of the provisions of the Code of Ethics and conflict of interest regulations are being established in every public institution and state owned enterprise. A presidential decree ordered a catalogue of government positions associated with corruption risks. Several awareness campaigns directed at civil servants were launched. Compulsory disclosure of income, expenditures, assets and property by public officials, their spouses and children was strengthened. A separate law obliges senior officials and close family members to close foreign bank accounts and repatriate financial assets abroad by September 2013. Some measures protecting whistleblowers were introduced, although there is no specific legal protection of public servants and perceived

legal protection has been undermined by the handling of high profile "business crime" cases in provincial courts and by unpunished assaults against investigative journalists.

Corruption prosecution has accelerated. The Prosecutor General's office recorded almost 50 000 corruption-related cases in 2012, a 25% increase over 2011. Several high-level corruption scandals have recently come to light, including investigations of corruption and embezzlement in state corporations, ministries and the prison service, and fraud in public procurement, including contracts for the 2014 Sochi Winter Olympic Games. However, according to opinion polls the general public is sceptical about the long-term success of the campaign and 77% of Russians think government efforts to fight graft are ineffective (Transparency International, 2013). Moreover, some corruption cases are sometimes perceived as politically motivated. Nevertheless, the scale and high status of those exposed, as well as associated legislative changes, suggest that the intent to fight corruption is genuine. The latest compliance report of the Council of Europe's Group of States against Corruption (GRECO, 2012) concluded that Russia implemented 15 out of its 26 wide-ranging recommendations, with remaining eleven being partly implemented. It is important to maintain and build on this momentum.

The Russian authorities have taken a number of steps to strengthen the judicial system with visible progress in the efficiency and competence of the economic courts (Granville, 2013). The share of firms considering courts a major obstacle in their business activity is falling strongly (World Bank, 2013). A new programme for "Development of the judicial system in 2013-20" foresees increasing transparency, accessibility and openness, including audio-video recordings of proceedings and broadcasting sessions on the Internet. Judicial salaries were substantially increased in 2012, although no attempt was made to introduce a rotation of judges or other measures to increase judicial independence as recommended in the *2011 Economic Survey*. Greater transparency in appointment and promotion processes would also be an important step forward. Another initiative to improve the quality of judiciary decisions is the introduction of a new criminal appeal procedure. The State Duma currently considers a draft law to establish administrative justice chambers in general jurisdiction courts and a new draft code on administrative court procedure, which should improve the ability of citizens to protect their rights against state action or inaction. On the other hand, the merger of the highest economic court with the Supreme Court of general jurisdiction, which intends to eliminate the possibility of different interpretations, led to concerns by key stakeholders about the impact on perceived efficiency and independence of economic courts. It is also important to make law-enforcement agencies, including the Investigative Committee and Prosecutor's Office, more transparent and accountable to limit room for undue influence.

The position of a Federal Business Ombudsman was created in June 2012 to protect business people from administrative and legal abuse by the government. Regional ombudsmen have been already established in 62 regions. The State Duma adopted in July 2013 an amnesty for businessmen who were criminally convicted only once and on lesser economic crimes, who agreed to pay damages, or who were still in pre-trial detentions. Article 159 of the Russian Criminal Code was amended in December 2012 clarifying the definition of "swindling", which was so broadly interpreted as to contribute to legal uncertainty. Measures directed at shortening the length of pre-rial detention should also be considered, as cases considered by the European Court of Human Rights, where detainees had been held for four to six years in remand (OSJI, 2011), are only extreme examples of the broader problem.

Promoting a strong civil society is essential for strengthening transparency, accountability and trust in public institutions. Recent progress in this area is mixed. On the one hand, it was decreed that all legislative initiatives that gathered 100 000 signatures should be discussed by the State Duma. Stakeholder consultations were strengthened at all levels of the government and the process of registration of non-governmental organisations (NGOs) was simplified. Business representatives certainly have more structured opportunities to have their say when legislation is being drafted. On the other hand, the media are not becoming more independent and Russia is ranked in 148th place out of 179 countries according to *Press Freedom Index* published by *Reporters Without Borders*. The new law on assembly put in place much tighter restrictions on participation in public debate. A 2012 law requires any NGO involved in broadly defined political activities and receives financing from abroad to register as a "foreign agent", a label that is highly stigmatising in Russia. This law and its heavy-handed enforcement attracted criticism from the Council of Europe and several human rights groups. At a minimum, clarifying the definition of political activity and foreign financing, and replacing the "foreign agent" label would send a very positive signal about the authorities' commitment to civil society activities.

More broadly, the continuous flow of unsettling news regarding interactions of politics, business and law enforcement, at least as it is presented by leading business media, for example CNBC (2013), FT (2013) might contribute to capital outflows, the low market valuation of Russian companies and sluggish private investment.

The role of the state in economy is large

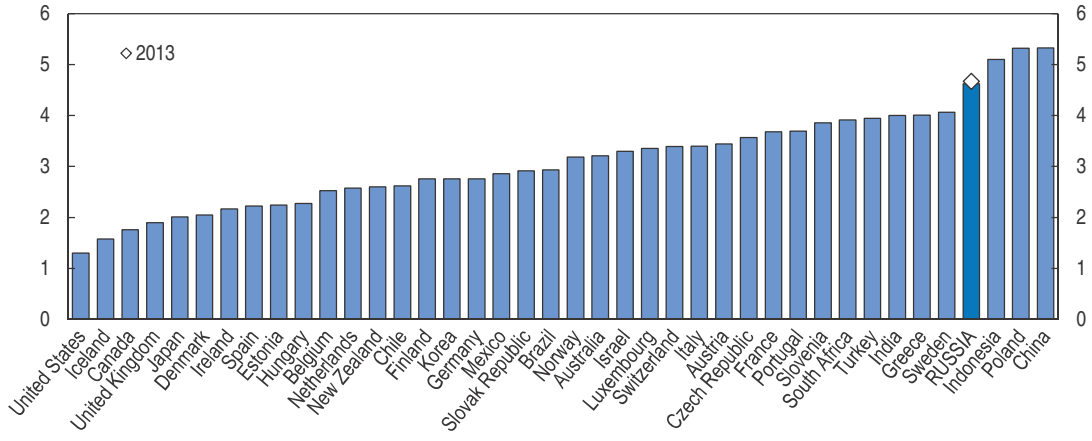
State-owned enterprises (SOEs) play an unusually high role in the economy (Figure 11). Their share of output has grown with large acquisitions by SOEs, like Rosneft and VTB, even as some small SOEs are disappearing. SOEs occupy the dominant position in a number of important sectors (Figure 12), including banking, transport and energy. Their dominance poses a severe challenge to market entry and competition and preserves pockets of inefficiency.

The privatisation plan adopted in 2010 foresaw privatisation of 1 500 enterprises, including several largest companies in key sectors, such as banking, energy, telecoms and transport. But while many stakes have been sold, the majority of large transactions were delayed because of, according to official sources, an unfavourable market situation. The original privatisation plan for 2014-16 aimed at the withdrawal of the state from all companies, except for natural monopolies and oil and defence sectors. However, this plan was substantially scaled down in June 2013.

State ownership comes in great variety, which reduces transparency and accountability, while complicating management and the unbundling of commercial and non-commercial roles. A management model respecting competitive neutrality in line with the OECD Guidelines on Corporate Governance of State-Owned Enterprises could help to address these problems. The official plan reducing the number of state unitary enterprises by 2016 is a step in this direction. As the quality of governance of SOEs is highly dependent on the autonomy of directors, the gradual withdrawal of top level public officials from the board of directors of SOEs that started in 2011 is a positive change. Professional directors were established instead in a number of enterprises (RZD, VTB, Rosneft, Gazprom), but the process is rather slow. The professionalisation of SOE management has also been encouraged by the introduction of the special committee on

Figure 11. **Product market regulation indicator: Public ownership**

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



Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.
Source: OECD, *The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries* (ECO/CPE/WP1(2013)14).

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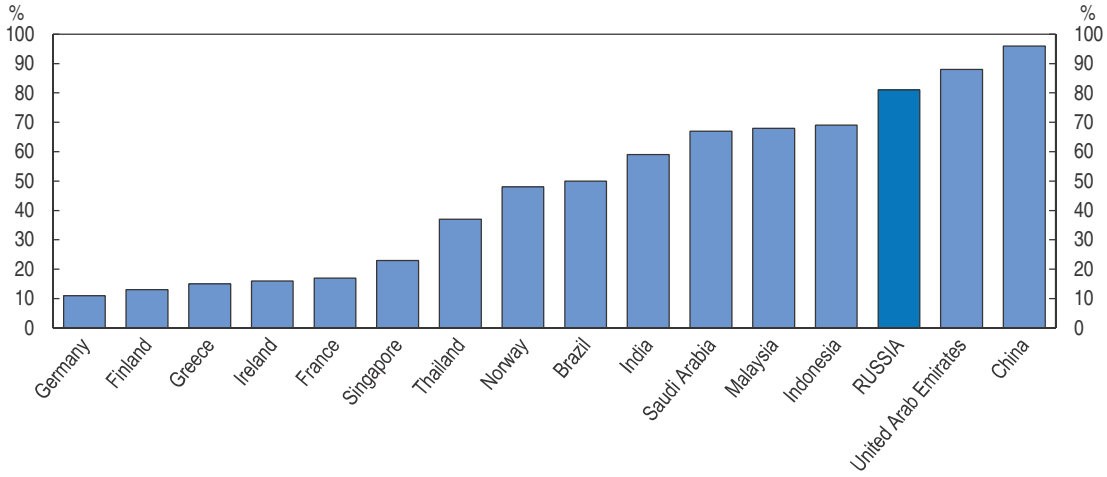
Figure 12. **State-owned enterprises shares among countries' top ten firms**



Note: Unweighted average of SOE shares of sales, assets and market values among country's top ten companies. It ranges from 0 (no state ownership) to 100 (all sales, assets and market value of country's ten largest companies are accounted for by SOEs). Only countries with shares above 10% are shown.
Source: Kowalski, P. et al., 2013.

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the selection of directors. Board member remuneration is also increasingly linked to achieving key performance indicators.

Nevertheless, the "system of instructions", under which some state-appointed directors are still required to vote at SOE board meetings according to the state's preferences on a set of issues, should be revised in line with the OECD Guidelines. The quality of governance in SOEs could also be improved by obliging them to increase the level of their stock exchange listing. Now, most of the largest public companies are traded at the

lowest listing levels of the Moscow Exchange, which minimises corporate governance requirements, such as information disclosure and the number of independent directors.

Governance problems are not only limited to SOEs. In the private sector, the ability of minority shareholders to monitor and seek redress is constrained by low transparency of business groups and scant information on ultimate beneficial ownership, and some loophole-ridden laws, such as on takeovers. The corporate governance problems add to other risks of investing in Russia, thereby contributing to high risk premium assigned to Russian companies, with a price/earnings (P/E) ratio that is two to three times lower than the same index for other BRICS. Among other consequences, these low valuations have an impact on the size of potential privatisation proceeds.

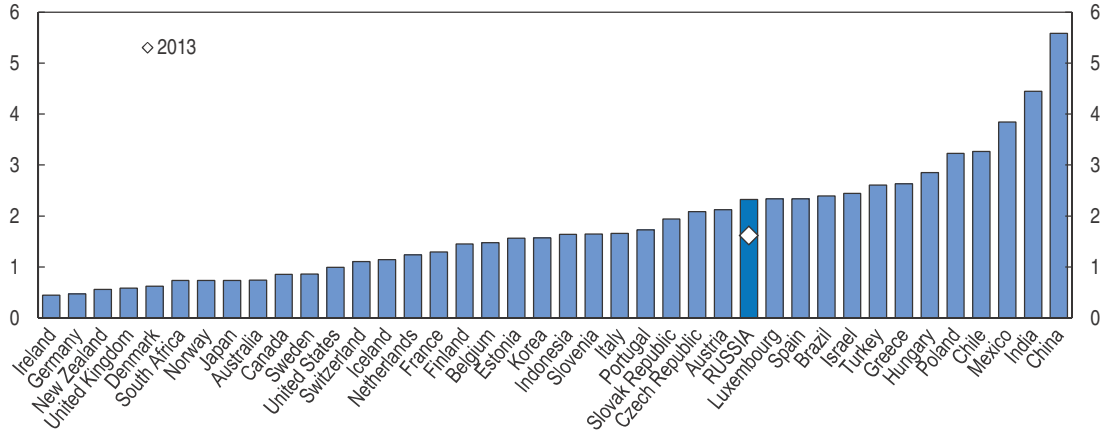
Reforms address administrative burdens

Only 25% of Russian employment is in small and medium size enterprises (SMEs), compared to 50% on average in OECD countries. This difference reflects the dominant role of large state-owned enterprises, the poor business climate and poor access to financing. Attitudes towards entrepreneurship also matter. The latest Global Entrepreneurship Monitoring review puts Russia last among 69 countries in terms of willingness to start a business (GEM, 2012). On a positive note, restrictions and red tape have been reduced in recent years, as reflected in a better PMR score on barrier to entrepreneurship (Figure 13). Russia also improved its World Bank *Doing Business* rank in terms of the ease of opening business from 111th in 2011 to 88th most recently. Similarly, a much lower share of firms reported that licencing, tax and courts administrations were significant obstacles to their business in 2011 compared to 2008 (World Bank, 2013).

Several measures to reduce administrative costs have been introduced: one-stop shops, reductions in licencing requirements, and streamlined claims for the zero VAT rate. However, there was no progress introducing a "deemed clearance" regime. The Ministry of

Figure 13. **Product market regulation indicator: Barriers to start-ups**

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



Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.

Source: OECD, *The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries* (ECO/CPE/WP1(2013)14).

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Economic Development (MED) is currently working on simplifying the registration process for legal entities and sole proprietors. The National Entrepreneurial Initiative *"Improvement of Business Climate"*, initiated at end-2011, includes 13 roadmaps to make business processes simpler, faster and cheaper. Work on preparing 10 roadmaps has finished and the process of implementation in pilot regions has started. The early success of the project was reflected in Russia being named one of the top three reformers in the 2014 World Bank *Doing Business* ranking, with the overall rank improved to 92nd from 120th in 2011. The Regional Investment Standard to be implemented by all regions in 2013 contains best practice measures to make the relationship between business and the regional authorities more transparent and efficient.

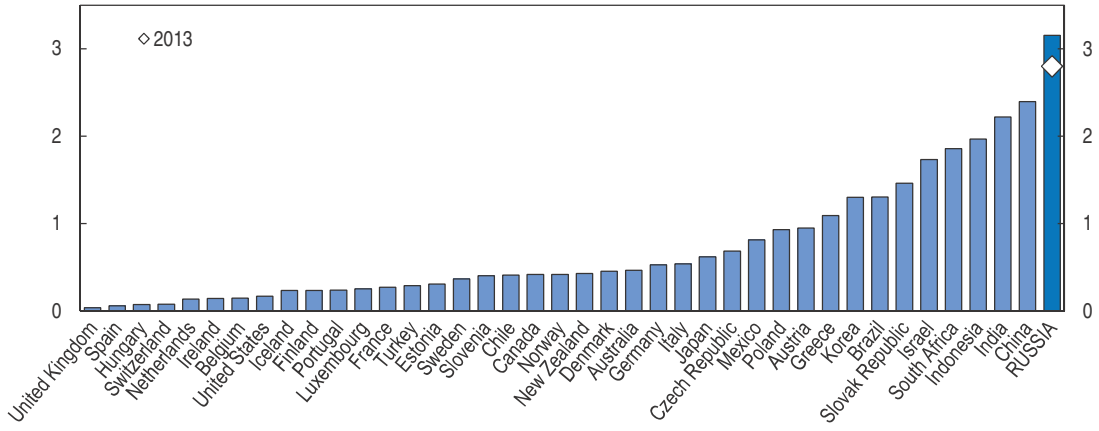
A regulatory impact assessment (RIA) procedure has been introduced since 2010 to review all new and, progressively, existing government laws and regulations for excessive costs to entrepreneurs. RIA procedure will be further strengthened and will be extended to customs and tax regulations and to the regional (2014) and municipal level (2015), where many barriers to business entrepreneurship originate (EBRD, 2012). Since August 2010 MED has already carried out more than 1 800 assessments. RIA could be extended to systematically reviewing legislative amendments under consideration by the State Duma.

Competition remains weak

Recent PMR results indicate that the barriers to competition have fallen slightly lower, but also that competition is still hampered by the dominance of large state-owned enterprises and barriers to foreign trade and investment (Figure 14). On the other hand, the Federal Antimonopoly Agency (FAS) is a strong and effective institution with a solid track record. However, it is overwhelmed with many insignificant cases. The recent "Third anti-monopoly package" should decrease the number of cases concerning small repetitive abuse of dominance, introduces the definition of cartel in both Competition Law and Criminal Code, and clarifies of the determination of a monopolistically high price.

Figure 14. **Product market regulation indicator: Barriers to trade and investment**

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



Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.

Source: OECD, *The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries* (ECO/CPE/WP1(2013)14).

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Remaining priorities for competition policy include further improving the quality and relevance of economic analysis of competition issues, enhancing conformity between the competition law and the criminal code, developing merger control mechanisms, and removing legal obstacles to effective co-operation between FAS and its foreign counterparts. Development of competition was strongly emphasised in the National Entrepreneurial Initiative, which gives priority to reducing the role of the state in the economy and establishing clear "rules of the game" regarding competition policy. In particular, a draft "Fourth anti-monopoly package" currently considered by the State Duma requires any new state owned enterprise be approved by FAS. Competition promotion was also recently introduced as a task shared across all government institutions. More effective progress with regulatory reform promoting competition and removing entry barriers is also essential for generating a significant impact of policies supporting innovation spending.

Barriers to trade and FDI remain high

Russia acceded to the WTO in 2012. The WTO membership will sharpen competitive pressures via tariff reductions and liberalised access in services, provided it is not compensated with commensurate increases in non-tariff barriers to trade. Potentially protectionist measures, notably food-safety related restrictions and the introduction of a recycling fee on imported vehicles, as well as certain implementation capacity problems suggest that further action is needed to take full advantage of the WTO process (Russian Accounts Chamber, 2013).

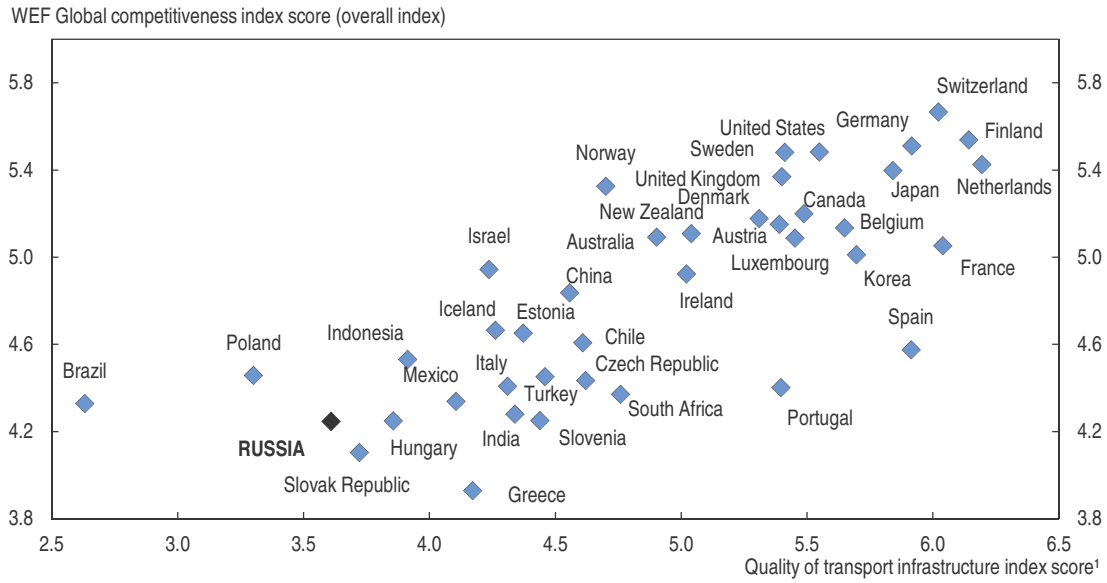
Inward foreign direct investment (FDI), at 1.6% of GDP in 2012, is close to the OECD average. However, round-trip investment via off-shore jurisdictions accounts for close to 60% of the total. This investment tends to be attracted to resource-rich regions and regions with a high perception of corruption, and is less technologically advanced than other FDI (Ledyaeva, 2013). Important barriers to FDI include restrictions on foreign investments in several sectors, including quotas and limitations on the scope of operations for licences granted to foreign investors in financial services. The usefulness of these restrictions should be regularly examined.

Attraction and support of FDI is a government priority, and steps to improve the FDI climate have been taken at both the federal and regional level. The State Duma is discussing simplifications of the approval procedures for foreign investors who want to acquire a significant stake in a sector deemed as strategic and fine tuning the list of strategic sectors. The removal of the application of reciprocity in the Banking Law for all OECD investors in October 2013 was an important step, expressing commitment to the principle of non-discrimination. The Russian Direct Investment Fund, created in 2011 to operate with long-term financial and strategic foreign investors, has become an anchor investor for a large number of projects. The road maps to improve the investment climate in critical areas, such as customs, construction and public procurement, have been developed at the federal level and some measures are now being tested at the regional level. The systematic implementation of these initiatives would be necessary for realising Russia's potential for attracting FDI.

Tackling transport bottlenecks

Russia ranks low in quality of transport and competitiveness (Figure 15). Estimates suggest that a 10% improvement in transport efficiency could increase GDP by 0.8% (Annex 1.A1). The modernisation challenge is huge as the Russian transport system is one

Figure 15. **Competitiveness and quality of transport infrastructure**



1. Simple average of four quality indicators (roads, railroad infrastructure, port infrastructure, air transport infrastructure). The responses are to the questions: "In your country, how would you assess the following aspects of transport infrastructure?" *a)* Roads, *b)* Railroad system, *c)* Air transport infrastructure, *d)* Seaport facilities [1 = extremely underdeveloped – among the worst in the world; 7 = extensive and efficient – among the best in the world].

Source: World Economic Forum (2013), *The Global Competitiveness Report 2013-2014.*

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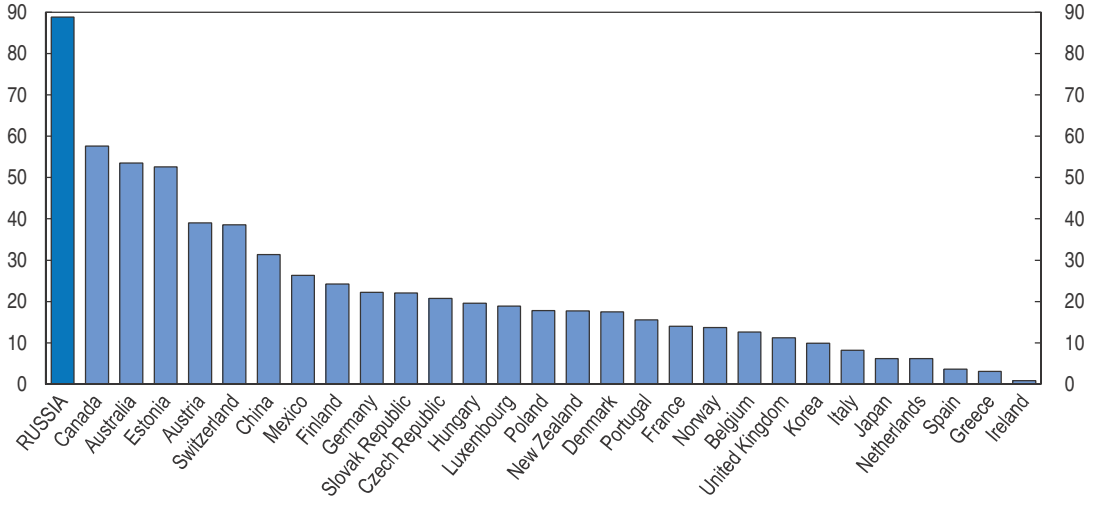
of the largest in the world, with a well-developed railway network but a poor road system. Improving the quality of railway services is particularly important because of its role for freight (Figure 16) and long-haul passenger transport. Spending on transport infrastructure

Figure 16. **Railway share of freight transport**

2010, % in total inland freight tonne-km



Note: Excluding oil pipelines. 2009 data for Canada, China, Greece, Luxembourg, Switzerland. 2008 for Australia, Korea, New Zealand, United Kingdom.

Source: OECD/ITF (2012), *Trends in the Transport Sector 1970-2010.*

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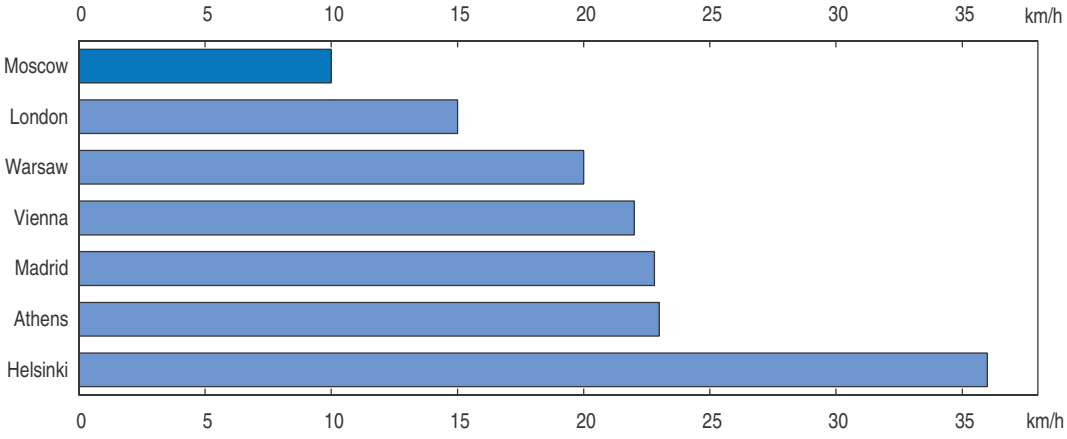
has risen in the last decade, but the needs remain substantial, as according to the World Economic Forum Russia's roads rank 136 (out of 148 countries), its railways 31, its ports 88 and its air transport 102 (World Economic Forum, 2013). Also repairs are not sufficient to prevent infrastructure degradation (IERT, 2012).

Problems with infrastructure quality are aggravated by unfinished institutional reform. Despite a large number of players in wagon operation, RZD maintains an effective monopoly in railway freight, being the owner of both infrastructure and all locomotives. This has resulted in the ineffective use of the available infrastructure, increasing prices, excessively long shipping times and even denial of service. In long-haul passenger transport, RZD faces competition only on the route between Moscow and St. Petersburg. Improving efficiency of railway transport requires a long-awaited decision about targeted model of railway competition followed by regulatory reform and strengthened competition rules enforcement by FAS.

While road transport has been growing rapidly, the network density and quality have not kept pace despite the growing attention of the government to its development. The majority of roads are not adequate for heavy vehicles, and deficient standards and enforcement have led to safety and environmental concerns (HSE, 2013). While the system is most dense in the European part of Russia, some areas in Siberia and the Far East still lack regular connections with the main transport network, hindering economic activity.

Transport problems in big Russian cities have become a particularly important constraint on economic development, as it is increasingly difficult to attract new investment and workers to these areas. The situation is most complicated in Moscow and St. Petersburg, where hours-long traffic jams have become the norm and public transport is inadequate (Figure 17). But congestion is an increasing challenge in most bigger cities (Donchenko, 2013). Improved local planning, including congestion charges, and further progress in local railway reform would be particularly important to enable an adequate response to the needs of commuters. The federal government should support cities more strongly by providing targeted aid, developing model urban and region transport plans and removing existing legal barriers.

Figure 17. **Average traffic speed in peak hours in selected cities**



Source: Donchenko, V. (2013), "Towards the Sustainable Mobility in Russian cities: Problems, challenges and risks", paper presented at the he International symposium OPTOSOZ, Moscow, 14 March.

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The revised "Transport Strategy of the Russian Federation until 2030", which was approved by the government in August 2013, lays out the principles of transport system development. The authorities are now rightly placing the revised Strategy at the centre of decision making. This should link investments with long-term priorities more strongly than in the past, and minimise the influence of short-term political and budgetary considerations, bringing more coherence and prioritisation to policy making. The various modes of transport should be also developed in a more consistent way. Large scale infrastructure projects, which will be needed to resolve transportation shortcomings, would also benefit from more rigorous cost and benefit analysis, improvements in public procurement, project evaluation, public-private partnerships, and the fight against corruption.

Box 2. **Recommendations for establishing a transparent, coherent and predictable business climate**

- Continue the current anti-corruption campaign with stronger focus on transparency and accountability mechanisms in the public sector. Improve legal protection of whistleblowers and do not restrict the scope for media or civil society organisations to publicise violations of the law.
- Strengthen judicial independence through greater transparency in appointment and promotion processes, better pay and rotation of judges, while avoiding even the appearance of political interference in court cases. Make law-enforcement agencies more transparent and accountable.
- Continue reducing administrative barriers, and widen federal initiatives to regional and local levels. Extend regulatory impact assessments to legislative draft considered by the State Duma.
- Push ahead with privatisation of state-owned banks and other state-owned enterprises (SOEs). Further improve governance of SOEs and foster a level playing field between public and private companies.
- To strengthen the positive impact of WTO accession, refrain from introducing entry barriers. Shorten the list of strategic sectors with prior approval required for foreign investment and streamline the approval process.
- Tackle transport bottlenecks by improving the efficiency of infrastructure spending, promoting competition in the transport sector and ensuring better policy co-ordination to address urban transport challenges.

Skills and innovation are essential for shaping future growth

Achieving high sustainable growth requires improving human capital and the innovation capability of the economy, and continued labour reallocation towards more productive and better paying enterprises. Lifelong learning, activation programmes and stronger income support to the unemployed could contribute to that reallocation by better matching skills with jobs. Also much needs to be done regarding the supply of the right mix of skills by continuing to reform the education system.

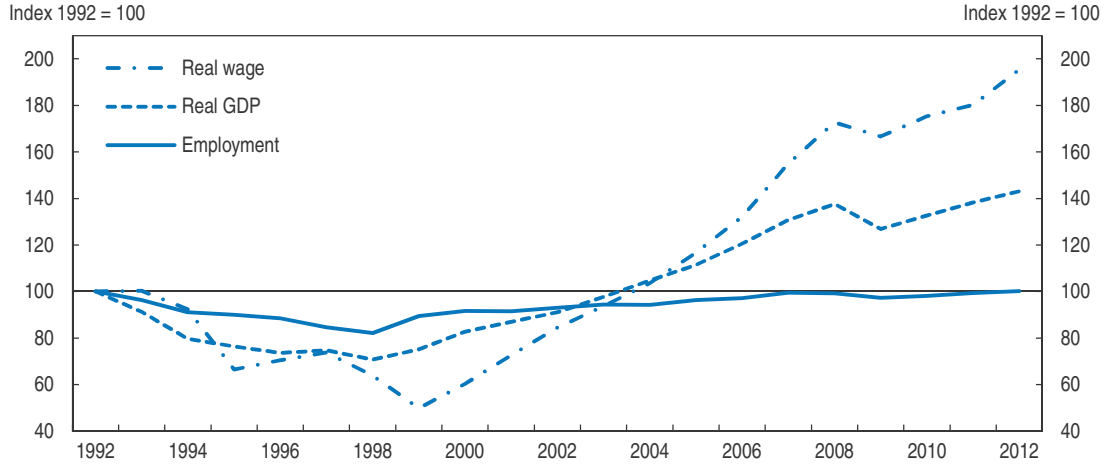
Better matching skills and jobs will require more active labour policies

With an employment rate of 69%, against 65% in the OECD, the Russian labour market performs relatively well. Employment also appears quite stable over time: Russia's GDP

declined by almost 8% in 2009, compared with less than 4% on average in OECD countries, but the unemployment rate rose by 2.2 percentage points, similar to the OECD average. This stability is due mainly to the high degree of wage flexibility (Figure 18; Lokshin et al., 2012).

However, this wage flexibility has resulted in a large share of employees with incomes less than the subsistence level (14% in 2013) and a high level of wage inequality as measured by the Gini coefficient (Denisova, 2012). Low wages and poor working conditions allowed least productive firms to survive but reduced job attachment, resulting in high turnover, with about 30% of workers leaving their jobs each year since 2000 (Gimpelson and Lippoldt, 2001; OECD, 2011b). The strong increase in the share of the informal sector in global employment, also added to the problem (Lehmann and Zaiceva, 2013).

Figure 18. **GDP, employment and wages**



Source: Rosstat.

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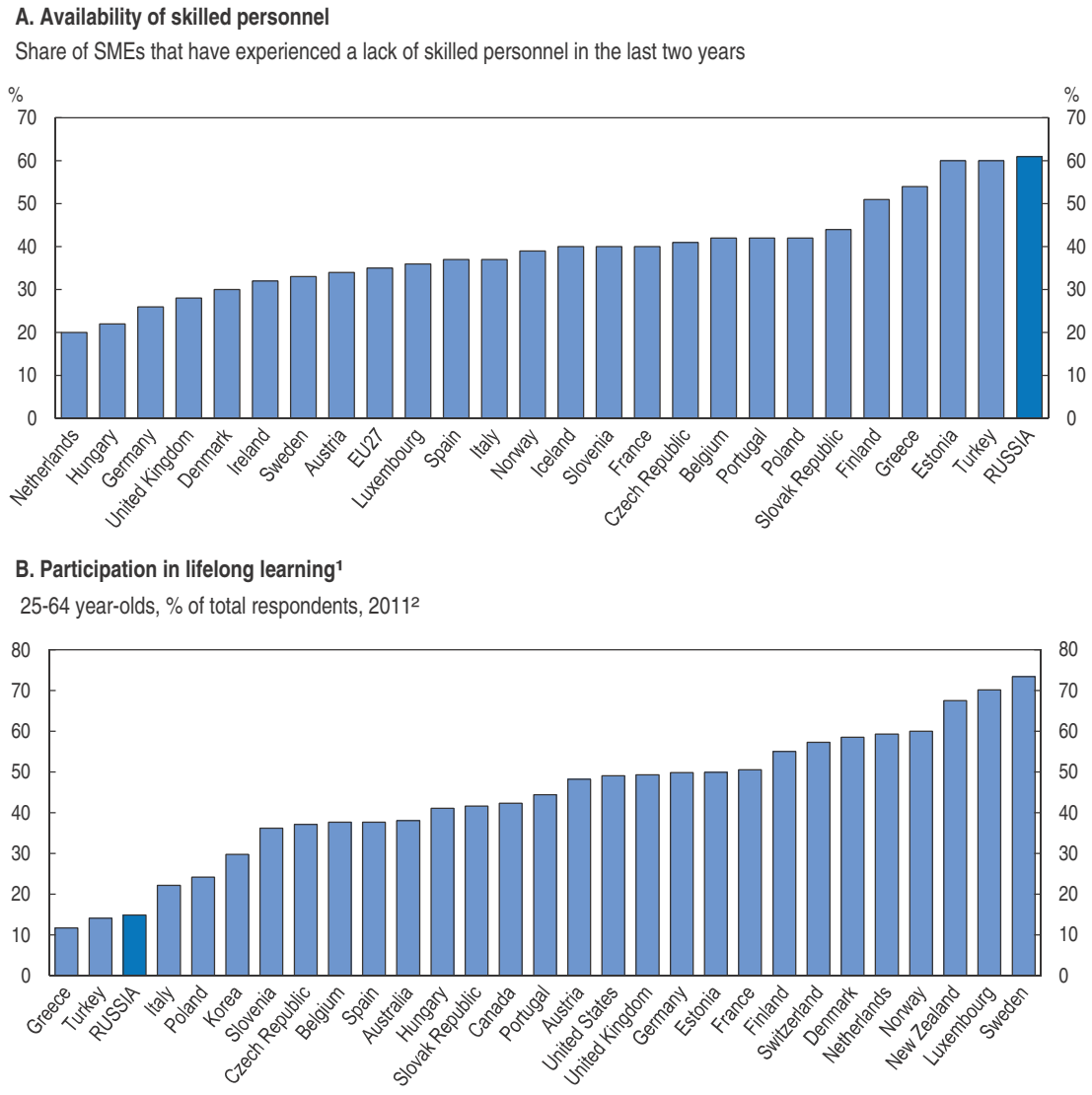
High labour turnover, informality and low wages reduce incentives to invest in human capital (Commander and Denisova, 2012). This results in difficulties for firms to meet their skill needs and lowers the engagement of workers in lifelong learning (EBRD, 2012; Figure 19). The ability to apply knowledge in a technology-rich environment seems to be a relative weakness among adults. Preliminary results from the *OECD Survey of Adult Skills* (PIAAC) suggest that Russians perform better than the OECD average in terms of literacy, similar to the OECD in terms of numeracy, but they lag behind in term of the ability to use ICT tools efficiently (OECD, 2013d). Brain drain adds also to the problem; 80% of emigrants in 2010 were highly skilled whereas most of immigrants were low skilled or unskilled (ILO, 2011; EBRD, 2012).

Lifelong learning could contribute more strongly to improving and matching skills and facilitate the adoption of new technologies (OECD, 2005). While some programmes exist to train specific qualified personnel, for instance for engineers, broader schemes to boost lifelong learning are underdeveloped. Low qualified workers in Russia tend to engage less in learning (Tan et al., 2007), while international studies find positive effect for this group of workers. But incentives for training them need strengthening as required investment in general and transferable skills is less profitable to firms (Ok and Tergeist, 2003; Bassanini et al., 2005). The engagement of SMEs in lifelong learning is also weak which may reflect financial and organisational difficulties faced by small firms or the lack of customised

Figure 19. **Skill mismatch and life-long learning**



1. Lifelong learning refers to formal and non-formal education.
2. 2006 for Finland and New Zealand. 2007 for Australia and Turkey. 2008 for Canada. 2009 for Switzerland. 2012 for Russia.

Source: Flash EUROBAROMETER 196 "Observatory of European SMEs": Russian SME Survey 2009-2010, Bauman Innovation/strategy Partners, OPORA RUSSIA; OECD (2012), *OECD at a Glance 2012*, Table C6.6; Eurostat: *Adult Education Survey Database*; and Ministry of Education of the Russian Federation.

StatLink http://dx.doi.org/10.1787/888932979557

training (OECD, 2012d). In that context, overall productivity could be raised by providing specific support to firms and workers who tend to under-invest.

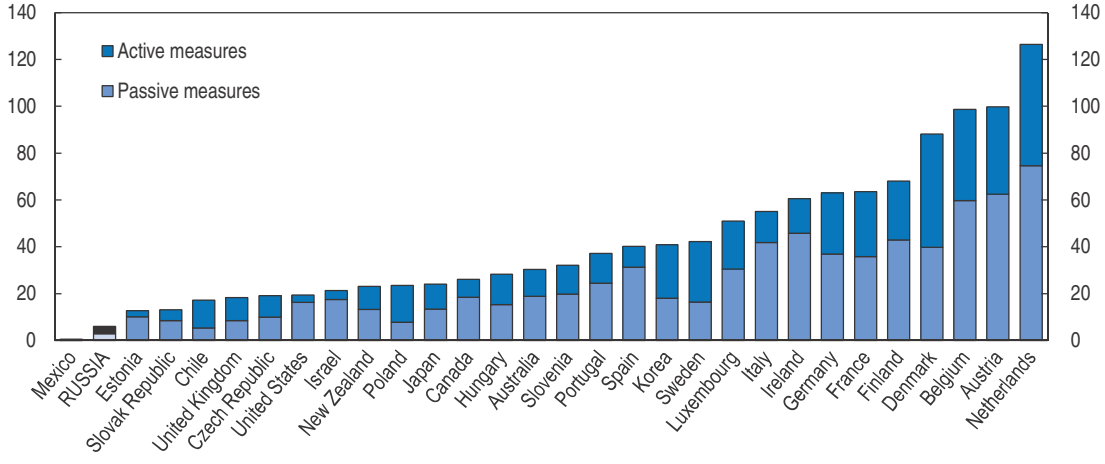
Balanced industrial relationships between workers and employers could also limit the vicious circle of low wage, low productivity, high turnover and low human capital investment. Despite relatively high trade union membership and the provisions in Russian law, the enforcement of collective bargaining is *de facto* very limited, in particular at the firm level (OECD, 2011b; Box 2.6). Nonetheless, collective bargaining plays an important role in ensuring the improvement of working conditions, stable employment and the access to training for all categories of workers (Keogh, 2009). Freedom to express collective

interests is also an important building block of civil society (Hayter, 2011) and effective enforcement of workers' rights and binding agreements is part of the rule of law. Authorities should therefore widen the scope for negotiating collective bargaining on the enterprise level and ensure enforcement by following the recommendations made by experts in the context of the OECD review on labour market and the ILO Commissions on Freedom of Association and Collective Bargaining (OECD, 2011b; ILO, 2013).

Moving towards human capital-led growth will require changes in the structure of the economy and, in particular, of employment. Strong active labour market measures could support the transition of workers to new jobs (Meager, 2009; Martin and Grubb; 2001; Berger et al., 2001) and to target services to those who will need it most, such as the low skilled (Benus et al., 2005; Nivorozhkin and Nivorozhkin, 2006; Akhmedov et al., 2003). However, spending in that area remains far below the OECD average (Figure 20). There is also a need to reorient spending from public works and wage subsidies toward programmes to address skills mismatches, such as training. Federal transfers to the 15 regions with the highest levels of unemployment, targeted support to regional mobility and requalification in mono-industrial cities should be continued and indeed strengthened. The efficiency of the public employment services could be improved by reducing the caseload and developing further IT intermediation tools. More generally, the efficiency of active labour programmes should be more systematically evaluated through *ex post* studies.

Figure 20. **Expenditures on labour market policies**

Public expenditure on labour market policies per unemployed (% of GDP per capita), 2010[1]



1. 2009 for United Kingdom and Russia.

Source: Russian authorities; OECD Public expenditure and participant stocks on LMP database; *OECD Economic Outlook Database* and *OECD Annual National Accounts Database*.

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The current level of passive labour market spending in Russia is also low, with unemployment benefits that do not cover even subsistence living costs. This may force financially constrained individuals to accept a poor job offer, creating mismatch problems and low productivity. It also reduces incentives to register in employment services and gain new qualifications. In that context, a twofold reform should be considered: increasing the level of active labour market spending and the level of unemployment benefits while reinforcing job search requirement for all recipients including those only entitled to the

minimum benefits. An adequate level of unemployment benefits will also support the transition from the informal to formal economy (OECD, 2004).

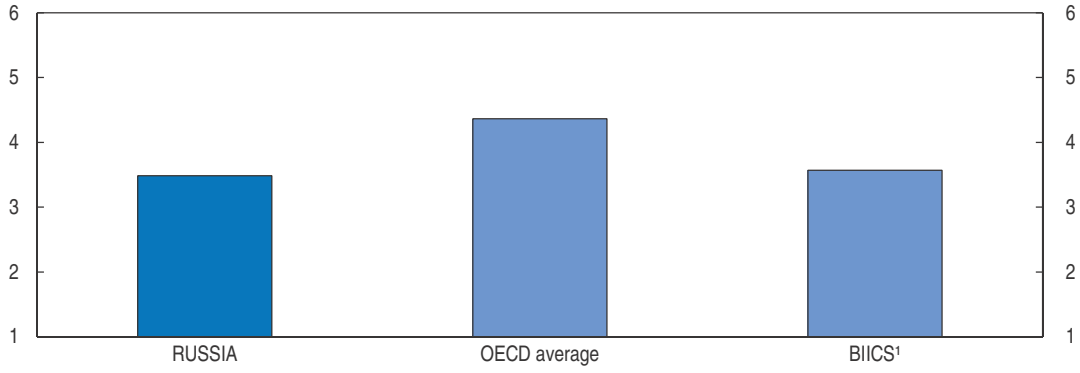
Education enrolment is high but quality and equality of opportunities need to be improved

Russia has one of the highest shares of tertiary educated population in the world, but the educational system has encountered difficulties in supplying the right mix of skills for employers (Figure 21). Weaknesses can be identified at all levels: secondary general, secondary vocational and tertiary education institutions.

Increased spending in the area of education should therefore be a priority in Russia. Overall spending should be brought closer to OECD levels especially in secondary education where the gap is highest (OECD, 2013b), while continuing efforts for improving the system's efficiency, notably through the ongoing process of restructuring the network of educational institutions and the allocation of funds in higher education institutions on a competitive basis. The authorities should also increase the funding to modernise secondary vocational education institutions that currently suffer from a general obsolescence and under-financing (Nikolaev and Chugunov, 2012) and ensure that federal transfers allow supporting schools with a high number of students in need. The planned OECD review of Russian education spending efficiency should provide useful guidance in that area.

Figure 21. **Quality of the education system**

2012-13, score (1-7 scale)



Note: The responses are to the question "How well does the educational system in your country meet the needs of a competitive economy ? [1 = not well at all; 7 = extremely well]".

1. Simple average of Brazil, India, Indonesia, China and South Africa.

Source: World Economic Forum (2013), *Executive Opinion Survey*, *The Global Competitiveness Report 2013-14*.

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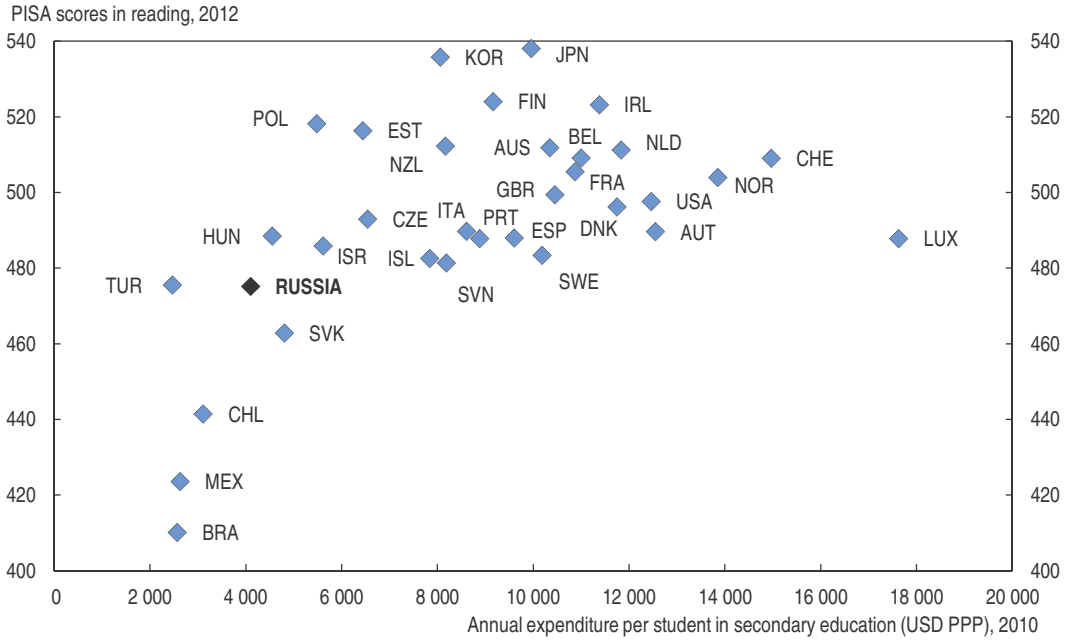
Results of international tests on educational performance are mixed. Russia belongs to the group of leading countries for PIRLS test (Progress in International Reading Literacy Study), and TIMMS test (Trends in International Mathematics and Science Study) which reflects good academic learning outcomes. However, the average performance of Russia in PISA is relatively poor reflecting a lower ability when it comes to apply knowledge in unfamiliar situations (Figure 22). There is also a high percentage of low performers, who do not reach the baseline proficiency in reading (OECD, 2013c). Many steps have already been taken to improve the quality of teaching including in the new Law on Education, which

came to force in September 2013, the new federal state education standards for primary and secondary education, the development of pre-school education, and an increase in wages. To attract good students to careers in teaching, the authorities should also consider generalizing the use of a performance-based bonus if current regional experiences with this tool prove successful.

Figure 22. **Education spending and PISA scores**



Source: OECD (2013), *PISA 2012 Results: What Students Know and Can Do – Student Performance in Mathematics, Reading and Science* (Volume I), Table I.A; and OECD (2013), *Education at a Glance*, Table B1.1a.

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The vocational education system, which is partly inherited from the Soviet period, mainly trains students for narrowly specialised jobs rather than core transferable skills. The co-operation of firms with vocational education institutions is weak (HSE, 2012). As a result, most firms have to retrain workers hired directly out of school (Survey from Centre for Human Resources, RANEPA). Including business representatives on governance boards of vocational institutions and revising the system of specialisation in vocational schools on the basis of currently updated professional standards, would reduce this gap. A dual system of vocational education with at least 25% of time spent in firms, which is currently being considered by the authorities, should also better align training with firms' needs and improve the school to work transition.

To improve the matching of higher education with local labour market needs, the new law on education allows universities to establish academic departments providing practical learning in close co-operation with employers. The role of regions has been strengthened since 2013, but the authorities still directly determine the distribution of state-subsidised places among study fields. Universities should be given stronger say in order to avoid creating career traps. The positive impact of such change would be reinforced by strengthening the governance boards and allowing more influence of

employers in decision making. Also, the share of students paying fees has also increased substantially over the last 20 years. While this sharpens incentives, it also increasingly risks excluding the poor, so introducing means-tested grants and loans with repayment contingent on income would improve equity. The government should consider revising the criteria for the allocation of free student places, which currently depend solely on academic scores, thereby indirectly favouring students with better socio-economic backgrounds.

Primary and secondary education is decentralised, which provides greater flexibility and responsiveness but also makes its provision fully dependent on regional and municipal budgets. The result is that public expenditures on general education currently varies considerably by region, with per student spending ranging from RUB 31 000 to 164 000 (Rosstat and Ministry of Education). Increasing federal transfers for education would narrow this disparity and help to equalise educational opportunities across the country. Fees for optional courses are also widespread and increase the dualism between schools financed by richer parents and schools with poorer parents, where only the compulsory subjects are taught (Andrushchak et al., 2010). Better resourced schools have also the possibility to attract better qualified teachers which adds to the problem. This practice should be reconsidered, and additional courses funded from the public budget.

Strengthening innovation in Russian firms

Further growth in Russia will have to be driven by improvements in productivity and energy efficiency. Such improvements are possible either by adapting best–practice technologies and business processes, or by innovating. Unfortunately, the number of innovative firms remains very small (Figure 23) and business funded just 26% of spending on R&D in 2010. This important "innovation gap", which is also reflected in a low number of patents, is particularly worrying when considering Russia's very rich science and engineering tradition, a large base of state-owned branch research institutes, and its high level of education attainment. Moreover, despite a rise in public R&D spending, Russia

Figure 23. **Innovation in the manufacturing sector by category**

2008-10, as a percentage of all manufacturing firms

Source: OECD (2013), *Science, Technology and Industry Scoreboard 2013*, Figure 5.1.2. See Statlink note.

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dropped out recently from the group of best performing upper-middle-income countries in terms of the Global Innovation Index (Cornell University et al., 2013).

Publicly-owned research and design institutions still perform almost 75% of all R&D in Russia (HSE, 2013), and the role of private organisations is marginalised. The "Innovative Russia 2020" strategy adopted in 2011 puts business more at the centre of innovation policies, including through promoting innovation at state-owned enterprises, creating innovation clusters and technology platforms, and involving business more systematically in innovation policy planning. However existing programmes still tend to be excessively focusing on high-tech innovation, which is at odds with the importance of innovations in low-technology and service sectors (OECD, 2012b). Such bias tends to disadvantage small and medium-sized enterprises, which make a remarkably small contribution to R&D spending in Russia, despite recent initiatives directed at promoting innovation co-operation between SOEs and small firms. It would also be essential to very carefully evaluate top-down programmes, such as the "Innovation Enforcement Initiative" directed at the largest SOEs, to avoid innovation "window dressing". More broadly, one structural problem with innovation policy in Russia is that new initiatives are launched without a systematic evaluation of previous actions (Kuzyk and Simachev, 2012).

Russia performs worse than most OECD countries in terms of academic output, as measured for example by publications in peer-reviewed journals. Improving the efficiency of public research spending is therefore essential, while too much funding is still allocated without adequate accountability or reference to performance (OECD, 2012b). Remaining state-owned branch research institutes continue to be largely disconnected from both firms and universities, and should be streamlined, for instance by encouraging their merger with production-oriented enterprises (OECD, 2012a). Improving the governance of the Russian Academy of Sciences, with its myriad specialised institutes and questionable preservation strategies, and which accounts for a significant share of publicly performed research, is particularly important. The share of competitive funding should be increased and underperforming institutes should be downsized. There is also a need to further strengthen research capabilities of higher education institutes, which account for less than 10% of total research spending. Recent initiatives have been directed at establishing an elite cadre of national research and federal universities. This is in line with OECD best practice but the effectiveness and cost efficiency of supporting programmes need to be carefully evaluated.

To strengthen the contribution of the Academy and universities to economic development, more needs to be done to open channels of knowledge diffusion beyond academic publications, including through direct co-operation with businesses. A series of federal laws and programmes encourage the creation of spin-offs, development of technology platforms and regional clusters, but it is still too early to assess the results of these initiatives.

Box 3. **Recommendations for strengthening skills and innovation**

- Strengthen life-long learning through incentive for firms and workers, such as training vouchers. Increase spending on active labour market programmes and temporary income support to unemployed. Widen the scope for negotiating collective agreements on the enterprise level.
- Increase overall education funding, in particular in poor regions, while continuing to restructure education institutions. Link remuneration of teachers with their performance. Strengthen the co-operation between education institutions, business and trade unions and continue efforts to develop updated professional standards for vocational education. Reconsider school fees for optional courses in primary and secondary education to reduce access inequalities.
- Continue broad-based support for innovation, and for the adoption of new technologies, in particular to improve energy efficiency. Finalise the reform of the public R&D sector; in particular by shifting more research from the reformed Academy of Science to universities, increasing the share of competitive grant funding and streamlining state-owned branch research institutes. Evaluate innovation policies more systematically.

Bibliography

Akhmedov, A., I. Denisova and M. Kartseva (2003), "Active labor market Policies in Russia: regional interpretation determines effectiveness?", *CEFIR Working Papers* 37.

Andrushchak, G.V. et al. (2010), "New pay system in schools. Experience of the Novgorod Region", *Higher School of Economics Working Papers Series* No. 05.

Bassanini, A. et al. (2005), "Workplace Training in Europe", *IZA Discussion Papers* 1640.

Belanovsky, S. et al. (2011), *Socio-economic change and political transformation in Russia*, The Center for Strategic Research, Moscow.

Berger, M.C, J.S. Earle and K.Z. Sabirianova (2001), "Worker training in a restructuring economy: Evidence from the Russian transition", *IZA Discussion Papers* No. 361, IZA, Bonn, Germany.

Benus, J. et al. (2005), "Re-training Programs in Russia and Romania: Impact Evaluation Study", *CEFIR Policy Papers*.

Brown, J.D. and J.S. Earle (2008), "Understanding the Contributions of Reallocation to Productivity Growth: Lessons from a Comparative Firm-Level Analysis", *IZA DP* No. 3683, September.

Bukowski, P. and J. Earle (2014), "Measuring Productivity Dispersion across Russian Manufacturing Firms, 2003-2010", *Economics Department Working Papers*, forthcoming, OECD Publishing.

CNBC (2013), *Is Russia Too Corrupt for International Business?*, 11 June, *www.cnbc.com/id/100805382*.

Commander, S. and I. Denisova (2012), "Are skills a constraint on firms? New evidence from Russia", *IZA Discussion Paper Series* No. 7041.

Cornell University, INSEAD, and WIPO (2013), *The Global Innovation Index 2013: The Local Dynamics of Innovation*, Geneva, Fontainebleau and Ithaca.

Denisova, I. (2012), "Income Distribution and Poverty in Russia", *Social, Employment and Migration Working Papers* No. 132, OECD Publishing.

Donchenko, V. (2013), "Towards the Sustainable Mobility in Russian Cities: Problems, Challenges and Risks", *paper presented at the International symposium OPTOSOZ*, Moscow, 14 March.

EBRD (2012), *Diversifying Russia. Harnessing regional diversity*, European Bank for Reconstruction and Development, London.

Floerkemeier, H. (2013), "The Exchange Rate *vs.* Interest Volatility Trade-Off: The Role of Inflation Targeting, Russian Federation", IMF 2013 Article IV Consultation: Selected Issues, *IMF Country Reports* No. 13/311.

FT (2013), Alexei Navalny verdict sends ripples through Moscow business world, *Financial Times*, 18 July, *www.ft.com/intl/cms/s/0/d2da85de-efb5-11e2-8229-00144feabdc0.html*.

Garbuzova, M. and R. Madlener (2012), "Russia's Emerging ESCO Market: Prospects and Barriers for Energy Efficiency Investments", *FCN Working Papers* No. 6.

Gimpelson, V. and D. Lippoldt (2001), *The Russian Labour Market: Between Transition and Turmoil*, Rowman & Littlefield Publishers.

Granville, C. (2013), "Russia's commercial courts: A bright spot", in Barysch, K. (ed.), *Three views on modernisation and the rule of law in Russia*, Centre for European Reform, London.

GRECO (2012), *Joint First and Second Evaluation Round, Addendum to the Compliance Report on the Russian Federation*, Group of States against Corruption, Council of Europe, adopted by GRECO at its 58th Plenary Meeting, Strasbourg, 3-7 December 2012.

GEM (2012), *GEM 2012 Global Report, Global Entrepreneurship Monitor*.

Hayter, S. (2011), *The Role Of Collective Bargaining In The Global Economy*, International Labour Office, Switzerland.

HSE (2012), *Monitoring of Education Markets and Organizations*, Higher School of Economics, ISSEK, Moscow.

HSE (2013), "*Bezopasnost dorozhnogo dvizhenia v Rossii:Sovremennoe Sostoyanie I Neotlozhnie Meri po Ulucheniu Situacii*"? (Road Safety in Russia: Current Situation and Emergent Measures for its Improvement), HSE, Moscow.

Huber, P. and A Wörgötter (1998), "Political Survival or Entrepreneurial Development? Observations on Russian Business Networks", *Post-Soviet Affairs*, Vol. 14, Issue 1, 81-91.

IEA (2011), *World Energy Outlook*, OECD Publishing.

IEA (2012a), *World Energy Outlook*, OECD Publishing.

IERT (The institute of the transport economics and development) (2012), *The Reference and Analytical Paper on the Railway Infrastructure Development in the Regions of the Russian Sea Ports Until 2015*, IERT, Moscow.

ILO (2011), *Employment and Labour Market strategies in Russia in the Context of innovations economy*, proceedings of the Conference, Moscow, September 2011.

ILO (2013), *Report of the Committee of experts on the application of conventions and recommendations*, Report III (Part 1A), ILO, Geneva.

Institute of Contemporary Development (2013), *Survey of public opinion*.

Keogh, H. (2009), *The State and development of adult learning and education in Europe, North America and Israel*, Regional synthesis report, Hamburg, Germany, UNESCO Institute for Lifelong Learning.

Kochetkov, A. (2011), *Professional Education and Labor Market: Problems of Interaction*, Institute of Sociology, Russian Academy of Sciences.

Kuzyk, M. and Y. Simachev (2013), "Russia's Innovation Promotion Policies: Their Evolution, Achievements, Problems and Lessons", *Russian Economy in 2012 Trends and Outlooks*, Issue 23, Moscow.

Ledyaeva (2013), "If Foreign Investment Is not Foreign: Round-Trip Versus Genuine Foreign Investment in Russia", *CEPII Working Papers*, February 2013.

Lehmann, H. and A Zaiceva (2013), Informal employment in Russia: Definitions, incidence, determinants and labour market segmentation, *Economics Department Working Papers* 1098, OECD Publishing.

Lehmann, H. and M. Silvagni (2013), "Is There Convergence of Russia's Regions? Exploring the Empirical Evidence: 1995-2010", *Technical Background Papers*.

Lokshin, M., V. Gimpelson and A. Oshchepkov (2012), "Explaining the dynamics in perceptions of job insecurity in Russia", *IZA Discussion Papers* 6422.

Martin, J. and D. Grubb, (2001), "What work and for whom: A review of OECD countries' experiences with active labour market policies", *Institute for Labour Market Policy Evaluation Working Papers* No. 14, IFAU.

Mauro, P. (1995), "Corruption and growth", *Quarterly Journal of Economics*, Vol. 110(3), 681-712.

Meager, N. (2009), "The role of training and skills development in active labour market policies", *International Journal of Training and Development*, 13(1).

McKinsey & Company (2009), *Lean Russia. Sustaining economic growth through improved productivity*, McKinsey Global Institute, Moscow.

Nikolaev, D. and D. Chugunov (2012), "The Education System in the Russia Federation", *World Bank Education Brief 2012*.

Nivorozhkin A. and E. Nivorozhkin, (2006), "Do government sponsored vocational training programmes help the unemployed find jobs? Evidence from Russia", *Applied Economics Letters*, Vol. 14(1), 5-10.

OECD (2004), "Informal employment and promoting the transition to a salaried economy", *OECD Employment Outlook*, OECD Publishing.

OECD (2005), *Promoting Adult Learning,* OECD Publishing.

OECD (2011b), *Reviews of Labour Market and Social Policies, Russian Federation*, OECD Publishing.

OECD (2011c), *Doing Better for Families*, OECD Publishing.

OECD (2012a), *Reviews Innovation Policy, Russian Federation*, OECD Publishing.

OECD (2012b), *Science, Technology and Industry Outlook*, OECD Publishing.

OECD (2012c), *Reviews of Health Systems: Russian Federation*, OECD Publishing.

OECD (2012d), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies,* OECD Publishing.

OECD (2013a), *Inventory of estimated budgetary support and tax expenditures for fossil fuel*, OECD Publishing.

OECD (2013b), *Education at a Glance*, OECD Publishing

OECD (2013c), *PISA 2012 Results: What Students Know and Can Do – Student Performance in Mathematics, Reading and Science* (Vol. I), OECD Publishing.

OECD (2013d), *Skills Outlook 2013: First Results from the Survey of Adult Skills,* OECD Publishing.

Ok and Tergeist (2003), "Improving Workers'skills: analytical evidence and the role of social partners", *Social, Employment and Migration Working Papers* No. 10, OECD Publishing.

OPORA (2012), *The entrepreneurship climate in Russia: Index of OPORA-2012*, Moscow.

OSJI (2011), *Pretrial Detention and Torture: Why Pretrial Detainees Face the Greatest Risk, Open Society Justice Initiative,* Open Society Foundations, New York, NJ.

Public Opinion Foundation (2013), *Survey of public opinion*.

Pushkarev, O. (2007), "Corruption and Economic Development of Russia: A Regional Aspect", *Applied Econometrics*, 2007, Vol. 6, Issue 2.

RAC (2013), *Report on intermediate results of the analytical review of "Measures taken by state authorities with regard to fulfilment of responsibilities and realization of rights of the Russian Federation related to the WTO accession, on evaluation of the impact of norms and rules of the WTO on the budget system and economy"*, Russian Accounts Chamber, 29 March 2013.

Tan, H. et al. (2007), Skills Shortage and training in Russian enterprises, *Higher School of Economics Working Paper 04*.

Timmer, M. and I. Voskoboynikov (2013), *Is Mining Fuelling Long-run Growth in Russia? Industry Productivity Growth Trends since 1995*, GGDC Research Memorandum.

Transparency International (2013), *Global Corruption Barometer*.

WHO (2013), *Global Health Observatory Data Repository*.

World Economic Forum (2013), *The Global Competitiveness Report 2013-14,* Geneva.

World Bank (2013), *Policy Note Russian Federation: National and Regional Trends in Regulatory Burden and Corruption*, February.

Zaytsev, V. and L. Saykina (2013), *Realization of energy efficiency policy in industry*, Energosvet, 28.

ANNEX A.1

Progress in structural reform

This Annex describes actions taken in relation to selected recommendations made in past *Economic Surveys of the Russian Federation* going back to the first one in 1995. 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.*

* A longer version of the table, with more detail on the actions taken, can be found in Y. Vaziakova, "Progress in Structural Reforms and Framework Conditions 2011-13", *OECD Economic Department Working Papers* (forthcoming).

Recommendations in past Surveys (Survey year)	Status of the progress made*
1. Business environment	
1.1. Business regulation	
Continue cutting red tape and increasing the transparency and accountability of the public administration (2009, 2011).	++
Reduce licencing and other formal regulatory burdens to reduce bureaucrats' opportunities to extract bribes from private-sector firms (2009).	+
Introduce a "deemed clearance" regime under which licences are issued automatically if the licencing office does not act by the end of the statutory response period (2009, 2011).	0
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 (2011).	++
Systematically carry out Regulatory Impact Analysis to assess the costs and benefits of all significant new regulatory proposals (2009, 2011).	++
Promote and maintain support organisations where entrepreneurs can easily obtain information concerning their various rights and obligations, consulting support, and the ability to lobby the their collective interests (2002).	+++
1.2. Trade and foreign investment regimes	
Following approval by the WTO Ministerial Conference, quickly ratify the WTO accession protocol and implement the accession package (2011).	+++
Reduce both the average and the dispersion of tariff rates, with the medium-term aim of achieving a low uniform rate (2011).	+++
Unwind all restrictive trade measures adopted during the global economic crisis (2011).	+/-
Consider introducing provisions to encourage regulators to use internationally harmonised standards and certification procedures wherever possible and appropriate and avoid unnecessary trade restrictiveness (2009).	+/-
Develop transport infrastructure as a measure to aid in the elimination of barriers to intraregional trade (2009).	++
Increase the openness and predictability of the foreign investment regime. Review the list of strategic sectors (2009).	+
Ensure a level playing field between domestic and foreign investors as regards government procurement, access to subsidies, law enforcement and dispute resolution (2011).	+
Co-ordinate federal and regional regulation to minimise burdens for foreign investors and assist the regions to disseminate best practice on attracting foreign investment (2011).	++
Lower other FDI barriers (2009).	+
1.3. 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).	++
Apply competition law without exemptions (including for public corporations) (2009).	+
Initiate a programme targeted at reducing violations of antitrust laws by federal and local government (2009).	+
Bolster the power of the Federal Antimonopoly Service to allow greater use of inspections and the collection of physical evidence in antitrust cases (2009).	++
In network sectors, continue separating the competitive and monopoly market segments and eliminate barriers to entry (2009).	+
Develop the capacity and strengthen the hands of the sectoral regulators (2009).	+
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 (2011).	+
Ensure that competition law is not used as a means to control inflation or to adjust prices of specific goods or services (2011).	0
Eliminate all remaining subsidies to large firms introduced or expanded during the global crisis (2011).	0
1.4. State role 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 (2011).	+/-
Reduce the list of firms for which privatisation requires the approval of the President (2009).	0
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 (2011).	+
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).	0
Increase the independence and accountability of government representatives and accelerating appointments of independent and accountable directors on SOE Boards (2009).	++
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).	+

Recommendations in past Surveys (Survey year)	Status of the progress made*
2. Public governance	
2.1. Public administration and anti-corruption	
Pursue civil service reforms to improve the fairness, transparency and efficiency with which remaining regulations are administered (2009).	++
Implement administrative reform to mitigate the potential for corruption by minimising uncertainty and subjective decision making within the government administration (2009).	+
Strengthen Russia's anti-corruption legislation, bringing it into line with international standards (2006).	++
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 (2011).	++
Impose an effective firewall between public and private professional activities to avoid conflicts of interest (2009).	+
Adopt measures to strengthen protection for whistleblowers (2011).	+
Increase substantially the pay for important civil servants and establish a strong threat of immediate removal in the event of violations (2002).	++
Expand the range of opportunities for using ICT in interactions between officials and ordinary citizens or businesses, especially in fields such as licencing or procurement (2006).	+++
2.2. Judicial system and law enforcement	
Strengthen judicial independence, with better training and pay for judges (2011).	++
Ensure regular rotation of judges among courts to prevent long-term informal relationships influencing legal decisions (2011).	0
Give tribunal presidents less scope for discretion as regards assignment of judges; case assignments could even be randomised (2011).	0
Avoid even the appearance of political interference in law enforcement or court cases (2011).	0
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).	++
Press ahead with reforms aimed at making law-enforcement agencies more transparent and accountable (2006).	+
2.3. Transparency and civil society participation	
Adopt freedom of information legislation, along with other measures to establish a norm of transparency in public bodies (2006).	+
Complement top-down anti-corruption measures with reforms favouring political openness, transparency and civil society participation (2011).	+/-
3. Sectoral policies	
3.1. Labour markets and social policy	
Equalise pensionable age for men and women and gradually raise the pensionable age in line with gains in longevity (1995, 2009, 2011).	0
Undertake reforms directed at providing more effective, targeted and fiscally sustainable social protection to vulnerable groups in the population (2006).	++
Promote free movement of labour. Relax security of tenure laws and progressively raise controlled rents towards market levels (1995).	+
3.2. Health	
Strengthen primary care provision and reduce the current over-reliance on tertiary care (2006).	++
Adopt payment schemes that encourage more cost-effective therapeutic choices (2006).	+
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).	++
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).	++
Establish a framework for regular, transparent review and revision of the guaranteed package in light of medical, technological and economic change (2006).	++
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 channeling most budgetary resources through OMS funds (2006).	++
Create mechanisms to make it easier for individuals to assess the relative performance of medical insurers and to choose their own insurers (2006).	++
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).	++
Encourage pilot projects in the regions with respect to OMS reform, including, where appropriate, experiments involving a single-payer system (2006).	+
Increase investment in primary care in order to establish a long term, co-ordinated 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).	++
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).	++

Recommendations in past Surveys (Survey year)	Status of the progress made*
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).	+
Incremental resources should be devoted to preventive medicine, for example, to the restoration of abandoned or rundown immunisation programmes (1995).	++
3.3. Innovation	
Broaden the opportunities and incentives for university es 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).	++
Increase the penalties for Intellectual Property Rights (IPR) violations and reduce the scope for relying on "copycat" patents (2006).	+
Shift to greater reliance on project-based rather than institutional financing of state-funded research (2006).	+
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).	++
Introduce mechanisms for performance-based pay and more rapid advancement (2006).	+
Reduce the number of direct recipients of R&D funds from the federal budget (2006).	+
Facilitate information exchange and other contacts between R&D organisations and the business community (2006).	++
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).	+
Allow accelerated amortisation of R&D expenditures for all firms, not only those in special economic zones (2006).	+++
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).	++
Ensure that except in the cases of start-ups and small firms, such incentives rely on tax breaks rather than subsidies (2006).	+
Facilitate the development of private venture capital via reforms aimed at creating a more attractive legislative and tax framework for Venture Capital firms (2006).	++
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).	+
3.4. Agriculture	
Create a functioning market in agricultural land (2006).	+
Rationalise state support for the agriculture sector (2006).	++
Make leasing and equipment markets more competitive (2006).	+
3.5. Banking sector	
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).	+
Improve the structure of the banking sector by outlining a long-term privatisation strategy for the state-owned banks (2009).	++
Facilitate and encourage consolidation of the sector, via speedy resolution of failing banks, facilitation of mergers, and higher minimum capital requirements (2009).	++
Improve the quality of on-site supervision, including via increased resources for staffing and training (2009).	++
Further streamline formal requirements on banks, while strengthening risk assessments (2009).	+
Play an active role in international efforts to improve financial regulation (2009).	++
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).	+
Expand the use of stress testing, including more testing of system–wide shocks affecting counter–party and market risks (2009).	++
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).	+
Amend Article 837 of the Civil Code which states that term deposits of households may be withdrawn on demand (2009).	0
Expand the use of IFRS financial reporting, including for non-banks (2009).	++
Develop a system of personal bankruptcy (2009).	+
3.6. Energy Sector	
3.6.1. Electricity sector	
Provide for market rules which are transparent, stable and effectively enforced (2004).	0
Reduce the broad discretion for the government in the field of electricity regulation (2004).	0
Provide for a strong, independent electricity regulator (2004).	0
Introduce competition into those activities where it is feasible, such as generation and supply (2004).	++
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).	+
Raise average domestic electricity and gas tariffs and reduce cross-subsidisation (2002).	+

Recommendations in past Surveys (Survey year)	Status of the progress made*
3.6.2. 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).	+
Separate regulatory and ownership functions more clearly and reduce the state's ownership of energy sector assets (2004).	0
Establish an effective third-party access regime for the sector's infrastructure (2004).	+
Provide for a separation of Gazprom's natural monopoly/infrastructure provision functions from its potentially competitive activities (2004).	+
Achieve a clearer separation of Gazprom's accounts with respect to production, transport and dispatch. Increase transparency in the company's other activities (2004).	0
Formulate and implement clear rules and principles governing the allocation and administration of quotas for regulated-price gas (2004).	0
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. 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).	+
3.6.3. Oil sector	
Ensure that the taxation and the regulatory regime yield an adequate responsiveness of exploration and production to oil price fluctuations (2009).	+
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).	+
Broadly harmonise taxation of gas and oil, with the elimination of export taxes (2009).	+
3.7. Environment and energy efficiency	
3.7.1. Environment protection	
Expand the use of fiscal instruments to improve environmental outcomes (2009).	+
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 (2011).	0
Expand the use of green taxes to reduce energy consumption and discourage environmentally harmful activities (2011).	0
3.7.2. Increasing energy efficiency	
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 (2011).	+
Speed up the installation of meters for all forms of energy and water, including via the use of financial incentives (2011).	+
Ensure that all energy consumers are offered multi-level tariffs differing by time of day, and introduce lower tariffs for interruptible service (2011).	+
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 (2011).	0
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 (2011).	0
Create specific policy packages to help small and medium-sized enterprises improve their energy efficiency (2011).	+
At least until energy prices adequately reflect marginal social costs, implement measures in the transport sector, such as mandatory fuel efficiency standards for cars and trucks (2011).	+
Implement 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 (2011).	+
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 (2011).	+
Given that building owners may not always have the right incentives to upgrade energy efficiency, develop instruments to mobilise financing for the renovation of the housing stock and speed up the rate of renovation is needed (2011).	+
4. Fiscal policy	
4.1. Fiscal rules and budgetary institutions	
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 (2011).	++
Supplement the non-oil deficit limit by a rule restricting the annual increase in total expenditure in real terms to some ceiling (2011).	0
Develop the necessary expertise on the cyclical adjustment of non-oil revenues. Publish more detailed information on the underlying fiscal position, highlighting uncertainties (2011).	0
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 (2011).	+

Recommendations in past Surveys (Survey year)	Status of the progress made*
4.2. 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).	+
Harmonise tax rates to achieve a better balance between the taxation of economic rents from oil and that from the extraction of other non-renewable natural resources, including natural gas (2009).	+
In the context of an overall reform of oil and gas taxation, eliminate export taxes on oil and gas (2009).	+
Explore ways of reducing the comparatively high tax wedge (2009).	0
Rebalance corporate and personal income taxes, providing for somewhat more progressivity in the latter in order to improve both economic efficiency and equity (2009).	0
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).	0
Expand the use of green taxes (2011).	0
Consider increasing taxes on alcohol and tobacco products (2011).	+
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).	+
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).	0
5. Monetary policy	
Clearly spell out price stability as the primary objective of monetary policy by amending the Central Bank Law (2009, 2011).	++
The time horizon over which the objective should be achieved should also be specified (2011).	++
Foreign exchange interventions should be conducted only to the extent that they are consistent with the primary objective of price stability (2009, 2011).	++
Consider establishing a Monetary Policy Committee with a mandate to set policy rates (2011).	0
Designate one or two policy rates as the main instrument(s) of monetary policy (2011).	+
Publish regular information about inflation expectations. Consider developing a market for inflation-linked bonds (2011).	+
Hold press conferences following policy meetings and publish minutes of the meetings and/or voting records (2009, 2011).	+

* "+++" corresponds to "Action substantially complete"; "++" to "Substantial progress made"; "+" to "Some progress made", "+/-" to "Mixed progress" and "0" to "No significant action taken".

Chapter 1

Improving the business climate and transport infrastructure in Russia

Economic growth is below what would be needed to resume rapid convergence to average OECD living standards. On-going efforts to improve the business climate are laudable, but need to be widened and strengthened. Much progress has been achieved in reducing red tape, but it is only recently that the authorities have visibly become more energetic in fighting corruption. Adverse interactions between politics, business and law enforcement generate obstacles for the rule of law and remain a major risk for potential investors. High entry barriers lead to weak competition. Reducing the role of the state in the economy and WTO membership should be viewed as opportunities to strengthen competition, and hence provide incentives for productivity improvements, which are urgently required to ensure stronger growth in Russia because of a shrinking labour force.

Transport can play an important role in promoting growth, diversification and regional convergence. However, with insufficient investment and incomplete structural reforms, Russia faces very large challenges in modernising its large transport system. Urban transport problems are intensifying, because of weak policy co-ordination and inadequate traffic management. Promoting competition in the transport sector is essential, in particular by effectively opening the railway freight market to independent operators.

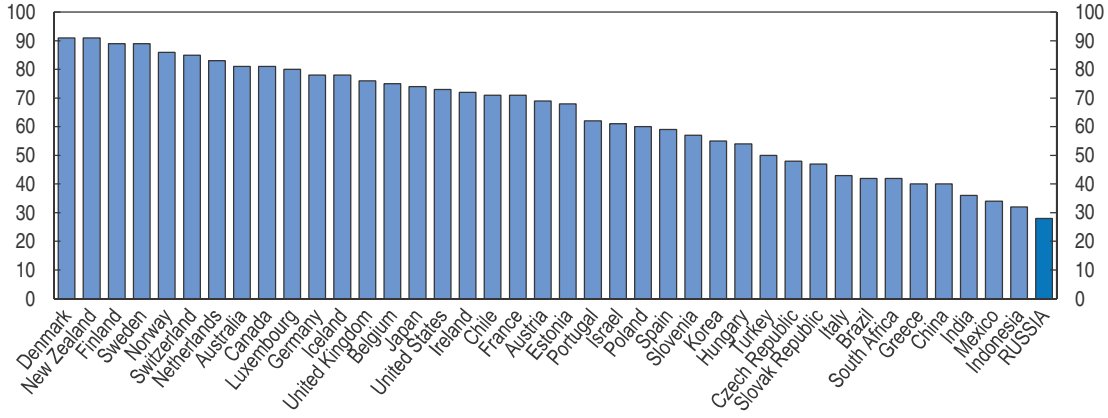
A favourable business climate is essential for growth, as demonstrated by experience across OECD countries and beyond. In Russia, re-launching stronger, more balanced and more sustainable growth requires the removal of barriers to private sector entrepreneurship and investment. Transport bottlenecks are playing an increasing role in holding back regional convergence, while regional differences are high and persistent (Lehmann and Silvagni, 2013). Despite the growing attention of the government to the development of the transport system, more needs to be done to improve policy co-ordination and prioritisation, and to strengthen competition in this sector.

Success of the current anti-corruption campaign is crucial

Russia scores poorly in most corruption assessments. Perceptions of corruption are, according to Transparency International, higher than in all OECD and other BRIICS countries (Figure 1.1), although the international ranking of Russia has improved since 2010. Particularly worrying is the corruption in law enforcement, which accounted for a quarter of all corruption cases brought to the courts in 2012. The business organisation OPORA states that about 90% of entrepreneurs have encountered corruption at least once. Bribery in some regions is so widespread that local firms are reported to consider it a convenient alternative to legal and administrative compliance (EBRD, 2012). Moreover, there seems to be only mixed progress in fighting corruption. In a Levada poll 80% of respondents believed that the level of corruption and fraud nowadays is the same or even higher than a decade ago. According to the *World Bank Governance Indicators,* corruption was less under control in 2011 than in 2004. On the other hand, a survey by the Public Opinion Foundation (2013) reports that bribes have become less frequent since 2005.

Figure 1.1. **Transparency International Corruption Perceptions Index**

Corruption Perception Index 2013 Score, scale from 0 (highly corrupt) to 100 (very clean)



Note: CPI 2013 Score relates to the degree to which corruption is perceived to exist among public officials and politicians by business people and country analysts. Score ranges between 100 (highly clean) and 0 (highly corrupt).
Source: Transparency International, *Corruption Perceptions Index 2013*.

StatLink http://dx.doi.org/10.1787/888932979386

These assessments are very worrying, because international evidence shows very clearly that corruption is economically and socially costly. It tends to have a strong negative impact on growth (Mauro, 1995; Tanzi, 1995), negatively affecting overall investment (World Bank, 2000) and foreign direct investment (Wei, 2000). It also tends to skew public expenditure away from health and education, presumably because they offer less corruption opportunities (Mauro, 1997). Finally, corruption tends to lead to increased inequality (Gupta et al., 2002).

Russia seems to suffer from corruption-linked ills. The negative impact of corruption on growth is confirmed in cross-country regression analysis including Russian and other transition economies (Mobolaji and Omoteso, 2009). The negative relationship between corruption and growth has also been observed in the Russian regions (Pushkarev, 2007). Foreign investment, other than round-tripping (discussed in later sections of this Chapter), tends to be small. Budgetary spending is biased towards military and other expensive, large-scale projects, while spending on health and education are relatively small. Finally, Russia is among the most unequal countries in the world.

Various surveys confirm the importance of corruption for the Russian economy and society Russian firms see endemic corruption as the major obstacle to market entry and sustainable growth, even though firms assess that the financial cost of corruption has declined during recent years (OPORA, 2012). Corruption is widely seen as the most important country-wide constraint on doing business in Russia (EBRD, 2012). *The World Economic Forum Global Competitiveness Report* (2013) lists corruption as the most problematic factor for doing business. Among households, corruption appears as the second biggest problem in the country, after housing difficulties but ahead of the bad state of roads according to a survey conducted by the Institute of Contemporary Development (ICD, 2013).

The fight against corruption has gained momentum in the last two years, which could be related to the first signs of improvement in corruption scores. The National Anti-Corruption Plan for 2012-13, signed in March 2012 included a number of important measures. Amendments combating corruption have been introduced into the Criminal Code of Russia and the Code on Administrative Violations. A series of measures aimed at increasing the quality of public governance:

- All public institutions and state owned enterprises are now obliged to create a commission to consider cases of violation of the provisions of the Code of Ethics and conflict of interest regulations. The monitoring of corruption risk has been strengthened, notably through the introduction of a catalogue of government positions associated with higher corruption risks. These changes have been accompanied by intensive information campaigns directed at civil servants. While there is still no specific legal protection of public servants reporting irregularities, some procedural measures protecting whistleblowers have been introduced. They will be held liable to disciplinary action only after the respective case is addressed at a meeting of the committees responsible for compliance with official conduct requirements and settlement of conflicts of interest. They are also entitled to free legal assistance if facing any kind of prosecution.
- Public officials have been obliged to declare their income since 2008. In recent years the requirements were tightened, requiring officials to disclose their financial assets and property as well as the income, assets and the property of their spouses and children. In the case of non-compliance, an official can be dismissed. A law adopted in 2012 obliges

public officials to declare all expenditures on real estate vehicles and financial securities exceeding three-year family earnings. A separate new law requires senior officials and their close family members to close bank accounts abroad by September 2013 and repatriate financial assets to Russia. Officials who decide to keep their property abroad would have to resign. Public officials are also obliged to report all the gifts that they receive during the performance of their professional obligations.

- Obligatory rotation of civil servants was introduced in January 2013. This applies primarily to public officials exercising control and supervisory functions. The purpose is to prevent the occurrence of too close a relationship between officials and supervised entities. Hence, public officials are to change jobs every 3-5 years, with the specific period in a given job dependent on the associated corruption risk assessment. Changing posts is neither a disciplinary measure nor a reward, but officials are offered an option of additional vocational training and reimbursement of moving costs. Again, the refusal to move by an official would be treated as a resignation matter.
- Proposed rules on lobbying prepared by the Ministry of Economic Development are currently being considered by the Presidential Administration.

The new law on public procurement, adopted in April 2013, also addresses corruption. Public procurement involves a higher risk of corruption in all countries but this risk seems to be particularly high in Russia. According to the World Economic Forum (2013), favouritism to well-connected firms and individuals when deciding upon contracts and policies in Russia was evaluated at 2.4 on the scale of 1 to 7 (with 7 representing the best result). This compares unfavourably with the majority of OECD countries but also with China at 3.8, Brazil at 2.9 and India at 2.8. The new law addresses this problem by regulating and increasing transparency and openness at all stages of the procurement process, including forecasting and planning, new implementation of new purchasing procedures, contract performance, audit and control based on the evaluation of the final project results. More specifically, information about all the public tenders has to be published on the official procurement website. Tendering is organised in electronic form on five official electronic trading platforms. The business history, and qualifications and reputation of the bidders will be also checked. In the past, a company with no business history could win a tender by proposing dumping prices and subsequently failing the task. Such a situation provided opportunity for corruption and collusion. The new law foresees a "black list" of unfair providers being officially published by the Federal Antimonopoly Service. While this is a step in the right direction, the new law does not disqualify firms with past corruption offences.

Another milestone was the ratification of the OECD Anti-Bribery Convention in January 2012, banning bribes to foreign officials. The Phase 1 evaluation report adopted by the OECD Working Group in March 2012 identified a number of challenges, especially a need to explicitly and clearly ensure the criminalisation for the "offer" and "promise" of a bribe, and to ensure that giving bribery to a third-party is also legally covered. The Phase 2 review by the OECD Working Group on Bribery in October 2013 revealed progress, but also urged that legislation and law enforcement be strengthened, with an awareness campaign against foreign bribery. In particular, Russia was praised for explicitly disallowing the tax deductibility of bribes to foreign public officials and for introducing the statutory requirement for companies in Russia to have anti-corruption measures in place. The report recommends that: *i*) the scope of foreign bribery offences should be expanded so that it

applies to all of the cases covered by the OECD Anti-Bribery Convention; *ii)* the recently instituted framework for holding companies liable for foreign bribery should be extended; *iii)* law enforcement and related agencies should implement a proactive approach to detecting, investigating and prosecuting foreign bribery offences and related accounting offences; *iv)* measures should be introduced to allow for the seizure and confiscation of a bribe and its proceeds and to improve co-ordination and accountability among law enforcement authorities; and *v)* foreign bribery should have a higher profile in anti-corruption efforts. Russia's accession to the Convention will provide inspiration for additional measures to fight domestic corruption.

There were several other initiatives aimed at involving business in the fight against corruption. A working group headed by the Minister of Economic Development, which brings together the main business associations and public authorities, was established in October 2011 to develop anti-corruption measures in business and investment areas leading to the implementation of the *Anti-Corruption Charter of Russian Business*. The *Charter* combines international standards of business conduct with clear rules and procedures for admission, membership verification and the resolution of disputes regarding potential violations. A specialised centre "Business against Corruption" was also set up with substantial political backing to protect business representatives from corporate raiding and corruption pressures.

Importantly, legislative and regulatory changes were accompanied by stepped-up efforts at enforcement. According to the information from the Prosecutor General's office, the number of corruption cases brought to justice increased by 25% in 2012. A number of high-level corruption scandals were also revealed, including one involving a Minister of Defence. Another recent high-profile case was linked with fraud in the innovation centre *Skolkovo*. A number of cases have also been opened in connection with corruption and embezzlement in state corporations and public procurement. Corruption cases were also revealed in the implementation of contracts for the 2014 Sochi Winter Games.

It is difficult to assess to what extent the current surge in the fight against corruption will be effective. Russian society has yet to be convinced: 77% of Russians think government efforts are not effective (Transparency International, 2013). Moreover, some corruption cases are sometimes perceived as politically motivated. However, the latest compliance report of the Council of Europe's Group of States against Corruption (GRECO, 2012) concluded that Russia implemented as many as fifteen out of its 26 wide-ranging recommendations, with remaining eleven being partly implemented. The systemic character of actions combining a wide range of legislative and regulatory changes, a focus on transparency and disclosure and determined enforcement might finally make a difference, and send a powerful message about the increased risks of using public money for personal gain.

There is insufficient official enthusiasm to increase the role of civil society and media to publicise corruption scandals. A number of assaults against journalists who reported alleged corruption involving high level public officials remain unpunished. The perception of legal protection for whistleblowers is also undermined by the handling of a case of a whistleblower who died in custody and was recently sentenced posthumously, using rarely applied legal regulations.

Improving the rule of law is a challenge

One of the main determinants of the business climate is the strength of the rule of law, nd the independence of the judiciary system in particular. Russia has remarkably weak rule of law, as illustrated by the World Justice Project index (Table 1.1). It performs poorly not only in comparison with OECD countries, but also with its regional and BRIC peers. Russia has a particularly poor ranking in terms of government powers being limited by law, judiciary and audit review, and possible sanctions for officials overstepping their duties. Fundamental rights appear to be very weakly protected, particularly because of problems with due process and improper government influence over the justice system. This is consistent with the revived use of the Soviet-era expression "telephone justice" signalling the widespread perception that public officials are able to influence judicial decisions (Ledeneva, 2011). As for the quality of justice, the state of civil justice seems more favourable than the criminal system. This is consistent with other evidence confirming progress in improving the efficiency and competence of the economic courts (World Bank, 2013).

Table 1.1. **World Justice Project Rule of Law Index**
Ranking among total of 97 countries

	Russia	Average Western Europe and North America	Average Eastern Europe and Central Asia	Brazil	China	India
Limited government powers	**92**	12	57	35	86	37
Absence of corruption	**71**	13	52	38	40	83
Order and security	**92**	17	37	69	32	96
Fundamental rights	**83**	12	45	33	94	64
Open government	**74**	14	51	31	69	50
Regulatory enforcement	**68**	14	51	37	80	79
Civil justice	**65**	14	49	43	82	78
Criminal justice	**78**	14	50	52	39	64

Source: World Justice Project Rule of Law Index 2012.

The Russian authorities have taken a number of steps to strengthen the judicial system in recent years. The Federal programme "*Development of the Judicial System 2007-12*" focused on improving operational aspects, investing in modern infrastructure and technologies, including e-justice. Improvements are clearly visible. For example, ICT solutions enabled Russia's economic courts to simplify and shorten procedures, automate processes and publish decisions. As a result, the share of firms considering court administration as a major obstacle in their business activity fell from 21% in 2008 to 7% in 2011. It is more difficult to assess the impact on key aspects of the rule of law, such as independence. The newly adopted follow-up programme "*Development of the Judicial System in 2013-20*" focuses in turn on increasing the transparency, accessibility and openness of the judicial system. For example, the programme foresees audio-visual recordings of proceedings and broadcasting sessions on the Internet. It can therefore be hoped that the programme will improve the quality of rulings and increase social trust in the system.

Increasing the integrity of the judicial system is an essential condition for strengthening the rule of law. Several initiatives were directed at improving the pay and training of judges. The three-year trial period for judges was cancelled. A presidential

decree of June 2012 increased judicial salaries and provided extra payments dependent on qualification and skills. Unfortunately, rotation of judges and randomised case assignments, recommended by the *2011 Economic Survey* to prevent long-term informal relationships influencing legal decisions, have not been implemented. Greater transparency in appointment and promotion processes would also be an important step forward. The scope for discretion available to tribunal presidents, regarding for example housing allocation and the assignment of cases, has not been limited, though this could reduce the degree of influence that can be exerted on judges.

Several other changes in the judicial system are planned. The merger of the highest economic court with the Supreme Court of general jurisdiction is intended to eliminate the possibility of different interpretations of the same case in economic and general jurisdiction courts. This step needs to be implemented in a way that would avoid putting the perceived efficiency and independence of economic courts at risk, concerns that have been expressed by a number of key stakeholders in Russia, including by judges on the economic courts. The State Duma is currently considering a draft law to establish administrative justice chambers in general jurisdiction courts and a new draft code on administrative court procedure, which should improve the ability of citizens to protect their rights against state action or inaction. Another initiative to improve the quality of judiciary decisions is the introduction of a new criminal appeals procedure.

It is also important to make law-enforcement agencies more transparent and accountable. Notably, senior prosecutors under Russian law may intervene in the prosecution process and review a decision to prosecute. While such interventions are often justifiable and necessary, the absence of clear guidance can create room for undue influence. The role of supervising prosecutors and procedures for distribution and re-distribution of cases among prosecutors raises similar concerns. In the case of the Investigative Committee, grounds for dismissal of the Chairman and his deputies are not clearly specified in the law, with the full discretion left to the Russia's President. This limits the necessary independence of an investigative agency.

In order to protect businesses from administrative and legal abuse by the government, the position of Federal Business Ombudsman was created in June 2012. The new office is headed by a former head of the nongovernmental organisation *Delovaya Rossia* (Business Russia). The work is supported by more than 60 regional ombudsmen working on a voluntary basis, as legislation requiring regional ombudsmen will come into force only in 2014. One of the first initiatives proposed by the Ombudsman, to increase the confidence of current and potential investors in the Russian judiciary system, was an amnesty for businessmen convicted for "swindling" (Article 159 of the Criminal Code). In its originally proposed form, the amnesty would have affected about 110 000 businessmen charged with economic crimes. However in its final narrower form (involving only 27 articles of the Criminal Code) adopted by the State Duma in July 2013, it is expected to affect only 10 000 businessmen (or no more than 2 000 businessmen according to different estimates) who were convicted for the first time for lesser economic crimes and who are ready to pay damages. The amnesty applies to those whose cases are still under investigation or have yet to be considered by the courts, which may be important for those in lengthy pre-trial detention. The implementation of the amnesty has been slower than expected, with some doubts about its real impact. The Human Rights Council proposed recently to prepare another amnesty coinciding with the 20th anniversary of the Russian Constitution for those convicted of non-violent crimes in the 1990s and 2000s.

In December 2012 a number of amendments were introduced in article 159 of the Russian Criminal Code on "swindling", as recommended in the previous *OECD Economic Survey*. The amendments include six new articles clarifying the types of swindling, which had been interpreted very broadly. Cases are to be initiated only after the complaint of a victim, which was not the case before. This marks important progress, because this article was often considered to be overused and its revisions can reduce legal uncertainty risks. Legal changes shortening the length of pre-trial detention are also needed. On the other hand, unanswered concerns of the Presidential Council on Human Rights on the validity of the second Khodorkovsky trial may lead to an impression of tolerance for predatory use of the law against business people. More recently the exodus of a prominent economist fearing to be prosecuted for his views as a member of the Presidential Council added to concerns about an uneven application of the law.

More broadly, interactions between politics, business and law enforcement generates a flow of troubling news, which might be contributing to large capital outflows and sluggish private investment (CNBC, 2013; FT, 2013). Notably, price/earnings (P/E) ratios, which in Russia are two to three times lower than in other BRICS countries, suggest a much higher risk than elsewhere.

Strengthening transparency, accountability and trust in public institutions would be supported by a stronger civil society. Recent progress in this area is mixed. On the one hand, there were several positive initiatives aimed at strengthening civil society participation:

- President Putin decreed that all legislative initiatives that had gathered 100 000 signatures should be discussed by the State Duma. A Federal state system of E-democracy was accordingly established in Spring 2013 to pre-select initiatives and publish them on a dedicated portal.
- Since April 2013 all new laws and regulations are to be publicly discussed. An "E-parliament" system will soon allow parliamentary committee meetings to be watched on the internet. Stakeholder consultations were strengthened at all levels of the government. Improvement in the Regulatory Impact Assessment procedure and mechanisms of National Entrepreneurial Initiative (both described later in this Chapter) give business representatives more structured opportunities to have their say when legislation is being drafted.
- A number of laws passed between 2009 and 2012 simplified the functioning of non-governmental organisations (NGOs) by facilitating registration, improving taxation and creating a Coordination Council on State Support of Charity in the Ministry of Economic Development. The Council distributes grants to NGOs, including those that have usually been critical of the current political leadership.

On the other hand, the new law on assembly puts in place much tighter restrictions on participation in public debate, including tighter regulation of participation in public protests. The law on NGOs that entered into force in November 2012 requires any NGO that is involved in broadly defined political activities (i.e. influencing public decision making and public opinion) and receives a foreign donation, independent of its amount, to register as a "foreign agent", a label that is highly stigmatising in Russia and carries the connotation of spying. The implementation of the law led to intrusive searches of hundreds of NGOs. Prosecutors have concluded that more than 200 NGOs should register as foreign agents, even though most of them stopped receiving foreign funding after the bill was passed.

Almost every NGO has refused to register and several prominent NGOs announced they might close down. As of September 2013, only one NGO is registered as a foreign agent. While conducting searches, prosecutors also uncovered over 500 violations in the groups' activities, unrelated to the Foreign Agent Law. The law and its heavy-handed enforcement attracted criticism from UN, OSCE, the Council of Europe and several human rights groups. At a minimum, clarifying the definition of political activity and foreign financing, and replacing the "foreign agent" label would send a very positive signal about the authorities' commitment to civil society activities.

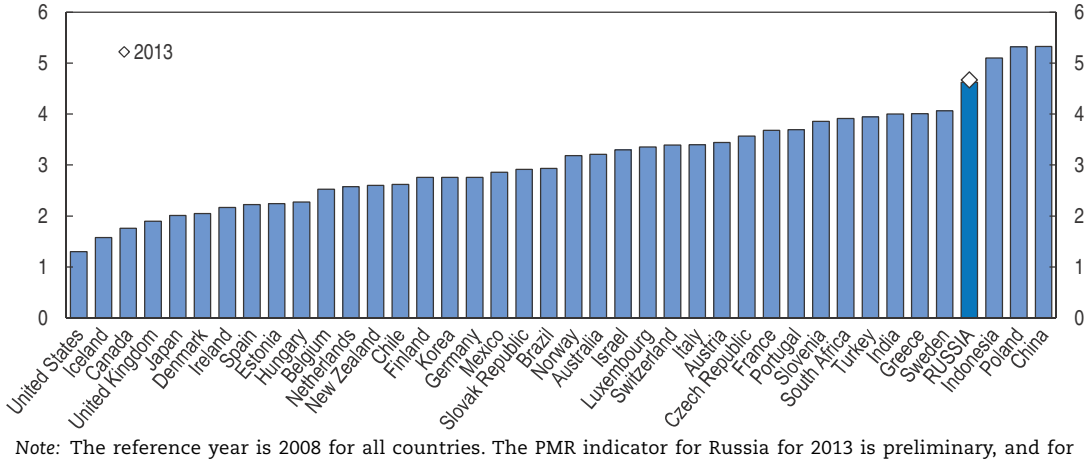
The media are not becoming more independent. Reporters without borders' *Press Freedom Index* (2013) puts Russia at 148th place out of 179, in comparison with 142nd place in 2012. This evaluation is echoed by Freedom House (2012), which noticed a decrease in media diversity in 2012 as many media outlets have been purchased by or become dependent on the government. On the other hand, more than 50% of population had the access to the internet in 2012 and are potentially exposed to independent discussion, including popular anti-corruption blogs.

The role of the state in economy

The state retains an unusually high stake in the Russian economy (Figure 1.2). This is mainly a legacy from the Soviet system, but it is also linked to the dependence on natural resource extraction and natural monopolies that often remain in state hands. State-owned enterprises (SOEs) occupy a dominant position in a number of important sectors (Figure 1.3), including banking, transport and energy. The continued dominance of the largest SOEs, which seem to have privileged access to finance, has an important impact on the economy, as it complicates market entry and suffocates competition, while preserving pockets of inefficiency. Privatisation and improved corporate governance of SOEs are therefore essential for improving overall productivity.

Figure 1.2. **Product market regulation indicators: Public ownership**

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

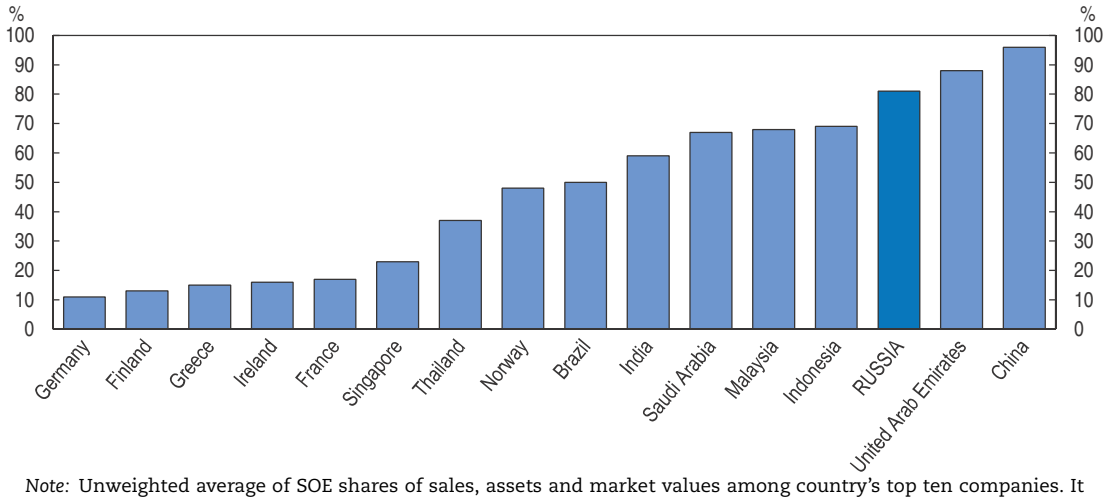


Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.

Source: OECD, The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries (ECO/CPE/WP1(2013)14).

StatLink http://dx.doi.org/10.1787/888932979405

Figure 1.3. **State-owned enterprise shares among countries' top ten firms**



Note: Unweighted average of SOE shares of sales, assets and market values among country's top ten companies. It ranges from 0 (no state ownership) to 100 (all sales, assets and market value of country's ten largest companies are accounted for by SOEs).
Source: Kowalski, P. et al. (2013).

StatLink http://dx.doi.org/10.1787/888932979424

The privatisation plan for the years 2011-13 adopted in 2010 foresaw the privatisation of 1 500 enterprises, including several large companies in key sectors, such as banking, energy, telecoms and transport. A presidential decree of May 2012 requests the full withdrawal of the state from all companies, except for natural monopolies and oil and defence sectors by 2016. The privatisation plan adopted by the government in June 2012 for years 2012-13 and the period until 2016 was also fairly ambitious. It foresaw full privatisation of large SOEs, such as VTB, Rosneft, Aeroflot, Rusgidro, Sheremetyevo airport and Sovkomflot, and a reduction of state ownership in RZD Russian Railways, Transneft and Zarubezhneft. However, the share of SOEs has actually grown in recent years, with important acquisitions by large SOEs which have outweighed realised privatisation deals. In particular, the state-owned oil company Rosneft purchased 100% of the privately owned TNK-BP, which made Rosneft the world's largest publicly traded oil company in terms of extraction and reserves, even though the government share in Rosneft declined as a result of this transaction. In the banking sector, VTB acquired a majority share in the Bank of Moscow.

Many smaller companies were privatised and large number of state stakes were sold, so that the number of state stakes in unitary enterprises has gone down from around 3 500 to 1 800 since 2010 and the number of stakes in joint stock companies has gone down from 3 000 to 2 300 in the same period. More than 1 800 SOEs are scheduled for full or partial privatisation, including 638 unitary enterprises and 1 201 joint stock companies. However, privatisation of large enterprises has been disappointing. The biggest transactions included the welcome sale of 7.6% of shares of Sberbank and 50.1% of United Grain Company that constituted about 80% of the income of the government from privatisation in 2012. New shares sold by VTB in 2013 to foreign sovereign funds reduced the government's stake in this bank from 75.5% to 60.9%. But the majority of large privatisation transactions were delayed. According to official sources, the delays were due to unfavourable market conditions, but Prime Minister Medvedev publicly mentioned the lobbying by "individual ministers and officials" against transactions "that would take away their control over a set of assets" as a barrier to privatisation.

While the reluctance to sell state assets below fair value is understandable, there is a risk that attitudes are turning against privatisation. This hypothesis is corroborated by a substantially more modest privatisation plan for 2014-16 announced in the summer of 2013 (Table 1.2). Among the main changes is the decision to retain VTB, Rosneft, Rusgidro and Zarubezhneft under state control until at least 2016. Further partial privatisation of Sberbank within the planning period was also ruled out prolonging the potential conflict of interest at the Central Bank of Russia, which is both the majority owner and the supervisor. It remains to be seen to what extent the new and more modest plan will be implemented more successfully than the last.

Table 1.2. **Privatisation plan 2012-13 and until 2016 vs. privatisation plan 2014-16**

Company	State share in September 2013	Target state share under privatisation plan 2012-13 and until 2016	Target state share under privatisation plan 2014-16
Rosselkhozbank	100.0%	Full exit by 2016	No plans for privatisation
Sberbank	50% + 1	50% + 1 (reduction from 57.6%)	No plans for privatisation
VTB	60,9%	Full exit by 2016	50% + 1
Rostelecom	55.6%	Full exit by 2013	Full exit by 2016
Aeroflot	51.2%	Full exit by 2016	25% + 1[1]
RZD Russian Railways	100%	75% + 1	75% + 1
Sovkomflot	100%	25% + 1	25% + 1
Sheremetyevo airport	83.0%	Full exit by 2016	Full exit by 2016
Vnukovo airport	74.7%	-	Full exit by 2016
Rusgidro	67%	Full exit by 2016	50% + 1
Rosneft	69.5%	Full exit by 2016	50% + 1
Transneft	78.3%	75% + 1	75% + 1
Zarubezhneft	100%	Full exit by 2016	50% + 1 share

1. Probably full exit from the capital after 2016.
Source: Ministry of Economic Development, *Vedomosti*.

Given the delay in privatisation and the fact that not all state companies can be privatised, improvement in the governance of the SOEs is a key challenge. The simplification of the SOE ownership models would be a step forward, as currently the sector is characterised by many different types of enterprises which reduces transparency regarding state ownership and accountability. It also complicates the regulatory framework and the unbundling of the commercial and non-commercial roles of SOEs. A harmonised management model respecting competitive neutrality, in line with the *OECD Guidelines on Corporate Governance of State-Owned Enterprises*, could help to address these problems. The authorities are currently planning to streamline the sector by introducing the joint stock company as a dominant model for all SOEs with commercial objectives and a new "public law legal entity" for SOEs with public function objectives, while significantly reducing the number of state unitary enterprises by 2016. This would be positive move forward, but so far progress in actual reorganisations is slow. The Russian authorities also plan to develop specific company goals to address any non-commercial objectives and public policy obligations, which would improve transparency of SOE operations. Nevertheless, the remaining "special list" of companies beyond the control of *Rosimushchestvo* and with direct links to executive powers remains a challenge in this respect. It is also important to improve the protection of minority shareholders in SOEs.

The autonomy of directors is an important determinant of the quality of governance of SOEs. The decision to withdraw top level public officials from the management of state companies by September 2015 was therefore a move in the right direction. A number of SOEs (RZD, VTB, Rosneft, and Gazprom) already replaced old directors with professional ones, but otherwise the process is rather slow and should be accelerated. Moreover, the "system of instructions", under which some state-appointed directors are still required to vote at SOE board meetings according to the state's preferences on a number of issues, should be reconsidered in the spirit of compliance with OECD Guidelines.

The introduction of a special committee for the selection of directors and the implementation of performance-related remuneration can contribute to the independence of SOE management. To improve the efficiency of state holdings, special committees on labour, auditing and strategic planning were also introduced. Key Performance Indicators are also set for such companies. One example is the centrally adopted target of achieving 10% cost savings during the next two years. Committees are also monitoring decisions about divesting non-core activities and stimulate co-operation with SMEs. These changes are positive in limiting direct political influence over SOE activities. Monitoring results are shown online on the webpage of *Rosimushchestvo*, which contributes to transparency.

However, most of the largest listed SOEs are traded on the lowest listing levels of the Moscow Stock Exchange, where corporate government requirements oblige them to disclose little information about the company structure and activity. Gazprom and some other companies are traded "off listing" which reduces these requirements even further. The quality of governance in SOEs could therefore also be improved by obliging them to increase the level of their stock exchange listing. It seems that the authorities consider moving in this direction, and also develop a plan to list all SOEs by 2018.

Reforms addressing administrative burden are showing results

SME development in Russia is lagging behind OECD countries, as well as other transition and emerging economies. SMEs account for only 25% of Russian employment, compared to 50% on average in OECD countries and Russian SMEs similarly lag behind in terms of production, exports and innovation (OECD, 2014). The dominant role of large state-owned enterprises, the poor business climate and poor access to financing are most likely the main explanation of this poor performance. They interact with negative attitudes towards entrepreneurship, as only 2% of people consider starting their own business in Russia in comparison with 26% in the countries with comparable income, putting Russia at the last spot among 69 countries reviewed by the latest Global Entrepreneurship Monitor (GEM, 2012).

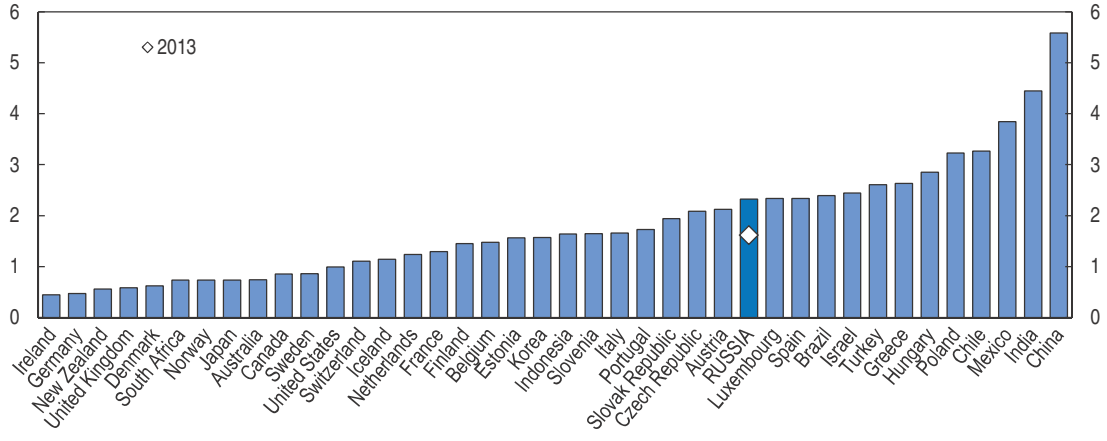
In order to address the administrative impediments to small business development, the National Entrepreneurial Initiative "Improvement of Business Climate" was initiated at the end of 2011. The ranking of Russia in the World Bank *Doing Business* project was adopted as one of the main measures of programme success. The goal is to put Russia in the top twenty by 2018 with the mid-term goal of reaching 50th place in 2015. The Initiative introduced 13 roadmaps, addressing the most important weaknesses, including business registration, construction permits, access to the electricity grid, property registration, development of competition, access of SMEs to public procurement and improvement of the quality of the regulatory environment for business. The roadmaps were prepared by the Agency for Strategic Initiatives (ASI) and had been closely discussed between

businessmen and public officials. The private sector also plays a crucial role in monitoring results. Work on preparing 10 roadmaps has finished and the process of implementation in pilot regions has already started to achieve some promising results. The early success of the project is witnessed by the fact that Russia was named one of the top three reformers in the 2014 *Doing Business* ranking, with the overall rank improved to 92nd from 120th in 2011.

Much progress has been achieved in reducing the administrative barriers to SMEs, Russia having recently improved its World Bank *Doing Business* rank in terms of the overall ease of opening business from 111th in 2011 to 88th. Starting a new business is relatively cheap compared with high income OECD countries. The introduction of one-stop shops has made the process of firm registration more efficient, and procedures to open a company bank account have been simplified. The 2011 law on licencing has substantially decreased the number of licensed activities, made licence duration indefinite and simplified procedures. However, changes have stopped short of introducing a "deemed clearance" principle as recommended in the previous *Economic Survey of Russia*. Claims for exemption from VAT have been streamlined. The Ministry of Economic Development continues to work on simplifying the registration process for legal entities and sole proprietors. Preliminary Product Market Regulation index calculations for 2013 confirm substantial progress in the area of reducing administrative burdens for business start-ups over the last 5 years (Figure 1.4). Also a much lower share of firms reported that licensing, tax and court administration processes were significant obstacles to their business in 2011 compared to 2008 (World Bank, 2013).

Figure 1.4. **Product market regulation indicator: Barriers to start-ups**

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



Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.

Source: OECD, *The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries* (ECO/CPE/WP1(2013)14).

StatLink http://dx.doi.org/10.1787/888932979443

Other serious problems have also been addressed. According to the 2014 World Bank *Doing Business* report, dealing with construction permits was made easier by eliminating several requirements for project approvals and reducing new building registration time.

Getting electricity was made simpler and less costly by setting standard connection tariffs and eliminating many procedures. Transferring property was also made easier by streamlining procedures and introducing time limits for processing applications. However, there is still considerable scope for improvement: dealing with construction permits takes 297 days compared with 26 days in Singapore, obtaining electricity 162 days compared with 17 days in Germany, registering property 22 days compared with 1 day in New Zealand.

Another activity of the ASI is the preparation and implementation of a Regional Investment Standard that aims to codify best practices and hence make the relationship between business and the state more transparent and efficient, and hence to increase investment in the regions. In 2012 the Standard was implemented in 13 regions and tested in another 6 regions, whereas in becomes obligatory in all 83 regions in 2013. Perhaps most interestingly, surveys of entrepreneurs were adopted as Key Performance Indicators (KPI) assigned to the regional authorities, contributing to systematic assessment and benchmarking of their performance.

An institutional process to minimise the regulatory burden on business is essential. A regulatory impact assessment (RIA) procedure was introduced in 2010 and implementation picked up speed after 2011. All government draft acts dealing with regulation are routinely sent to the RIA department of MED, which has performed more than 1 800 assessments, and around 35% of them identified problems that required changes in the law. A preliminary assessment takes 5 days. If it finds that a given regulation could potentially have a negative influence on the business environment, a more detailed cost and benefit study is carried out within one month. The full assessment includes public hearings. Progressively, existing government laws and regulations are also being screened.

Additional amendments have been adopted recently to further strengthen RIA. According to a presidential decree from 1 July 2013, regulatory impact assessments will now be started at a very early stage by institutions originating a draft law and regulation, long before it is being sent to the RIA department at MED for final verification. Consultations with key stakeholders will also be enhanced at every stage of draft preparation. Although a negative RIA assessment does not constitute a veto, and its recommendations are non-binding, practice so far confirms a high level of compliance. Such comprehensive RIA procedure is likely to have a significant impact on the quality of regulation, which would be further strengthened when the planned on-going RIA is finally introduced.

A presidential decree from 2012 provides for RIA at the regional level from 2014 and municipal level from 2015. This is an important step forward as many barriers to business entrepreneurship originate at these levels (EBRD, 2012). A number of regions are already participating in pilot RIA. A consultative council was established to strengthen co-operation with regions, improve monitoring and transfer know-how. This work is supported by regular workshops, as building capacity for conducting RIA at the sub-national levels and in specific line ministries is critical. RIA will be expanded to the law on customs and tax issues. It will be done as well for the Customs Union laws, generated by Belarus and Kazakhstan.

To involve the State Duma in the process, a newly passed law empowers the Duma to demand a review of the draft on an ad hoc basis. But the remit of RIA could be extended to systematically reviewing legislative changes considered by the Duma.

Competition policy should become a cornerstone of structural policies

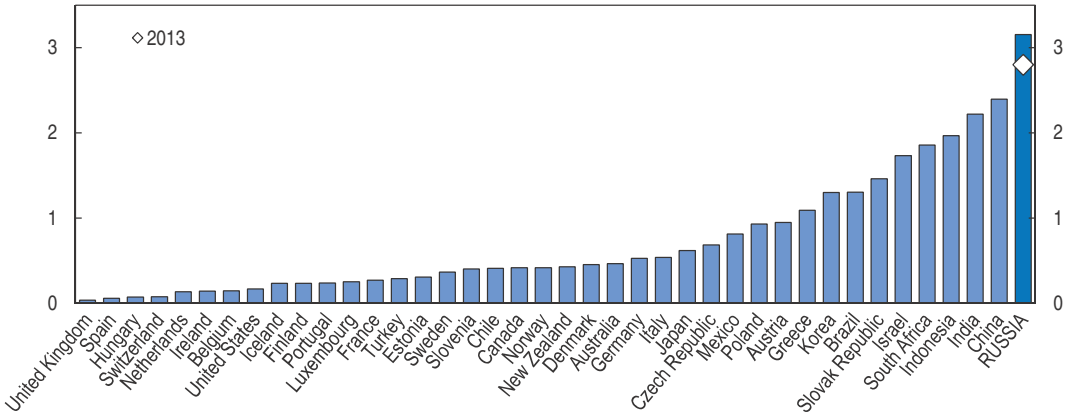
Competition in Russia is still hampered by the dominance of large state-owned enterprises and barriers to foreign trade and investment, problems which are confirmed in the latest results of the OECD Product Market Regulation Indicator (Figure 1.5).

The role of competition protection policy lies in preventing abuses of a dominant market position. The Federal Antimonopoly Agency (FAS) is a strong institution with a solid track record of effective competition rule enforcement. It also has also strong public outreach and capacity building programmes implemented through specialised university programmes. The recently introduced "Third anti-monopoly package" strengthened the competition policy framework by introducing a "prevention" instrument to decrease the number of cases concerning small repetitive abuse of dominance. This is an important change as FAS seemed to be overwhelmed with many insignificant cases.

One problem in effective competition policy enforcement is insufficient conformity between the competition law and the criminal code, so the recent introduction of a harmonised definition of a cartel is a major achievement. In turn, clarification of the determination of a monopolistically high price is an important step in further improving the quality and relevance of economic analysis of competition issues, which again should allow better prioritising of resources on the most important threats to competition. On a less positive note, the September 2012 presidential decree obliged Gazprom and other strategic Russian companies to get prior permission before providing information to the foreign competition authorities, raising concerns about the extent of commitment to international co-operation in competition policy matters.

Figure 1.5. **Product market regulation indicator: Barriers to trade and investment**

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



Note: The reference year is 2008 for all countries. The PMR indicator for Russia for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see the document prepared for discussions at the October 2013 meeting of the Working Party No. 1 of the Economic Policy Committee (ECO/CPE/WP1(2013)14). The document also provides the 2013 indicators with a revised methodology.

Source: OECD, *The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries* (ECO/CPE/WP1(2013)14).

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Broader challenges to competition policy were addressed in a roadmap on "Development of Competition" prepared as part of the National Entrepreneurial Initiative. In this roadmap, an explicit priority is given to reducing the role of the state in the economy. In particular, a draft "fourth anti-monopoly package" currently being considered

by the State Duma would restrict the establishment of new state owned enterprises, especially on regional and local levels, and require explicit permission by FAS based on its assessment of the competitive situation in a given market. In the future, FAS will also systematically review the operation of existing SOEs with the presumption that in many instances the current state of market development does not necessitate state intervention in the form of an SOE. Establishing clear "rules of the game" regarding competition policy is to be facilitated by the creation of a special body in FAS, which is authorized to give official explanations regarding the practice of competition law. Secondly, the importance of the whole-of-the government approach is recognised, resulting in a recent resolution that defines, for the very first time, competition promotion as a task shared across all government institutions. Also a link between SME promotion and competition policies is now reflected in the structure of the Ministry of Economic Development, which is responsible for policy development in both these areas.

The roadmap marks a shift from top-down policy making towards intensifying dialogue with business. The roadmap was developed by a working group, which was headed by the business organisation *Delovaya Rossia* with the participation of the government. The business sector will also play a leading role in monitoring implementation.

WTO membership is an opportunity to promote competition

WTO accession in 2012 was expected to deepen Russia's integration into the global economy and contribute to improving the regulatory culture. By joining the WTO, Russia committed to adhere to multilateral rules that ban the arbitrary use of protectionist and discriminatory trade-distorting practices. After the phase-in period, Russia's average bound tariff will be reduced from 11.9% to 7.1% (which is still above the average bound tariff in OECD countries). Among other commitments, access will be liberalised in such service sectors as telecommunications, insurance, transport and distribution. The World Bank has estimated the short-term welfare impact of the accession at 3.3% of GDP, and a long-term impact at 11% with most of the gains stemming from the removal of barriers to FDI flows, in particular through services liberalisation (Table 1.3). Reaping these benefits is dependent on establishing a transparent, consistent and coherent business environment. This includes refraining from responding to competitive pressures with potentially discriminatory measures. However, most Russian businesses reported that WTO accession had had no impact on the Russian economy in 2013 (Strategy Partners Group, 2013) and the Russian Accounts Chamber expressed concerns about not making full use of the opportunities in connection with membership (RAC, 2013). Relations with key trading partners also remain difficult.

In part, the positive impact is simply delayed because of long transitional arrangements, under which tariff reduction is phased in until 2020. The longest transitional periods cover agriculture, automotive and civil aircraft industries. Russia

Table 1.3. **Impact of WTO accession on economy-wide variables in Russia**

	Short-to-medium term effect				Long-term (steady state)
	Tariff reform only	Improved market access only	Reform of FDI barriers only	Total	
Aggregate welfare (% of GDP)	0.6	0.3	2.4	3.3	11.0
Unskilled labour wage (% change)	0.4	0.1	1.9	2.5	13.2
Skilled labour wage (% change)	1.5	0.6	2.5	4.7	17.6

Source: Tarr (2007).

negotiated long transition periods to help its most vulnerable sectors strengthen competitiveness through time consuming restructuring efforts. There is, however, a risk that such extended transition periods will reduce the incentives for business in shielded sectors to implement competitiveness-oriented changes. Such risks should be minimised by energetic competition policy enforcement and improved governance of state owned enterprises, as discussed above.

While Russia's trade is now governed by WTO rules, some potentially protectionist measures recently introduced by the government have raised concerns about Russia's compliance with its WTO commitments and have posed new obstacles to foreign trade. For instance, at a time when liberalisation of the trade regime would have been expected, Russia introduced a recycling fee on imported vehicles and food-safety related restrictions on certain agricultural and food products. These measures have been heavily criticised by its trading partners. The recycling fee has been viewed by partners as a discriminatory measure because only domestic manufacturers and producers in Kazakhstan and Belarus could obtain exemptions. A Federal law on equalisation of conditions governing the payment of recycling fees was signed by the President in October 2013 and will come into force 1 January 2014. Nevertheless, the EU requested that an arbitration panel be established at the WTO Dispute Settlement Body, contesting the elements of the recycling fee. While the outcome of this case is still pending, it would be better for Russia to focus more on policies making the most of WTO accession.

Following WTO accession, Russia's sanitary and phyto-sanitary (SPS) policies need to comply with the requirements of the WTO SPS Agreement. However, Russia's SPS measures seem more stringent than international regulations with a negative impact on trade (US Trade Representative, 2013). While ensuring food safety is an evident priority for every government, Russia should explore the scope for deeper harmonisation of its SPS measures with international standards.

Another challenge is the full adaptation of domestic legislation and procedures to WTO operations (RAC, 2013). Out of 66 measures in the post-accession action plan, only 26 have been fully implemented to date. On the federal level, the authorities do not monitor the post-accession compliance in regions, and most regions do not have proper regulations to govern their economic activities in line with WTO rules. Improving administrative capacity to monitor and enforce compliance is therefore a key recommendation for speeding up the positive effects of accession. The government is understaffed in terms of skills relevant to the understanding and handling of WTO disputes. Opening a permanent WTO delegation could therefore be helpful.

Non-tariff barriers to trade also remain high. In particular, Russia's border administration has been assessed as persistently inefficient, with customs clearance processes ranked as 127th out of 132 reviewed economies by the World Economic Forum's Enabling Trade Index in 2012. According to World Bank (2013), the "Trading across borders" rank for Russia is 157 among 189 countries. The cost of exports per container in Russia in 2012 was almost twice as much as in an average OECD member country. Until recently, progress has been rather modest. For instance, the authorities introduced an electronic customs system in 2008, but it did not replace the paper document flow, minimising actual gains. Also the electronic system implemented in Russia did not match internationally adopted standards and was not compatible with corresponding systems overseas (Korostelev, 2012). However, the federal reform road maps discussed earlier paid very high

attention to these problems and progress has been visible more recently. According to the 2014 World Bank *Doing Business* report trading across borders was made easier by effectively implementing an electronic system for submitting export and import documents and by reducing the number of inspections. According to the Federal Customs Service, the time taken for customs operations at road border crossings decreased from 80 to 40 minutes between 2011 and 2013, and the time to import a container was reduced from 36 to 21 days.

All foreign goods are subject to national treatment provisions embedded in WTO Agreements, but in government procurement such provisions are afforded on a reciprocal basis. Russia did not sign the WTO Government Procurement Agreement (GPA), which governs rules for public procurement for many members, but announced its intention to initiate negotiations for membership of the GPA within 4 years. So, for the time being Russia has preserved the right to restrict the access of foreign companies to its growing public procurement market (estimated in 2012 at around 14% of GDP). While, recent revisions of the legislation have moved public procurement towards greater transparency and thus in the direction of the GPA provisions, they have also broadened the range of reasons for the government to prohibit or limit admittance of foreign goods, works and services in the public procurement. They now include protection of the Russian domestic market, development of the national economy and support of domestic producers. In practice, public procurement tenders can include conditions for the preferential treatment of products of Russian origin in accordance with temporary provisions that introduce localisation incentives. Guidelines for procurement procedures for SOEs remain to be finalised. It is important for gains from trade that actual implementation of new and planned legislation does not create new barriers for foreign suppliers.

Another area of concern is compliance with WTO rules on trade-related intellectual property rights (IPR). Harmonisation of Russian IPR legislation with international principles is an important achievement. However, despite Russia's continuing efforts to improve its IPR regime, the implementation and enforcement of IPRs has long been a concern of Russia's trading partners. In 2013, a specialised court for intellectual property rights was established within the system of economic courts in Russia to deal with cases regarding patent rights, trademark violations and other intellectual property disputes. However, according to the Global Intellectual Property Center, Russia is among those countries with the poorest intellectual property rights protection (US Chamber of Commerce, 2013). Stepping up enforcement and fighting intellectual property rights violations more vigorously is therefore a priority.

Regional integration initiatives, if properly designed, may also strengthen competition and international value chains. They can also increase the scope and opportunities for wider integration. The Eurasian Customs Union (ECU), the latest Russian-led initiative in the region, appears deeper than previous initiatives, which did not achieve the expected results: the new ECU has a stronger institutional framework and its bodies have an obligation towards Russia to ensure that ECU measures are consistent with relevant WTO commitments. But long-term gains from the ECU will depend not only on the elimination of classic trade barriers but also the harmonisation of the regulatory measures and standards, which can otherwise increase costs and place unnecessary obstacles in the way of business. In this process, Russia must juggle national development objectives, ECU obligations and the requirements of the global WTO-based trading environment.

FDI potential is not fully used

Russia is relatively successful in attracting FDI with inflows of 1.6% of GDP in 2012, close to the OECD average. However, this figure is inflated because over 60% of reported FDI is the result of "round-tripping", with Russian owners structuring firms as an international conglomerate. Round-trip investment generally flows to regions with large endowments of natural resources and a high perception of corruption, and it is usually viewed as a response to institutional constraints in Russia, such as weak regulatory policies and shaky financial markets. There is also evidence that round-trip investment is less technologically advanced than genuine FDI (Ledyaeva et al., 2013), lowering its impact on economic development and regional convergence (Gonchar and Marek, 2013).

Attraction and support of FDI is a stated government priority and steps to improve the FDI climate have been taken at both the federal and regional levels. Several incentives are available to foreign investors, including budgetary support. In 2011, the Russian Direct Investment Fund was established by the government to operate with long-term foreign investors. The Fund is mandated to secure co-investment, thus acting as a catalyst for foreign investment. The Fund has formed partnerships with financial institutions in 6 countries and has become an anchor investor for a large number of investment projects. Projects with a total value of more than USD 2 billion are already being implemented and projects worth another USD 9 billion are under considerations. Vnesheconombank, a state-owned bank, is another source of capital for investment projects that are available to foreigners. The bank already participates in the capital of companies, provides loans, credits, leasing facilities and guarantees for investment projects, and currently the government considers authorising the bank to administer infrastructure projects with funds from the National Welfare Fund.

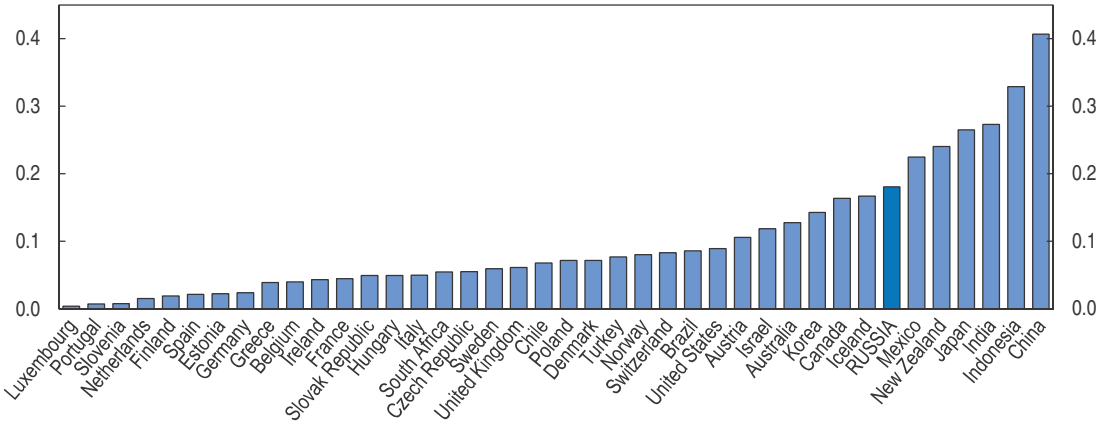
However, these efforts cannot compensate for important and distorting barriers to FDI. Apart from the problems of the general business climate discussed above, the regulatory regime for FDI in Russia is more restrictive than in most OECD countries (Figure 1.6). Barriers to FDI remain unusually high in the financial sector, mining, transport, business services and real estate (OECD, 2012). Quotas and limitations on the scope of operations for licences granted to foreign investors in financial services are examples of particularly strict barriers. The share of non-residents in the authorised capital of Russian credit institutions was 27.5% in July 2013, compared with the 50% quota and the share of controlled assets of 17.2%. The removal of the application of reciprocity in the Banking Law for all OECD investors in October 2013 was an important step. While the reciprocity provision had never been applied, its removal provides valuable reassurance to potential investors, and expresses commitment to the principle of non-discrimination.

The Law on Enterprises Strategic for Defence and Security subjects to prior approval any transaction that would grant a foreign investor a majority interest, or effective managerial control, in an enterprise strategic for defence and security. It requires prior notification to the authorities of any transaction by a foreign investor leading to the acquisition of a majority interest or effective managerial control in any enterprise strategic for national defence and security. The threshold for prior notification is lower in mining enterprises which operate on "plots of federal importance", and in cases where the investing entities are controlled by foreign states. The authorities should continue to amend the law to simplify and improve the transparency of the application process and shorten the list of strategic. The Government Commission for Control over Foreign

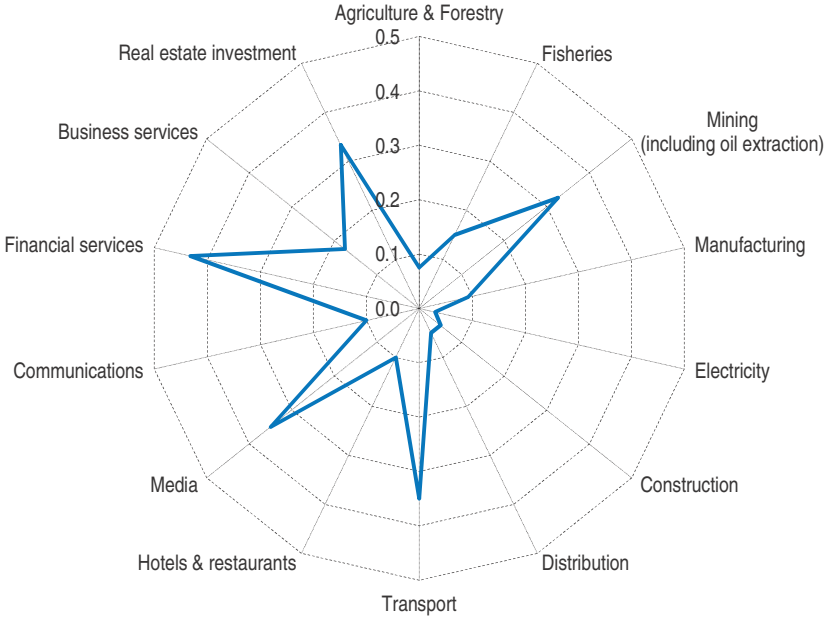
Figure 1.6. **FDI regulatory restrictiveness index**

2012, index scale of 0-1 from least to most restrictive

A. International comparison



B. Russia, breakdown by sector



Note: A higher score of the Index indicates more restrictive regulations for FDI.
Source: OECD, *FDI Regulatory Restrictiveness Index database*.

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Investment, which grants approvals, should also regularly report to the State Duma to improve accountability.

Information on rules and procedures is still difficult to obtain for foreign investors and is spread across many sources, adding unnecessary costs to investing in Russia. In this regard, the principle of transparency in the OECD Codes of Liberalisation and National Treatment calls for improving access to Russian laws and regulations for foreign investors by providing foreign language translations and easing access to information by developing a dedicated and continuously updated internet site. The reform road maps, described in earlier sections, which aim at improving the business climate in critical areas such as

customs, construction and public procurement have the potential to bring positive changes too. More transparent and accountable information practices, especially in regions that so far have been less successful in attracting foreign investors, are likely to facilitate foreign investors' operations and reduce their risks.

Box 1.1. **Recommendations for establishing a favourable business climate**

- Continue the current anti-corruption campaign with stronger focus on transparency and accountability mechanisms in the public sector. Improve legal protection of whistleblowers and do not restrict the scope for media or civil society organisations to publicise violations of the law.
- Strengthen judicial independence through greater transparency in appointment and promotion processes, better pay and rotation of judges, while providing better protection against outside interference in court cases. Make law enforcement agencies more transparent and accountable.
- Continue reducing administrative burden, and widen federal initiatives to regional and local levels. Extend regulatory impact assessments to legislative draft considered by the State Duma.
- Push ahead with privatisation of state-owned enterprises (SOEs), and large banks in particular. Further improve governance of SOEs and foster a level playing field between public and private companies.
- To strengthen the impact of WTO accession, refrain from introducing entry barriers.
- Shorten the list of strategic sectors with prior approval required for foreign investment and streamline the approval process. The usefulness of quotas and limitations on the scope of operations for licences granted to foreign investors in financial services should be regularly examined.

Transport bottlenecks hamper growth and regional convergence

Transport can play an important role in promoting growth, diversification and regional convergence in Russia. It is a backbone industry that enables participation in global production chains, which have been productivity a driver in many countries. Improvement in transport sector efficiency by 10% could increase overall GDP by 0.8% according to a general equilibrium model of the Russian economy (Annex 1.A1). The same model also demonstrates that increased efficiency would play a particularly strong positive role in poorer regions, such as in the South, Siberia and the Far East. The impact on manufacturing will also be stronger than on extractive industries. As a demonstration of the importance of transport for economic growth, freight turnover (ton-kilometres) has increased by roughly two thirds in Russia since 1998 and has recently exceeded its turnover at the time of the collapse of the Soviet Union.

Russia faces very large challenges in modernising its transport system, which it is among the largest in the world (Table 1.4). According to the World Economic Forum, the ranking of Russian transport sectors among 148 countries is generally poor (Figure 1.7). It is also rather uneven: in the case of quality of railways, Russia's rank is 31, and for roads 136, air transport 102 and ports 88 (World Economic Forum, 2013). The transport network accessibility is also very uneven geographically. It is densest in the European part of Russia,

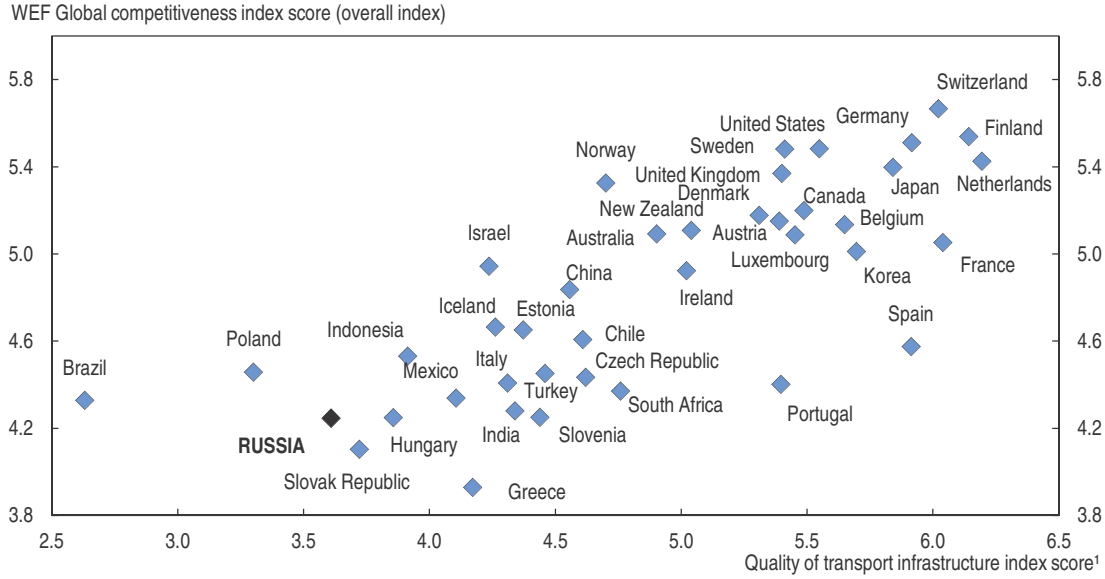
Table 1.4. **Transport infrastructure networks scale comparison, 2009**

Thousand km

	EU27	United-States	China	Russia
Roads	5 000	4 400	3 056	776
Railways	212	202	86	86
Inland waterways	41	41	117	102

Source: European Commission, *EU Transport in Figures, Statistical Pocketbook*, 2012.

Figure 1.7. **Competitiveness and quality of transport infrastructure**



1. Simple average of four quality indicators (roads, railroad infrastructure, port infrastructure, air transport infrastructure). The responses are to the questions : "In your country, how would you assess the following aspects of transport infrastructure?" *a)* Roads, *b)* Railroad system, *c)* Air transport infrastructure, *d)* Seaport facilities [1 = extremely underdeveloped – among the worst in the world; 7 = extensive and efficient – among the best in the world].

Source: World Economic Forum (2013), *The Global Competitiveness Report 2013-14*.

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while some areas in Siberia and the Far East lack regular connections with the main transport network, implying an important barrier to economic development of these regions. One third of all rural settlements are still not connected with the national paved road network.

Priorities, principles and the main directions of the transport system development are presented in the "Transport Strategy of the Russian Federation until 2030", which was elaborated in 2008 a revised version being approved by the government in August 2013. The Strategy proposes appropriate policy directions (Box 1.2) and the authorities are now rightly placing it more clearly at the centre of decision making. In particular, the key multi-year federal financing programme (State Programme "Development of Transport System") seems to be now well synchronised with the Strategy. This should link investments with long-term priorities more strongly than in the past, and minimise the influence of short-

term political and budgetary considerations, bringing more coherence and prioritisation to policy making. Regional transport strategies currently in preparation should complement the integrated system of strategic planning in Russia.

Box 1.2. **Transport Strategy of the Russian Federation until 2030**

The Strategy defines strategic goals for the state policy in the transport sector:

- creating the integrated transport space in the Russian Federation;
- ensuring access to quality transport-logistic services;
- ensuring access to quality transport services for the population;
- integration into the international transport system, increasing the transport services exports and transit;
- increasing the level of transport safety;
- reducing the negative environmental impact of transport.

Implementation mechanisms include:

- the introduction of the national and regional high-level plans to co-ordinate national or regional transportation demand and supply;
- formation of the multi-annual guaranteed transport financing system;
- creation of the monitoring system on transportation markets and transport infrastructure;
- development of the PPP mechanisms;
- Improvement of the legal base of the transport industry.

The strategy provides a detailed list of targeted numeric objectives in term of social, economic, and transport-sector specific results.

Source: Ministry of Transport (2012).

Prioritisation and implementation capacity are the keys to success of infrastructure renewal

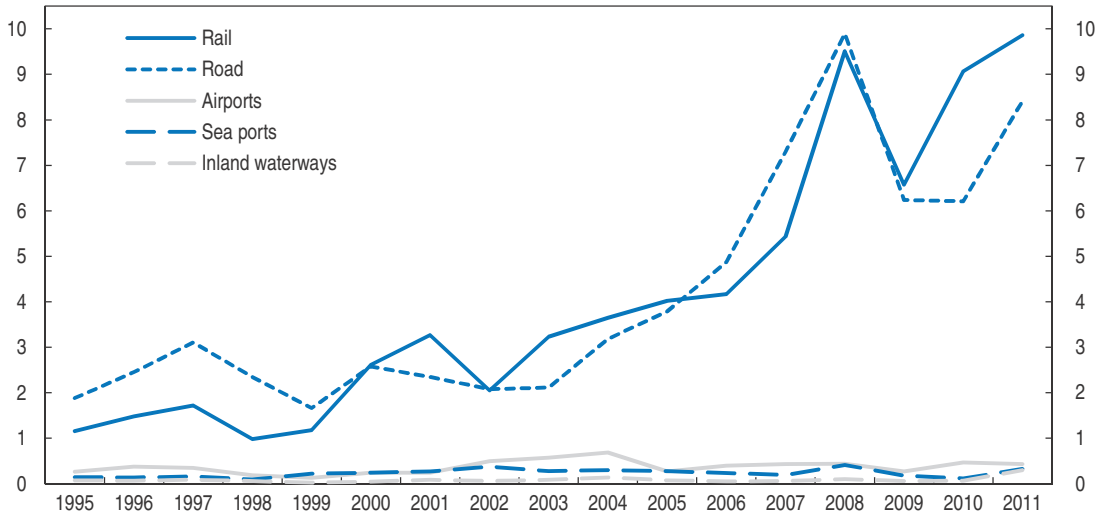
Recent years have been marked by the growing attention of the government to the development of transport infrastructure, as reflected in massive increases in spending on rail and roads (Figure 1.8). According to the existing plans, this trend will be continued at least until the end of the decade.

Improving the quality of railway infrastructure is particularly important as railways dominate freight transport (Figure 1.9) and serve large Russian industries, notably raw materials, which often have no transport alternative. While Russia has inherited an extensive railway system, repairs do not keep up with infrastructure degradation and increasing freight transport demand (IERT, 2012), which manifests itself most strongly in insufficient capacity of particular sections on the main export directions. The total length of sections with capacity lower than demanded was roughly 7 600 kilometres (9% of total railways length) in 2012 and under current trends will reach 13 000 kilometres in 2015. Official plans aim at reducing bottlenecks to 5.1% of the total length by 2020, and to extend the network by 3%. But in the past similar targets have been systematically missed.

Railways also remain essential in long-haul passenger transport serving more than 40% of all passengers. Improving transport connectivity among major cities through the

Figure 1.8. **Transport infrastructure: Gross investment spending**

Current prices and exchange rates, billion euros



Source: OECD/ITF (2013), *Spending on Transport Infrastructure 1995-2011.*

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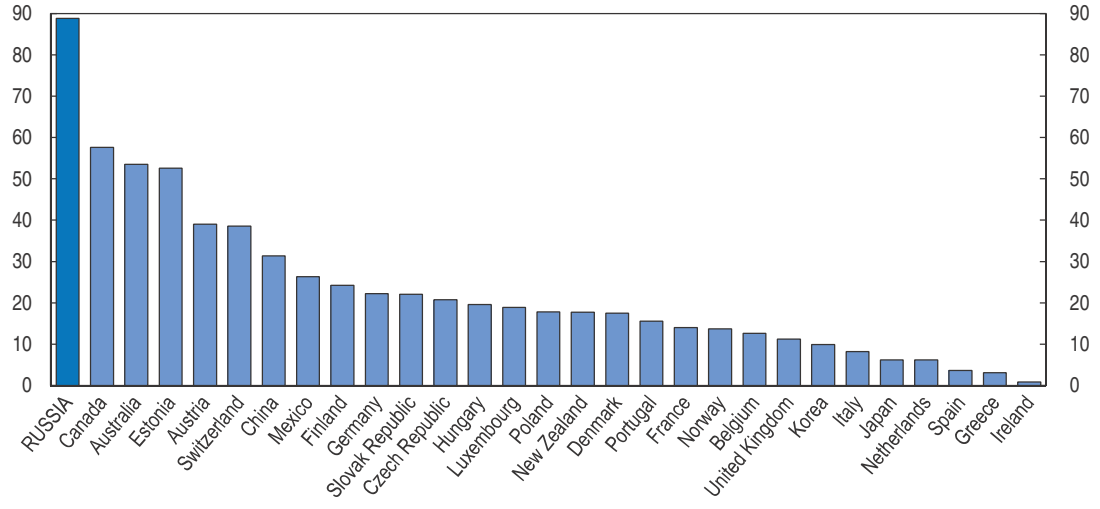
Figure 1.9. **Railway share of freight transport**

2010, % in total inland freight tonne-km



Note: Excluding oil and gas pipelines. 2009 data for Canada, China, Greece, Luxembourg, Switzerland. 2008 for Australia, Korea, New Zealand, United Kingdom.

Source: OECD/ITF (2012), *Trends in the Transport Sector 1970-2010.*

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construction of the high-speed railway (HSR) has also long been an important item on the policy making agenda. The first HSR programme was approved in 2006 and envisaged 21 HSR routes being built till 2020. Plans to build an HSR between Moscow and Kazan were included in the July 2013 stimulus programme. Extensions to Yekaterinburg and the route between Moscow and St. Petersburg are also being considered.

The road system was underdeveloped in the Soviet times, as this sector was seen to play a secondary role in the centrally planned and heavily industrialised economy. But the role of road transport has been growing rapidly since the start of the economic transition

and the marked acceleration in investment has made road freight competitive with rail in many markets where rail enjoyed a monopoly. But despite the growing attention of the government to the development of the road network, its density and quality still do not meet the needs of rapidly increasing motorisation. There are many overloaded sections on the main federal roads – generally near big cities, and especially within the Moscow zone. The majority of roads are not adapted to heavy vehicles: less than 30% of federal and regional roads are adapted to standard modern axle loads of 10 tonnes or more. Modernisation is therefore very important and road components for the main corridors should be designed in line with international corridors and to be usable for the most efficient lorries. The State Programme aims to ensure that all federal roads will be of satisfactory quality by 2019. Heavy investments are also planned at regional and local levels.

While air passenger traffic is increasing, airport infrastructure, with the exception of the biggest airports, is underfinanced. The smaller airports were transferred to the regions which often cannot finance them properly and many were closed or face bankruptcy. Such outcomes are worrying for more distant regions, where there are no feasible alternatives to air connections. The existing regional and local subsidisation system is non-transparent and ineffective and needs to be revised. However, several programmes providing funding for socially important routes have been implemented recently. While infrastructure is being expanded and repaired, improving the efficiency of existing infrastructure is also important. For example, the number of take-off and landing operations per runway in Moscow airports – the busiest in Russia – is currently less than half than in London airports and two-thirds of that in some Chinese airports (Katchan, 2011). Airport infrastructure development therefore needs to be co-ordinated with the air-traffic management system improvements, which would also allow for increasing the total capacity of air routes within Russia (Okulov, 2011).

Massive investment in seaports increased total port capacity above the current and medium-term needs. However, bottlenecks in the inter-modal infrastructure limit the effective use of ports (Rosmorport, 2012). Most ports suffer from poor rail and road access and lack of modern logistic facilities providing smooth trade and transport flows. There is also a lack of specific port capacities serving trade in high-processed goods, first of all in containers and wheeled cargo, since most investments were attracted to projects linked to exports of raw materials. Customs and other border-crossing procedures still take a lot of time and the "single window" principle has not been implemented in the seaports in spite of numerous projects. Therefore, while high private sector participation in port development is a major achievement, the authorities should play a more active role in strategic planning and co-ordination.

While investment needs are very high as reflected in long-term spending plans, so are policy planning and implementation capacity challenges. Strict prioritisation according to transparent indicators will not only be necessary for new projects, but also for maintenance and modernisation of existing infrastructure. As part of the modernisation of legislation in the field of road infrastructure, the full implementation of the principle of normative financing for the repair and maintenance of roads is foreseen by law in 2014. The high capital and running costs of transport infrastructure projects deserve elaborate cost-benefit analysis, covering the lifetime of a project and including all external costs and benefits.

It is equally important to seek to prioritise "smart" solutions and efficiency improvements to maximise the benefit from using existing infrastructure. For example, intermodal solutions could be used instead of parallel roads and railways; improved management of road capacity through congestion and parking pricing could reduce the need for building new city roads; and new air traffic management systems could reduce the need for new airport runways. This would require, among other things, improving the quality of the transport statistics on the basis of modern market monitoring methods. In particular, there is only limited statistical information available about road freight transport and coach passenger transportation, while no reliable statistics are available on private passenger car usage.

The implementation of large-scale infrastructure investment projects, such as the recently announced construction of a high-speed rail line between Moscow and Kazan, a central ring road around Moscow and upgrading the Trans-Siberian and Baikal-Amur railways, in cost-effective fashion will be challenging. The new law on public procurement, which increases transparency and openness at all stages of the procurement process is an important step forward but needs to be supported by further improvements in project evaluation, management and control, better use of the public-private partnership and, mostly crucially, cleaning up corruption (see above).

Ensuring competition in the transport sector

Ambitious and wide-ranging railway reform was started in 2001 but is yet to be fully completed. In its first stage (2001-03) the functions of the state regulation were separated from operations, which previously were all combined within the Railway Ministry. The state-owned company "Russian Railways" (RZD) was established in 2003 and the regulatory part was integrated within the Ministry of Transport. In the second stage (2003-05) RZD spun off 40 daughter companies operating specialised rolling stock (container wagons, reefers, car-carriers, etc.) and providing special services. In the third stage (2006-10), massive private investments were allowed into rolling stock so that currently about 80% of freight turnover is transported by freight wagons owned by private wagon operators. However, only RZD is allowed to operate locomotives and hence it retains an effective monopoly in freight carriage. Any attempts by private players to enter this market (with 200 licences issued so far), have been effectively blocked. The system is also legally closed for foreign operators.

This continued monopoly combined with disintegration of the wagon operation leads to an ineffective use of assets with thousands of empty wagons, thereby creating additional railway bottlenecks, excessively long shipping times (for example guaranteed delivery time between Krasnoyarsk and St. Petersburg is usually not shorter than 30 days) and even denial of service. The average speed of freight trains fell from 274 kilometres per day in 2010 to 219 in 2012 (Nord-News, 2013). Tariffs continued to rise rapidly in recent years. All these problems make it very difficult for many firms, especially SMEs, to ship goods by rail. According to the 2011 government decision, RZD is expected to solve problems with the management of independent wagons before the current market structure is further reformed. But meanwhile RZD was frequently fined by the Federal Anti-Monopoly service for abusing its market position, and in particular for refusing to provide freight wagons to other carriers. However, these sanctions have proved largely ineffective so far, and the head of FAS publicly characterised RZD in July 2013 as a "typical Soviet monopoly" operating "at the expense of its customers".

A genuine reform that would introduce competition into railway freight is therefore essential. There are two principal approaches to such reform as practised across OECD countries: allowing competition among the vertically-integrated railway companies or unbundling the infrastructure from train operations to establish the platform for competition between separate companies running trains. The decision to choose and implement the targeted model of railway competition needs to take into account important features of the Russian rail freight system: intensive usage of infrastructure and its concentration on a few key lines. Nevertheless, the decision is long overdue and would require a wide-ranging legal and regulatory reform, as well as strengthened competition rules enforcement. Whatever is the decision, carefully managed tariff liberalisation will be needed to better align tariffs with costs and allow rail freight to compete successfully against road transport for higher value cargos. Unfortunately, neither the fourth stage of reform announced in 2011 nor the strategic transport documents signal any progress in this area. While there are conflicting announcements concerning plans for partial privatisation of RZD, privatisation alone is unlikely to improve transport outcomes given the current market structure. In fact replacing a public monopoly with a private monopoly might make the situation even worse.

Long-haul railway passenger transport is also highly monopolised. The Federal Passenger Company (FPK), a daughter company of RZD, controls more than 95% of the market, and RZD controls an additional 3.5% of the market. The rest is divided between small private companies, each operating a limited number of routes (FPK, 2012), FPK faces competition only on the route between Moscow and St. Petersburg. Promoting more active competition in long-haul passenger transport should therefore be another priority for Russian policymakers. This is likely to be in the form of competition on the tracks in more profitable markets and in the form of competition for exclusive concessions in markets, which require subsidisation.

There are also barriers to competition in air transport, which is important considering the size of the country and the poor quality of railway and road infrastructure. Although the air carriage market is generally very competitive, the main problem is linked to the slow pace of providing non-discriminatory access to ground services (fuelling, technical services, etc.) resulting in poor quality and high prices. This is because the legal base regulating the relationship between the carriers and the airports is not properly developed, and in some regions, airport and air carriage business have not been separated. As a result, prices for aircraft fuel are usually higher than in other countries, and other airport services are twice as expensive (Fridland, 2013). In consequence, import-bound air cargo traffic is frequently arranged via the neighbour states' airports with the final leg to Russia provided by trucks. High technical landing and air-navigation fees also limit the growth potential of international transit cargo. It is therefore important to finalise separation between airport and airlines, better regulate local monopolies and strengthen competition policy enforcement. The lack of small airports with good and affordable service quality poses barriers for low cost carriers (Sobol, 2012). Low-cost carriers also face legal obstacles, as according to the Aviation Code of Russia the carrier is obliged to provide the full scope of passenger services (on-board meals, baggage handling, etc.) without any exceptions. Removing such barriers would be important to encourage a low-price segment for passenger air transport after low-cost carriers left the market in 2011.

Establishing and enforcing appropriate standards is important for safety and environmental outcomes

A deficit of modern and systematically enforced standards for road transport is another key problem contributing to road safety, environmental and service quality concerns:

- Transport safety is a serious problem. Road traffic mortality is five times higher than in several European Union countries, about twice higher than in the United States and significantly higher than in other advanced transition economies. The bad state of the roads, a sharp decline in road police personnel, as well as drunk driving, are contributing factors (HSE, 2013). Strengthening standards and enforcement should therefore be considered. The unsatisfactory condition of emergency medical services in some regions exacerbates the situation.
- The environmental impact of road transport is substantial. Its share in all the emissions in Russia is about 40% and in transport emissions about 80% (MNRE, 2012). The total volume of emissions is decreasing despite the growing number of vehicles, because the car fleet is gradually being replaced with lower emission vehicles. Also, after several delays, more ambitious mandatory fuel efficiency standards for cars and trucks have been introduced: Euro 3 fuels are required from 1 January 2013 and Euro 4 fuels will be required from 1 January 2015. However, the motor fuel quality monitoring and enforcement system remains ineffective, and about one third of all the motor fuel sold in Russia still does not comply even with Euro 2 (Dieselnet, 2013). Proposals of tax changes encouraging the use of natural gas in transport are being discussed, but have not yet been adopted.

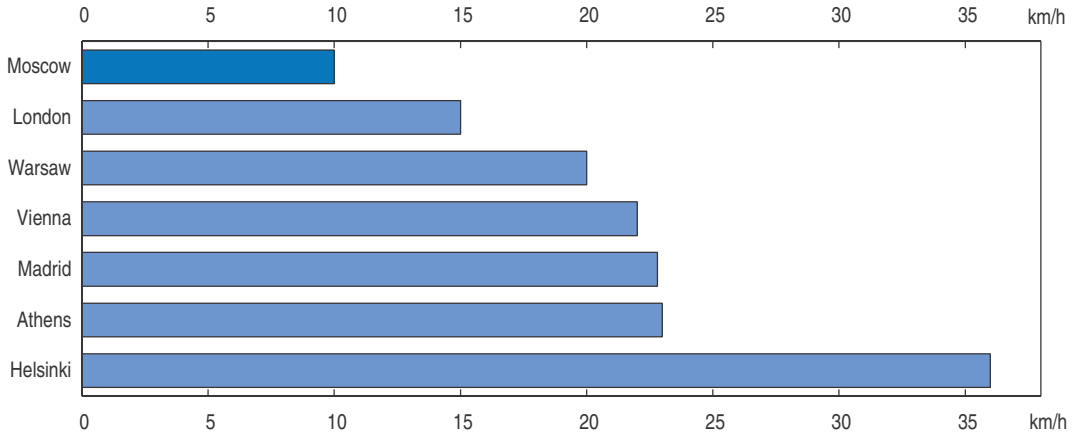
The virtual abolition of vehicle technical inspections in 2012, introduced in an attempt to cut red tape, has had an important negative impact on the enforcement of transport safety and environmental standards. The technical inspection of road vehicles in Russia, which was traditionally implemented by the road police, is currently within the responsibility of the Russian Union of auto-insurance companies. An insurance policy cannot be sold without the technical inspection card, but in practice, the insurance companies often ignore this rule, and no state control or enforcement is envisaged at the moment (AUTONEWS-RU, 2013).

Better policy co-ordination to address urban transport challenges

Local transport constraints mean that it is increasingly difficult to attract new investment and workers to the fastest growing cities. Traffic congestion, long commuting times and related air pollution are becoming key challenges in almost all bigger cities, but the situation is particularly bad in Moscow and St. Petersburg (Donchenko, 2013). Hours-long traffic jams have become the norm and the average traffic speed in peak hours in Moscow is much lower than in other European capitals (Figure 1.10), generating high congestion costs.

The main factor influencing the urban transport situation is the motorisation boom in Russia. Car ownership has doubled since 2000. While the average car ownership in Russia is currently about 250 cars per 1 000 inhabitants, it is much higher in urban areas. The share individual transport by private cars is estimated at 68% which is still less than in most OECD countries and hence is likely to grow further. This suggests that without appropriate policy response, urban transport problems will only become more acute.

Figure 1.10. **Average traffic speed in peak hours in selected cities**



Source: Donchenko, V. (2013), "Towards the Sustainable Mobility in Russian cities: Problems, challenges and risks", paper presented at the he International symposium OPTOSOZ, Moscow, 14 March.

StatLink http://dx.doi.org/10.1787/888932979519

The current policy priority is to improve the quality and accessibility of the public urban transport (Donchenko, 2013). Finalising the reform of local railways is essential for improving the quality of suburban commuting, as railways serve 44% of local public transport users. The "Concept of the Local Passenger Railway Services", drafted at the end of 2012, is aimed at modernising railways and integrating them with other elements of urban transport infrastructure, by establishing clear mechanisms of subsidising the suburban carriers; setting quality standards; and mandating regional transport service development plans. However, the draft legislation is not prepared yet.

While the bus is the main mode of urban public passenger transportation in Russia, it is becoming less attractive as weak municipal finances have led to rapid ageing of the bus fleet (MOT, 2012a). The recent federal support for modernising the public transport fleet is a therefore step in the right direction. The attractiveness of buses and trolleybuses is further reduced by the fact that they are usually not privileged in traffic organisation, and hence offer little advantage over cars. In the course of the reforms the public transport system has been complemented by mini-buses, operated by individuals or by small private enterprises. They now serve up to 15% of all the urban passengers (MOT, 2012b). This subsector is poorly regulated in terms of quality standards and is not at all integrated with the rest of the transport system. On the other hand, the current legal framework does not allow private operators in the mainstream urban public transport system. The existing legal frameworks, including federal anti-monopoly law, should be revised to eliminate the legal barrier to transparent and competitive contracting of public transport services.

There is scope to improve traffic management. City authorities try to tackle the problem by introducing dedicated lanes for buses, bicycle paths and pedestrian zones, prohibition of heavy vehicle traffic, strict parking policies, etc. But these measures are usually uncoordinated, not supported by economic incentives and generally ineffective (Donchenko, 2013). Transport policy planning is heavily focused on investment projects. Moreover, there is no proper co-ordination among various authorities and the link with city development planning is weak. As in other countries congestion charges are unpopular and would occupy considerable political capital.

Introducing special federal legislation concerning urban public transport organisation, management and financing, should be a key priority. Russian regions have tried to introduce such models within the framework of regional laws but their attempts have come into conflict with general federal anti-monopolistic legislation. The federal government, however, could develop a menu of model urban and region transport plans, which would be available to the local authorities, together with ready-to-use legal instruments, for example for transport service contracting. Such framework legislation should be accompanied by measures improving the quality of local level policy planning, for example by establishing a national centre to train the staff and elaborate recommendations based on best international and Russian practices.

Box 1.3. **Recommendations for improving transport infrastructure**

- Tackle transport bottlenecks
  - Ensure that Transport Strategy provides a clear and binding guidance to executive documents.
  - Prioritise, when possible, maintenance and modernisation of existing infrastructure over large and expensive new construction projects.
  - Prioritise "smart" solutions, intermodal complementarities and efficiency improvements to minimise investments needs.
  - Improve the quality of transport statistics related to road freight transport, coach passenger transportation, and in particular to private passenger car usage.
- Improve the efficiency of transport infrastructure spending.
  - Fight corruption in the implementation of large investment projects.
  - Improve evaluation methodologies.
  - Improve the legal framework to increase the use of public private partnerships.
- Promote competition in the transport sector.
  - Choose and start implementing a preferred model of competition in railway freight transport.
  - Stimulate on tracks competition and competition for exclusive concession in passenger train transport.
  - Finalise separation between airlines and airports and remove legal barriers for low-cost operators.
- Strengthen standards and their enforcement to minimise the health and environmental impact of transport.
- Ensure better policy co-ordination to address urban transport challenges.
  - Finalise the reform of local railways to allow for integration with other elements of urban transport infrastructure.
  - Improve transport demand and traffic management, including by introduction of congestion charges and strict parking policies.
  - Develop a modern legal framework for integrated urban transport planning, removing obstacles for contracting private transport operators.
  - Better co-ordinate transport policies with territorial development planning.

Bibliography

AUTONEWS-RU (2013), *"Voditelam ne Pridetsa Prohodit Tehosmotr"* (Drivers will not have to pass the inspection), *http://autonews.ru/autobusiness/news/1720780/*.

CNBC (2013), *Is Russia Too Corrupt for International Business?,* 11 June, *www.cnbc.com/id/100805382*.

Dieselnet.Com (2013), *Emission Standards Russia*, *http://dieselnet.com/standards/ru/*.

Donchenko, V. (2013), "Towards the Sustainable Mobility in Russian cities: Problems, challenges and risks", paper presented at the he International symposium OPTOSOZ, Moscow, 14 March.

EBRD (2012), *Diversifying Russia. Harnessing regional diversity,* European Bank for Reconstruction and Development, London.

FPK (2012), *The 2011 Yearly Report*, Federal Passenger Company, Moscow.

Freedom House (2012), "Freedom of the Press 2013: Russia".

FT (2013), "Alexei Navalny verdict sends ripples through Moscow business world", *Financial Times*, 18 July, *www.ft.com/intl/cms/s/0/d2da85de-efb5-11e2-8229-00144feabdc0.html*.

Fridland, A. (2013), "O structure Zatrat na Aviaperevozki I Effektivnosti predlagaemih Mer" (On the Air Transportation Costs Structure and the Effectiveness of the Proposed Measures), presentation to the Transport Union of Russia, Moscow.

GEM (2012), *GEM 2012 Global Report*, Global Entrepreneurship Monitor.

Gonchar, K. and P. Marek (2013), *Natural-resource or Market-seeking FDI in Russia? An Empirical Study of Locational Factors Affecting the Regional Distribution of FDI Entries*, Higher School of Economics, Moscow.

GRECO (2012), *Joint First and Second Evaluation Round, Addendum to the Compliance Report on the Russian Federation*, Group of States against Corruption, Council of Europe, adopted by GRECO at its 58th Plenary Meeting, Strasbourg, 3-7 December 2012.

Gupta, S., H. Davoodi and R. Alonso-Terme (2002), "Does corruption affect income inequality and poverty?", *Economics of Governance*, March 2002, Vol. 3, Issue 1.

HSE (2013), "Bezopasnost dorozhnogo dvizhenia v Rossii: Sovremennoe Sostoyanie I Neotlozhnie Meri po Ulucheniu Situacii" (Road Safety in Russia: Current Situation and Emergent Measures for its Improvement", Higher School of Economics, Moscow.

ICD (2013), *Survey of public opinion,* Institute of Contemporary Development.

IERT (2012), *The Reference and Analytical Paper on the Railway Infrastructure Development in the Regions of the Russian Sea Ports Until 2015*, The institute of the transport economics and development, Moscow.

IUR (2012), *2012 Report on Combined transport in Europe*, International Union of Railways, Paris.

Katchan, V. (2011), *Tri voprosa k ministru transporta Rossii* (Three Questions to the Russian Minister of Transport), ATO (Aviation Business Review Portal), *http://ato.ru/content/tri-voprosa-k-ministru-transporta-rossii*accessed May, 2013.

Korostelev, V. (2012), "Odno Okno – Neverny Princip, Kotori ne Rabotaet" (One window – the wrong principle that does not function).

Kowalski, P. et al. (2013), "State-Owned Enterprises: Trade Effects and Policy Implications", *Trade Policy Papers*, No. 147, OECD Publishing.

Ledeneva, A. (2011), "Telephone Justice in Russia", *The EU-Russia Centre Review*, Issue 18, May 2011.

Ledyaeva, S., P. Karhunen and J. Whalley (2013), "If Foreign Investment Is not Foreign: Round-Trip Versus Genuine Foreign Investment in Russia", *CEPII Working Papers*, February 2013.

Lehmann, H. and M. Silvagni (2013), "Is There Convergence of Russia's Regions?: Exploring the Empirical Evidence: 1995-2010", *Economics Department Working Papers*, No. 1083, OECD Publishing, doi: *http://dx.doi.org/10.1787/5k422105ht33-en*.

Mauro, P. (1995), "Corruption and growth", *Quarterly Journal of Economics*, Vol. 110 (3).

Mauro, P. (1997), "The Effects of Corruption on Growth, Investment, and Government Expenditure: A Cross-Country Analysis", in Elliot, Kimberly Ann (ed.), *Corruption and the Global Economy*, Institute for International Economics,Washington, DC.

MNRE (2012), *The State Report on the Environment condition and the Environment protection in 2011,* Ministry of Natural Resources and Environment of the Russian Federation.

Mobolaji, H.I. and K. Omoteso (2009) "Corruption and Economic Growth in Some Selected Transitional Economies", *Social Responsibility Journal*, 5 (1): 70-82.

MOT (2012), *Transportnaya Strategia Rossiiskoi Federacii na Period do 2013 Goda* (Transport Strategy of the Russian Federation until 2030), MOT, Moscow.

MOT (2012a), *Ob Osnovnych Itogah Socialno-Economicheskogo Razvitia Transportnogo Kompleksa v 2011 Gody i zadachah na 2012 god I Srednesrochnuiu Perspektivu do 2014 Goda* (On the main results of the socio-economic development of transport in 2011 and the tasks for 2012 and until 2014), MOT, Moscow.

MOT (2012b), *Transportnaya Strategia Rossiiskoi Federacii na Period do 2030 Goda* (Transport Strategy of the Russian Federation until 2030), MOT, Moscow.

Nord-News Agency (2013), "Skorost Gruzovih Poezdov na Seti Zheleznih Dorog v Janvare 2012 Goda Virosla" (The Speed of Freight Trains Increased in January, 2013), *http://nord-news.ru/news/2013/02/04*.

OECD (2011), *OECD Economic Surveys: Russian Federation*, OECD Publishing.

OECD (2012), *FDI Restriction Index*, OECD Publishing.

OECD (2014), *Review of SME and Entrepreneurship Issues and Policies in the Russian Federation* (forthcoming).

Okulov, V. (2011), "The Russian Ministry of Transport initiatives in air cargo transportation development on domestic and international markets", paper presented at the II AirCargo Forum, Moscow.

OPORA (2012), *The entrepreneurship climate in Russia: Index of OPORA-2012*, Moscow.

Public Opinion Foundation (2013), *Survey of public opinion*.

Pushkarev, O. (2007), "Corruption and Economic Development of Russia: A Regional Aspect", *Applied Econometrics,* Vol. 6, Issue 2.

Reporters Without Borders (2012), "World Press Freedom Index 2011-2012".

Reporters Without Borders (2013), "World Press Freedom Index 2013".

Rosmorport (2012), *Strategy of the sea port infrastructure development of Russia until 2030*, Rosmorport, Moscow.

RAC (2013), "Report on Intermediate Results of an Audit of the measures taken by bodies of state power for fulfilment of obligations and realisation of the rights of the Russian Federation, related to joining the WTO, to assess the influence of the WTO regulations and rules on the budget system and sectors of economy", Russian Accounts Chamber, Moscow.

Sobol, E. (2012), "Discaunter ne Letit" (The Discounter Won't Fly), *Vedomosti,* 30.11.2012, Moscow.

Strategy Partners Group (2013), "CEO Agenda Survey", Moscow.

Tanzi, V. (1995), "Corruption, Government Activities, and Markets".

Tarr, D. (2007), "Russian WTO accession: what has been accomplished, what can be expected", *Policy Research Working Papers Series* 4428, World Bank, Washington, DC.

Transparency International (2013), *Corruption Perception Index – 2013*.

Transparency International (2013), *Global Corruption Barometer*.

US Chamber of Commerce (2013), "International Intellectual Property Index", Global Intellectual Property Center.

Wei, S. (2000), "How Taxing Is Corruption on International Investors", *Review of Economics and Statistics* 82.

World Bank (2000), *Anti-Corruption in Transition: A Contribution to the Policy Debate*.

World Bank (2011), *Worldwide Governance Indicators*.

World Bank (2013), *Doing Business 2013*.

World Bank (2013), *Doing Business 2014*.

World Bank (2013), *Policy Note Russian Federation: National and Regional Trends in Regulatory Burden and Corruption*, February.

World Economic Forum (2013), *The Global Competitiveness Report 2013-14,* Geneva.

World Economic Forum (2012), *The Global Enabling Trade Report 2012,* Geneva.

ANNEX 1.A1

Economic impact of improving transport infrastructure in Russia: Results of the computable general equilibrium model

The SUST-RUS is a regional computable general equilibrium model of the Russian economy (Sust-Rus, 2013). The model includes the representation of the microeconomic behaviour of 32 industries, three types of households (high, medium and low income groups) and a regional government in each of 7 regions (Federal Districts) of the Russian Federation, as well as federal governments. The model represents regional economic developments, as well as interregional and international trade linkages. It models continuous substitution between capital, labour, energy and material inputs in the case of firms, and between different consumption goods in the case of households.

Firms

The behaviour of the production sectors is based on the profit-maximisation principle and is captured by the behaviour of the representative firm. Sectoral return to capital is associated with the costs and structure of their intermediate inputs and factor inputs. Intermediate inputs of the firms include energy, various commodities and services. Factor inputs of the firms include physical capital and labour. At each time period, the instantaneous behaviour of the sectors is based on the minimisation of the production costs for a given output level under the sector's technological constraint. The production technology of the sector is represented by the nested Constant Elasticity of Substitution (CES) functions.

Households

The behaviour of the households is based on the utility-maximisation principle. A household's utility is associated with the level and structure of its consumption. Each household spends its consumption budget on services and goods in order to maximise its satisfaction from the chosen consumption bundle. Households have substitution possibilities between different consumption commodities. Households in the model receive their income in the form of wages, capital rent, unemployment benefits and other transfers (pensions and other social transfers) from the federal government.

Governments

The governmental sector collects taxes, pays subsidies and makes transfers to households, production sectors and to the rest of the world. Tax revenues are shared by the

national and regional governments according to the certain rates determined from the base year data. The federal and regional governments consume a number of commodities and services, where the optimal governmental demand is determined according to the maximisation of the governmental consumption utility function.

Data sources

The benchmark dataset is a multiregional Social Accounting Matrix (SAM), where each regional SAM represents economy of a Federal District of the Russian Federation. All regional SAMs are interconnected by trade and income flows. The model is calibrated using 1995 and 2003 Russian symmetric input-output tables, System of National Accounts 2001-08 and Russian interregional trade database. Base year is 2006 as dictated by data calibration availability.

Focus on Russian regions and the role of the transport sector

Federal Districts (FD) of the Russian Federation are highly differentiated. Gross Regional Product is the highest in the Central FD (Table 1). This is the most densely populated region with 52 persons per square km, which is 6 times bigger than the country average, and with most diversified economy. Far East FD is the least developed region the biggest territory but the smallest GRP and population. South FD is the poorest region with GRP per capita 2.3 times less than the country average. Urals FD has biggest GDP per capita, it is a manufacturing heart of the Russian economy and it is rich in natural resources with 66.7% of Russian oil reserves and 77.8% of gas reserves.

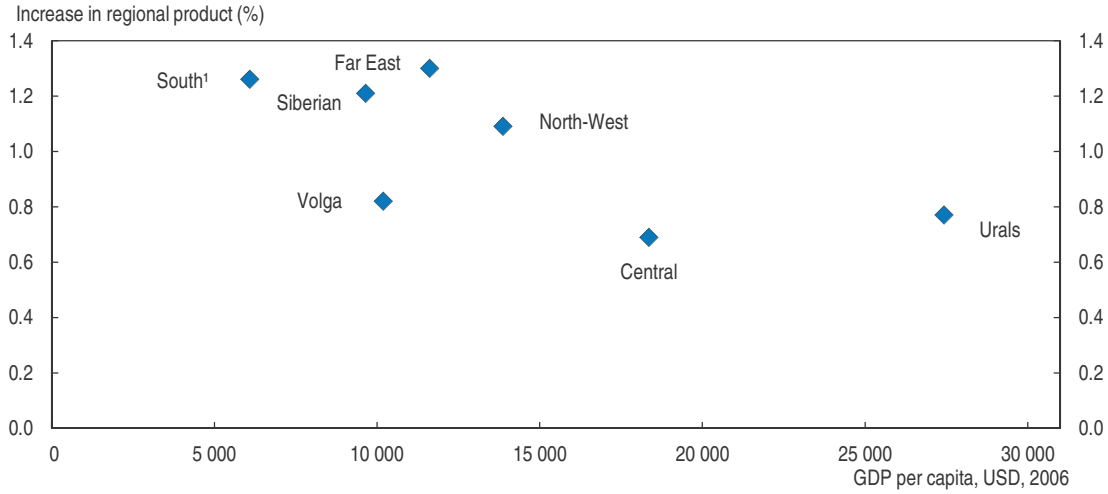
Transport sector amounts to 8% of total country's production and similar share of capital use, but 10% of total employment, according to 2006 data used for model calibration. Transport sector is most intensive in medium skill workers, employing 12% of country total, compared with only 5.5% for high skill workers and 7.8% for low skill workers. Demand from other production sectors accounts for 44% of total transport services, transportation of goods from producer to consumers for 16%, households use for 25%, government use for 3% and export for 12%. Import penetration of transport is very low. Importance of transport regions varies strongly with a share of transport sector in GRP (employment) ranging from 6.6% (8%) in the Central FD to 11.9% (13.3%) in the Far East FD.

Policy scenario: Transport sector efficiency improvement

The policy scenario mimics increase in overall efficiency improvement in the transport sector. It is assumed that all types of labour, capital and energy across the country become 10% more productive. Factor productivity rise of 10% in transport sector results in GDP increase of 0.8% from the benchmark value. This positive effect could be traced on the regional level. The poor or underdeveloped regions tend to benefit from largest increase in GRP, and the opposite is true for two richest regions Central FD and Urals FD. This means that improvement in efficiency contributes to regional convergence (Figure 1.A1.1).

Transport efficiency has also an impact on sectoral composition of output. Apart from transport sector itself, manufacturing is the biggest winner from efficiency improvement, while extraction sectors gain the least (Figure 1.A1.2). Improvements in transport efficiency contribute therefore to economic diversifications.

Figure 1.A1.1. **Impact of 10% increase in transport sector efficiency on Federal Districts**



1. South Federal District is in the boarders of 2006, previous to its division between South and North Caucasian Federal Districts.

Source: SUST-RUS model calculations.

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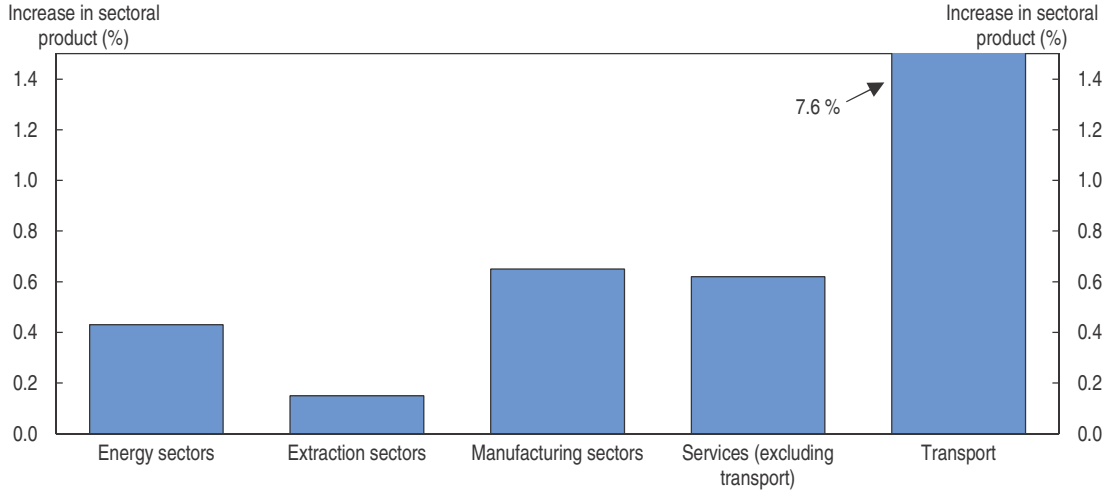
Figure 1.A1.2. **Impact of 10% increase in transport sector efficiency on sectors**



Source: SUST-RUS model calculations.

StatLink http://dx.doi.org/10.1787/888932979709

These positive effects are strengthened if efficiency improvements are supported by transport oriented investment. For example, increase in transport infrastructure spending, which corresponds to the current official transport development programme and amounts to 1.8% of total national investment, would increase the overall positive impact to 2.1% of GDP.

References

Sust-Rus (2013), *Spatial-economic-ecological model for the assessment of sustainability policies of the Russian Federation*, Final Publishable Summary Report, Moscow.

Chapter 2

Boosting productivity: Skills, education and innovation

The labour market in Russia is very flexible. Firms adjust to economic shocks through wage cuts, working hour reductions and minimisation of non-wage labour costs. Workers react by changing jobs. This results in a high and stable overall employment rate, but also high wage inequality, informality and labour turnover, which limits incentives for firms to invest in human capital and productivity improvements.

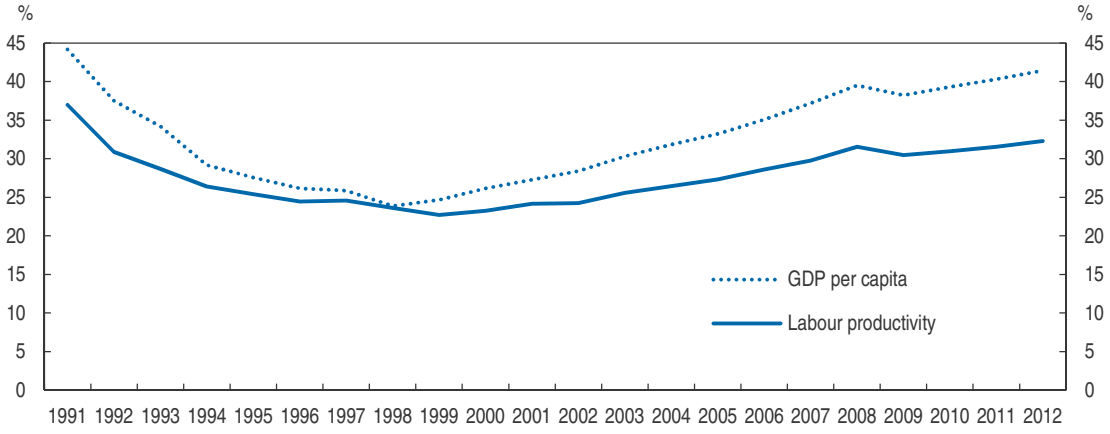
While educational attainment is very high, the education system needs to be strengthened to respond to the needs of a skill-based economy. School-employer co-operation is low and opportunities for higher education are unequally distributed. Adequate funding for education institutions is not assured everywhere while inefficiencies persist.

Private spending on innovation is very low and Russia underperforms in terms of scientific outputs and patents. Support for low-tech innovation and technology adoption, especially among SMEs is narrow because of a bias towards large and high-tech projects, which however are only loosely related to Russian manufacturing capacity. Reform of the public R&D sector is incomplete, notably with respect to strengthening funding on a competitive basis.

Despite sustained productivity growth over the last decade, the gap in GDP per capita of Russia relative to OECD countries remains high and is mainly driven by a productivity and human capital gap (Figure 2.1). The recent growth slowdown made it clear to most observers and policy makers that rapid economic growth before the crisis was largely dependent on rising energy prices. Moreover, pre-crisis productivity growth was lower than previously thought: while several studies estimated average multi-factor productivity growth at about 5% a year since mid-1990s (Jorgenson and Vu, 2011), recent estimates based on better capital stock statistics suggest that it was only about 2¼ per cent (Timmer and Voskoboynikov, 2013). Achieving higher sustainable growth in the future and reducing the income gap require stronger and continuous productivity improvements that imply a larger role for energy savings, innovation and human capital as well as the adoption of best-practice technologies and business processes.

Figure 2.1. **GDP per capita and labour productivity**

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



Note: Labour productivity is measured by GDP per hour worked.

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 estimates.

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The large share of unproductive firms is an obstacle for moving toward skills led growth

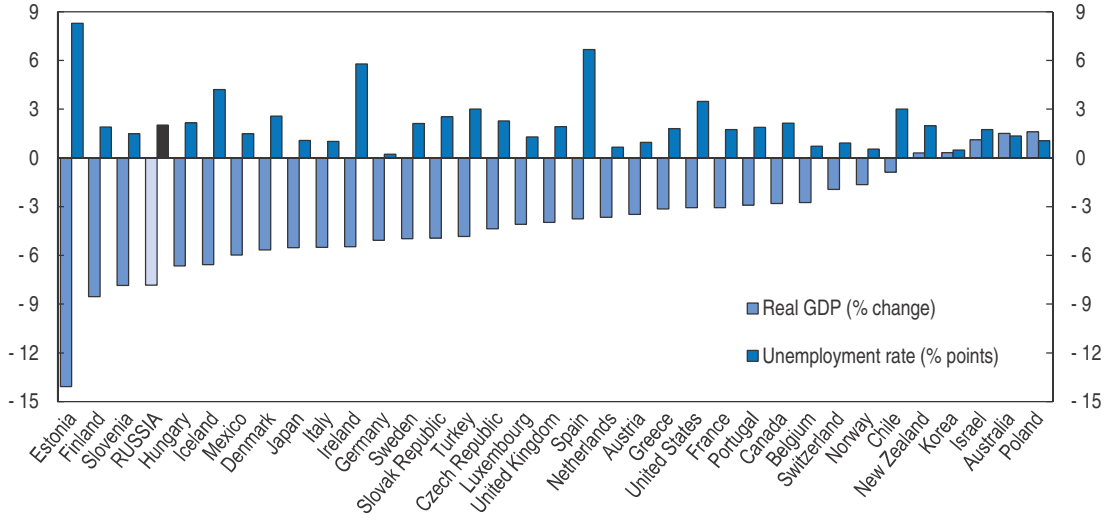
Institutional arrangements on the Russian labour market allow low productivity firms to survive and give little incentive to upgrade the quality of jobs. This results in a slow pace of restructuring, a high proportion of bad jobs and a significant skills mismatch. The main challenge for Russia is to move from this institutional trap to arrangements that will favour human capital-led growth (Kapelyushnikov, 2000).

Shock adjustments take place through wages, working hours and the use of atypical contracts

The Russian labour market performs relatively well overall, with the employment rate at 69% in 2012 compared with 65% on average in OECD countries and the unemployment rate at 5.5% compared with 8% in the OECD. While the crisis hit hard, with a decline in GDP of 8% in Russia in 2009 compared with less than 4% in OECD countries, the impact on the labour market was relatively mild, with an increase in the unemployment rate of 2 percentage points, which is similar to what happened in OECD countries on average (Figure 2.2). In other words the Okun coefficient in the crisis was only half of the OECD average (OECD, 2012a). Since then, the situation in the labour market has recovered more fully than in most OECD countries and both employment and unemployment rates are at their historically best levels. Again in terms of the Okun coefficient this means that the Russian labour market exhibits a similar pattern to Germany.

Figure 2.2. **Employment is relatively stable over the economic cycle**

Changes in real GDP and unemployment rate during the crisis (2008-09)



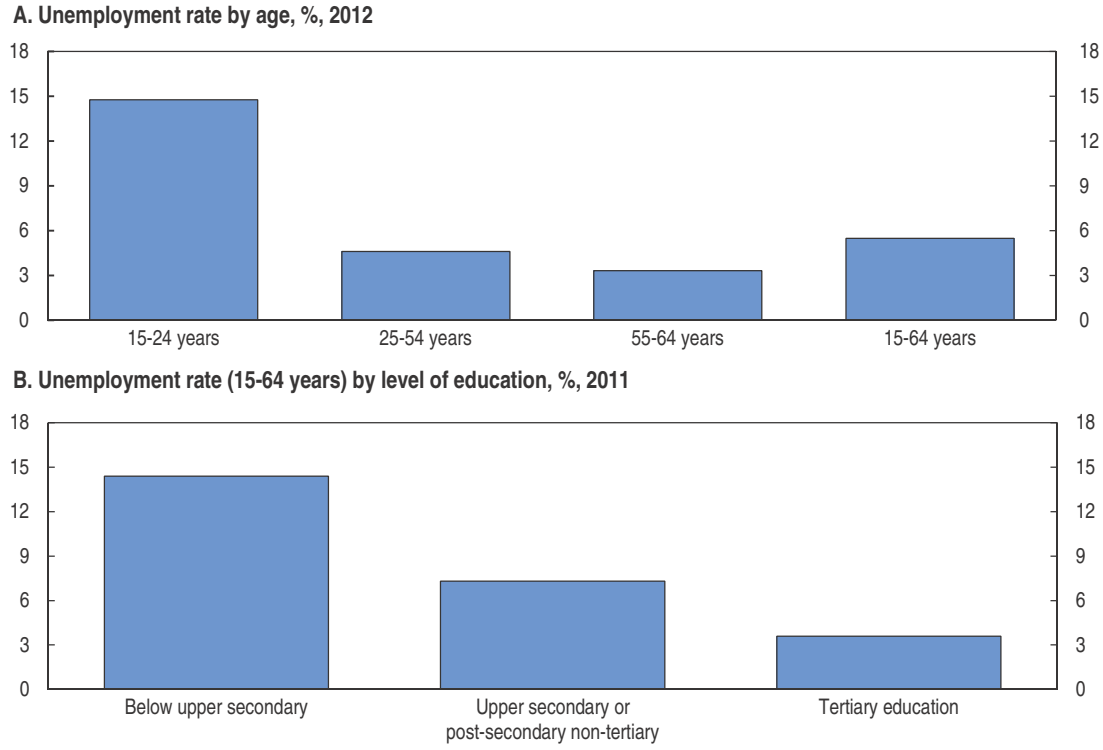
Source: OECD, *OECD Economic Outlook Database* No. 93, OECD Short-term labour force statistics database and Rosstat.

StatLink http://dx.doi.org/10.1787/888932979747

Despite these overall good results, some specific categories are at higher risk of unemployment. This is the case for youths and the less-educated, with unemployment rates above 15% and 20% in 2012, respectively (Figure 2.3). These numbers are broadly in line with outcomes in OECD countries, where the average unemployment rates for youths and the unskilled are both around 16%.

The overall stability of employment in Russia's labour market relies mainly on the possibility to adjust wages in response to economic shocks (Kapelyushnikov et al., 2012). In 2009, as a result of the financial crisis, real GDP declined by 8% and real wages by 4% (Figure 2.4). Wage flexibility relies on several mechanisms. First, in the wage setting system about 40% of wages depend on firm performance, allowing firms to cut wages in case of economic difficulties to a greater extent than in many other countries. For instance, in the United States, which is considered one of the most flexible economies, the median share of

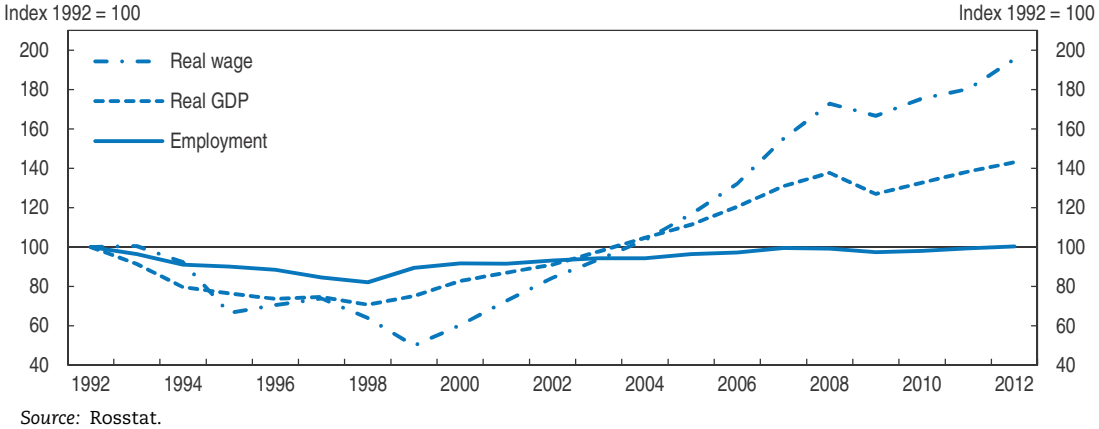
Figure 2.3. **Unemployment rate by age and education**



Source: OECD *Labour Force Satistics Database* and OECD (2013), *Education at a Glance 2013: OECD Indicators*, Table A5.4a.
StatLink http://dx.doi.org/10.1787/888932979766

performance pay in total earnings was estimated at less than 4% (Lemieux et al., 2009), resulting in stable real wages despite GDP decline. Other mechanisms involved in real wage adjustment include the use of informal payments, estimated to be around 50% of the official wage (Gimpelson and Kapeliushnikov, 2011).

Figure 2.4. **GDP, employment and wages**



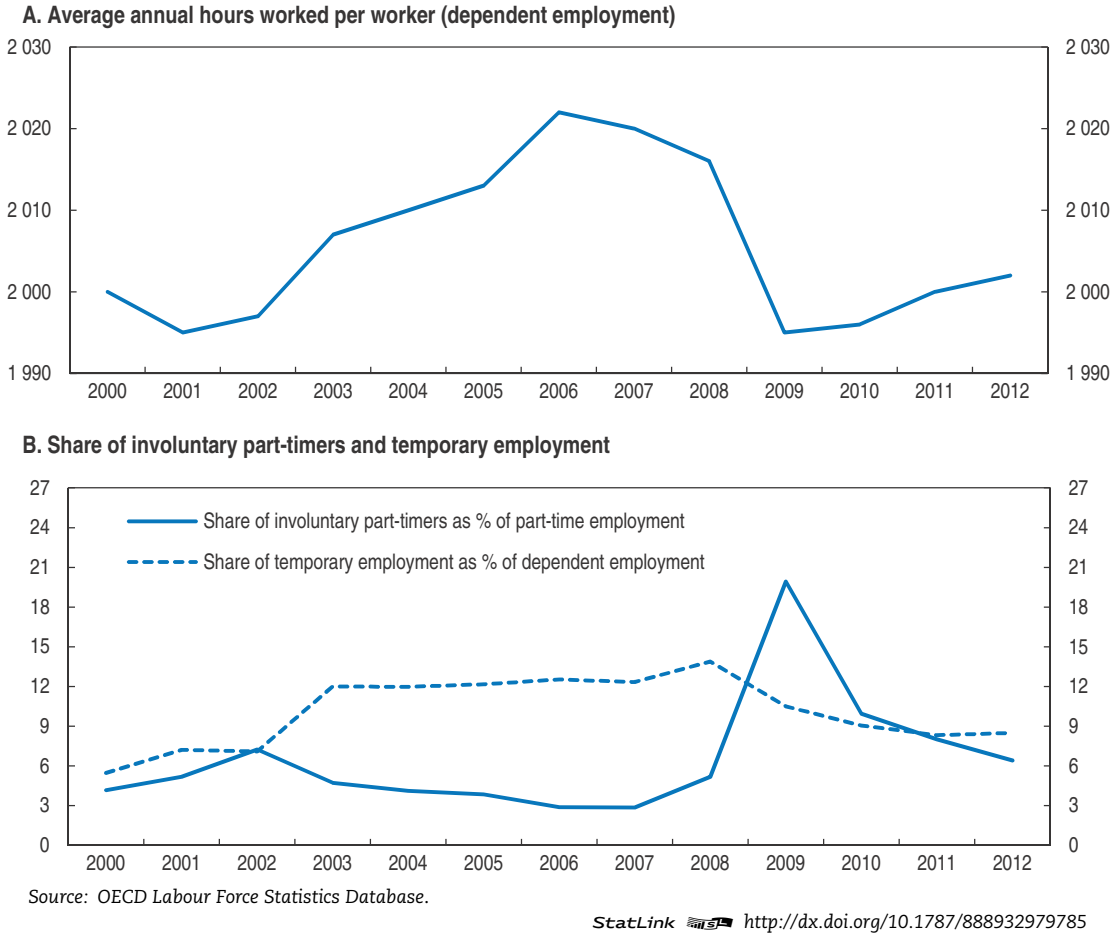
Source: Rosstat.

StatLink http://dx.doi.org/10.1787/888932979538

Cuts in working hours and the use of non-standard labour contracts provide firms with additional flexibility in terms of non-wage and hiring-and-firing costs and were widely used during the last crisis (Figure 2.5):

- 20% of employees experienced involuntary part time work in 2009, up from 5% in 2008, but this came back to 6.4% in 2012. As a result, during the recovery period employment gains were lower than GDP growth.
- Temporary employment contracts were also increasingly used during the boom period to meet firms' needs and reached 14% before 2009. While their share in total employment has since declined, they remain more widespread among less-educated men and low productivity enterprises (Smirnykh and Wörgötter, 2013; Karabchuk, 2012).

Figure 2.5. **Working hours cuts and incidence of involuntary part time**



Source: OECD Labour Force Statistics Database.

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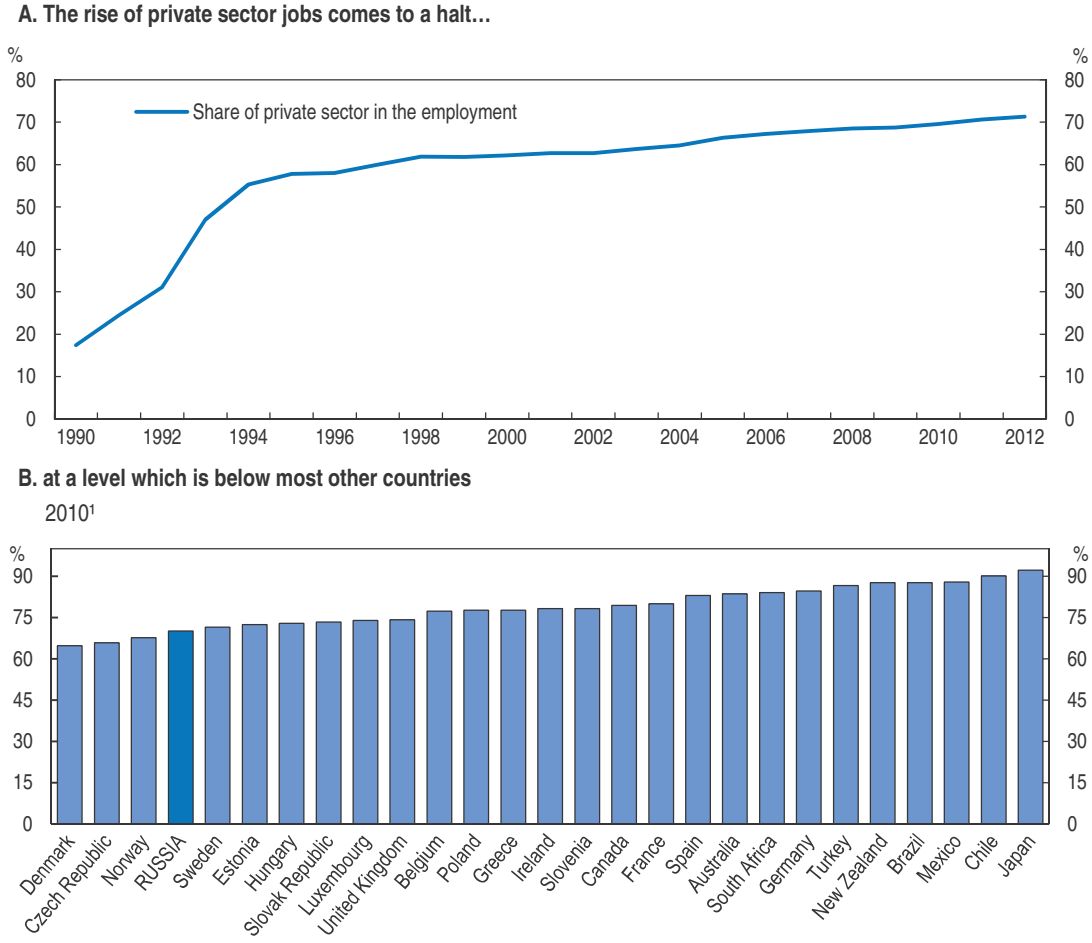
A high number of low-quality jobs

The incomplete transition of Russia toward a market-based economy has resulted in the survival of low-quality jobs inherited from the Soviet period, notably in municipalities and less efficient state owned enterprises (SOEs). While the employment share of SOEs was more than halved between 1992 and 2004, the pace of change has slowed down since then, and the share of the private sector in employment is still low compared with other

countries (Figure 2.6). Productivity dispersion among firms is high and rising, as the unfavourable business climate stifles competition from new entrants and permits inefficient incumbents to continue to operate (Bukowski and Earle, 2014). This suggests that the remaining scope for further restructuring is large, indicating a considerable potential for productivity improvements.

Figure 2.6. **The share of employment in the private sector**



Note: Mixed firms are included in the private sector.
1. 2009 for Brazil and Russia.
Source: Rosstat and ILO, ILOSTAT and LABORSTAT online databases.

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Many new jobs are also of poor quality, as job creation happens mostly in low productivity, non-corporate and informal sectors of the economy (Figure 2.7):

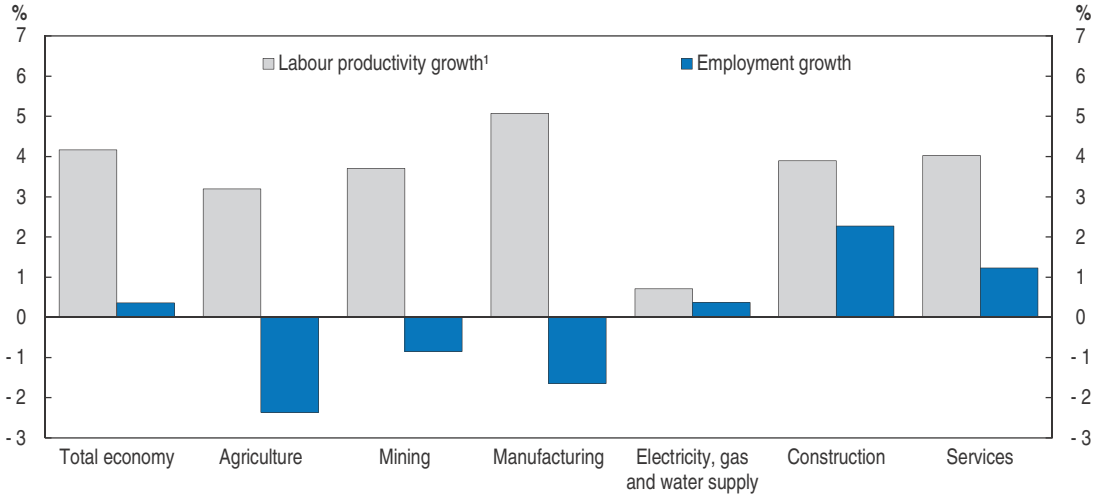
- Between 2002 and 2011, employment increased strongly in services (1.2% per year on average) and construction (2.3%), while employment in the manufacturing sector, where the annual productivity growth rate was the highest, declined strongly (4.7%).
- While corporate employment remained stable during the 2000s and accounts for around half of non-farm employment, employment in the non-corporate sector (own-account workers; individual entrepreneurs, small farmers and their employees) increased. But workers in the non-corporate sector are generally not entitled to employment benefit,

are less protected because of weak enforcement of the labour code and have fewer opportunities for training (OECD, 2011).

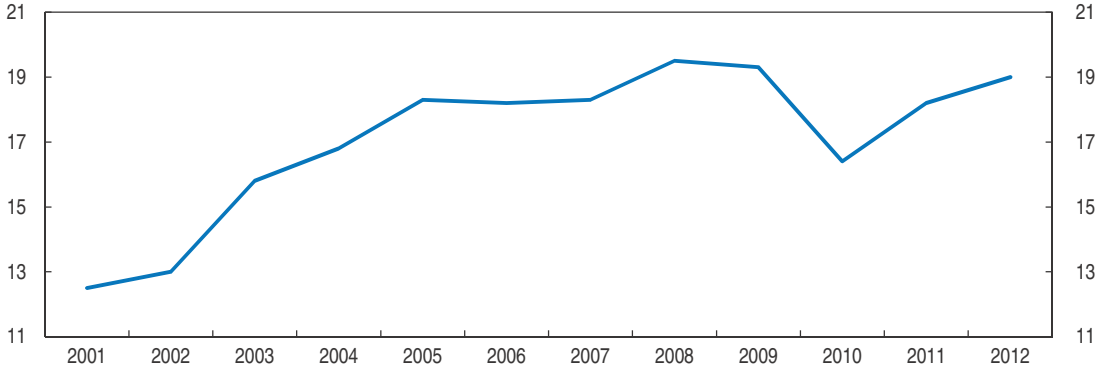
- According to recent estimates, between 7% and 20% of dependent employment is informal and, between half and three quarter of self-employed have no registered activities or are not covered by contracts (Lehmann and Zaiceva, 2013). This comes with several problems, including negative fiscal effects and cost advantages for firms avoiding labour regulation. Informality is also associated with weak incentives to invest in human capital and a risk of labour market segmentation (Box 2.1).

Figure 2.7. **New jobs are mainly created in low productive sectors and the non-corporate sector**

A. Labour productivity and employment growth by sector, annual percentage change 2002-2012



B. Employment in the non-corporate sector2 as a percentage of total employment



1. Labour productivity is defined by gross value added per person.
2. The non-corporate sector corresponds to the Rosstat definition of the informal sector

Source: OECD calculations based on Rosstat and Ministry of Economic Development data.

StatLink http://dx.doi.org/10.1787/888932979823

The rise in low-quality and low-wage jobs contributes to increasing wage inequality. The Gini coefficient is estimated at 0.42 in 2011 which is significantly higher than in most OECD countries (Figure 2.8). The share of employees with labour remuneration lower than the subsistence level is 14% in 2013 after peaking at 18% in 2005. At the same time, the share of the poor in the population remains very high, with one third of all employees

Box 2.1. **The labour market is segmented**

Informality is associated with a risk of segmentation of the labour market. Almost 28% of individuals who had quit a job in the informal sector found a new job in the same sector, against 83% in the formal sector. This persistence mainly affects the most vulnerable groups of workers, such as the low-skilled and long-term unemployed, implying that public support should be targeted at those individuals before and after they fall into informality. On the other hand, the boundaries between the formal and informal sector are not clear-cut, as 10-15% of all formal sector employees have a second job in the informal sector.

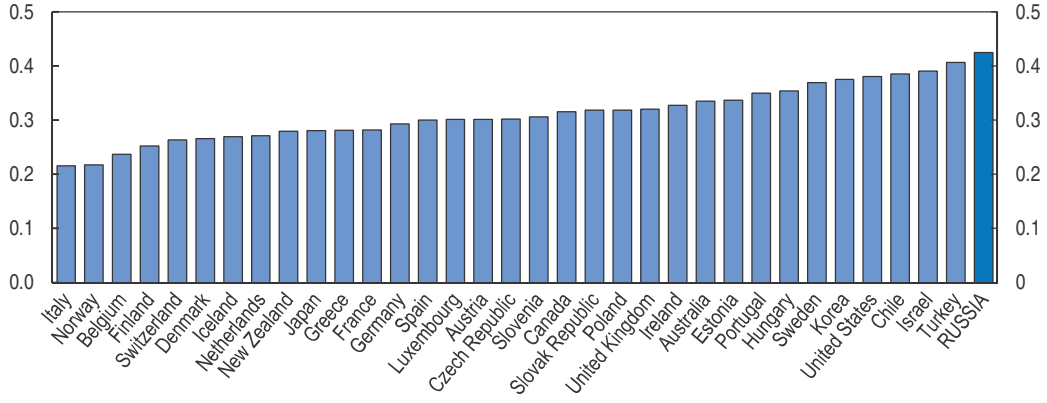
Table 2.1. **Persistency effect in the informal sector**

Type of job separation over 2003-08	Type of job destination in 2009		
	Non-employed	*Formal jobs*	*Informal jobs*
Displacement from formal jobs	8.7	83	8.2
Displacement from informal jobs	12.5	75	12.5
Voluntary quit from formal jobs	5	86.6	8.4
Voluntary quit from informal jobs	5.5	66.6	27.7

Source: Lehmann et al., 2013; Lehmann et al., 2011a ; Kapelyushnikov et al., 2012.

Figure 2.8. **Wage inequality is high**

Gini coefficient, 2011[1]



1. 2009 for France, 2010 for Belgium, Estonia, Germany, Italy, Luxembourg, Netherlands, Slovenia, Switzerland and Turkey.

Source: OECD calculation based on the *OECD Earnings Distribution Database*; Denisova, I. (2012).

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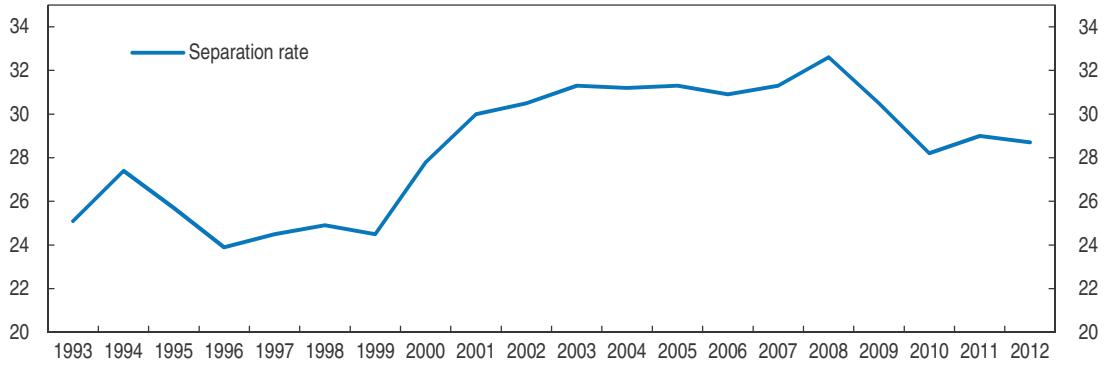
having less than two-third of the median wage, compared with 14% in OECD countries as a whole (Denisova, 2012).

Excessive labour turnover has a negative impact on skills

Low wages and poor working conditions reduce incentives to stay in a job, leading to high turnover, with about 30% of workers leaving their jobs every year since 2000 (Figure 2.9). Separation and hiring rates are particularly high in less productive firms, which survive thanks to low wages. Conversely, higher wage employment is associated with lower labour turnover and less risk of informality (Lehmann et al., 2011b; Gimpelson and Lippodt, 2001).

Figure 2.9. **Work turnover is high and characterised by high quit rates**

Worker turnover, % of average employment



Note: Excluding small businesses.
Source: *Statistical Yearbook 1997*, 2000; and Rosstat.

StatLink http://dx.doi.org/10.1787/888932979861

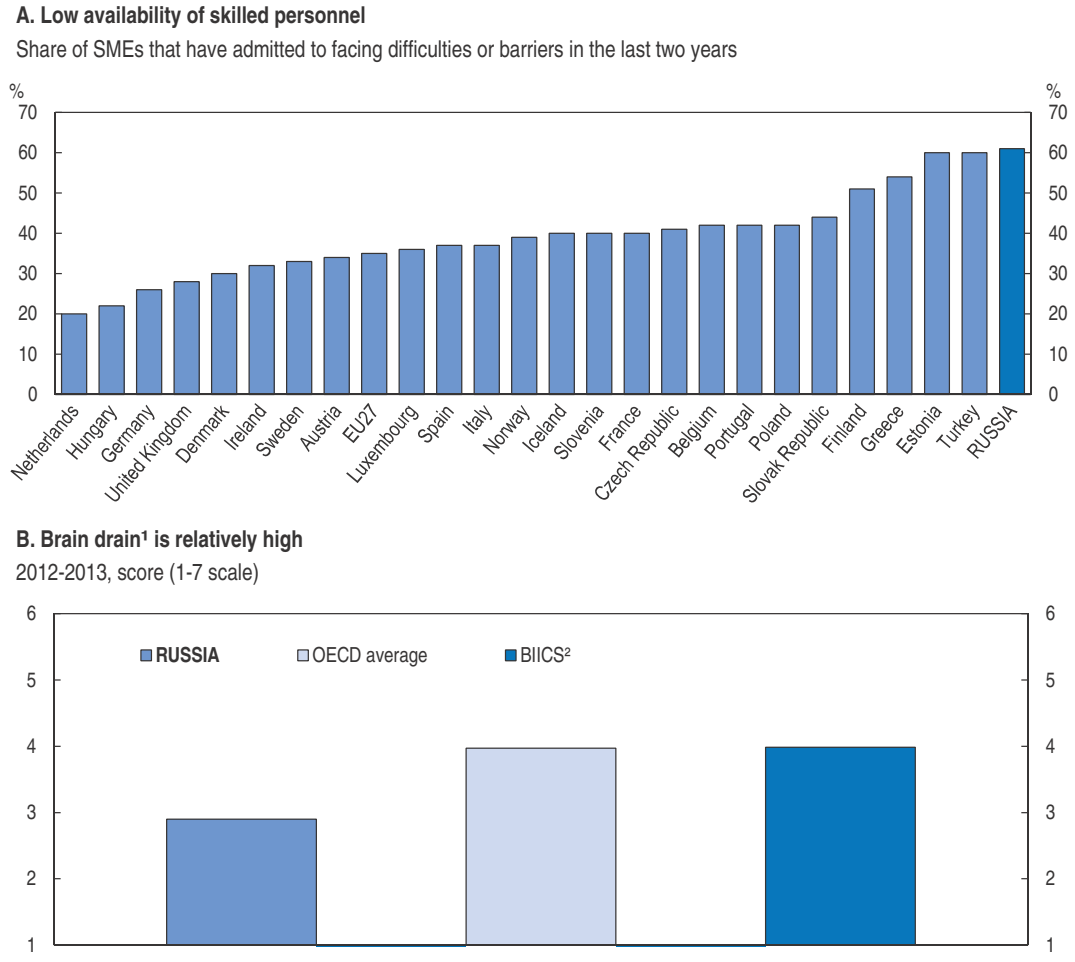
Too-high a level of labour turnover reduces incentives to invest in human capital (Wasmer, 2002). This seems to be the case in Russia, where firms face difficulties in hiring skilled workers (Commander and Denisova, 2012). According to the last EBRD-World Bank survey of Russian firms, 45% of expanding firms think that skill shortages are a constraint on growth and this share is even higher among SMEs (EBRD, 2012). A relatively low capacity to attract and retain talent adds to the problem via brain drain phenomena (Figure 2.10). A skills mismatch is also demonstrated by the high proportion of highly educated people in low skilled occupations in Russia (Kyui, 2010; Gimpelson et al., 2009b; Denisova and Kartseva, 2008). Labour market and education policies could help lead to a better mix of skills supplied in the labour market and should be complemented by improvements to broader framework conditions to boost the demand for skills (Box 2.2).

Strengthening active labour market policies

Moving towards human capital-led growth will imply a substantial need for structural change, including the reallocation of labour resources. This calls for continued monitoring of labour market changes and more active policies to promote job search and new skill acquisition. But spending on labour market policies in general and on ALMPs in particular are weak, with only 0.15% of GDP devoted to active labour market policies (ALMPs) in 2010 (Figure 2.11). The authorities should therefore consider activation policies as a priority and scale up the level of spending in that area (OECD, 2006).

The public and temporary work programmes that were largely implemented during the crisis reduced tensions in the labour market but do not favour labour reallocation and skill improvements (Figure 2.12). Despite some welcome changes, with a three-fold decline in public works since 2009, there is still a need to reorient further spending toward measures such as job search support and training. Job search is usually immediately effective and very cost-efficient. While recent studies prove the positive long-term effects of training, positive effects are visible in transition economies even in the short term (Box 2.3; Lehmann and Kluve, 2008). But despite recent efforts to strengthen training for employees, in the form of certification of vocational qualifications for job seekers and specific retraining programmes for the inactive, only 13% of the registered unemployed were engaged in training programmes over 2010-12, compared to 8% in 2009. The

Figure 2.10. **Skill shortage is a strong barrier to growth**



1. Simple average of two quality indicators "Country capacity to retain talent" and "Country capacity to attract talent". The responses are to the question "Does your country retain talented people? [1 = the best and brightest leave to pursue opportunities in other countries]"; 7 = the best and brightest stay and pursue opportunities in the country] and "Does your country attract talented people from abroad? [1 = not at all; 7 = attracts the best and brightest from around the world]".
2. Simple average of Brazil, India, Indonesia, China and South Africa.

Source: Flash EUROBAROMETER 196 "Observatory of European SMEs": Russian SME Survey 2009-2010, Bauman Innovation/Strategy Partners, OPORA RUSSIA and World Economic Forum, Executive Opinion Survey, *The Global Competitiveness Report 2013-14*.

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authorities should therefore consider extending support in this area. International experience suggests that successful programmes are *i*) market-oriented with workplace training; *ii*) targeted at specific needs; *iii*) intensive and small-scale, with high cost by head, rather than with a large coverage and low intensity; and *iv*) provide some formal certification (Martin and Grubb, 2001; Poppe et al., 2003; BIS WP, 2007).

The current focus of labour market policies on selected groups (the disabled, women on long maternity leave and seniors) is appropriate given their higher risk of inactivity. Notably, current efforts to increase senior participation in the labour market, by suppressing early-retirement schemes, reducing barriers to employment, and fighting age discrimination, go in the right direction. Efforts targeted at youth could also be strengthened given their relatively high unemployment rate. While this situation calls for

Box 2.2. **The weak demand for skills is a problem**

While skill shortages may be mainly explained by an inadequate supply of workers, demand for skills is also a problem:

- The lack of workers is reported as the main reason for skill shortages by more than two third of respondents in the World Bank Survey of Large and Medium Enterprises but the low level of wages ranks as the second reason (forty one per cent of respondents).
- On-the-job training is low with less than 15% of workers engaged in lifelong learning activities, compared to 70% in Sweden for instance (OECD, 2013). This suggests that Russian workers assume that firms have in fact relatively little interest in acquiring skills.
- Brain drain is further evidence of the low capacity to retain or attract talented people. Brain drain is significantly higher than in OECD countries and similar to other BRIICS (Brazil, India, Indonesia, China and South Africa). Moreover, the problem is increasing for Russia while it is declining for other BRIICS countries (EBRD 2012). Russia had the world's third largest number of emigrants in 2010, 80% being highly skilled, whereas most of immigrants were low skilled or unskilled (ILO, 2011).

Table 2.2. **Low wages and skills shortage explain understaffing of firms**
Main reasons reported by firms to explain understaffing (% of firms)

High hiring costs	2
Lack of workers with needed skills in the local labour market	72
High competition for workers in local market	23
Expected decline in demand for output	5
High labour turnover	30
Adverse working conditions	18
Low wages compared to other firms	41
Other reasons	8

Note: Figures do not add to 100% because respondents could select 3 key reasons.
Source: Russia LME Survey, 2005.

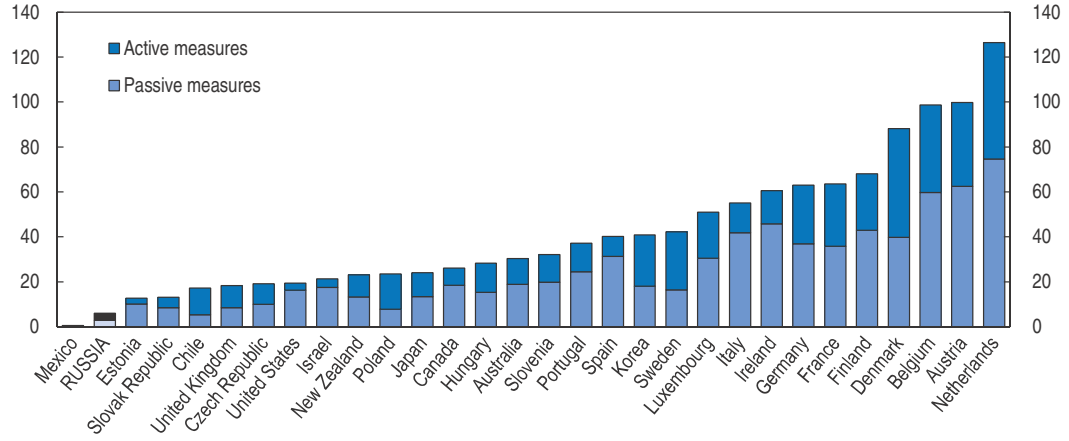
Source: Tan et al., 2007; OECD, 2013; ILO, 2011.

specific reforms in the education system, international experience, notably in Denmark, Germany and the United Kingdom, suggests that specific and well-designed activation policies for youth, including workplace programmes, are useful complements (Jensen et al., 2003; Dorsett, 2006; Ehlert et al., 2011).

Labour market policies should also be adapted to local needs given the strong heterogeneity of employment performance across regions. The regionalisation introduced in January 2012, which has delegated active labour market policies and their funding to regions, gives opportunities for such adaptation. However, the authorities should ensure that this transfer of responsibility will not result in an inequality for unemployed and workers because of differences in financial and specific capabilities among regions (Akhmedov et al., 2003). The authorities should especially make sure that the additional federal transfers provided to the 15 regions with the highest levels of unemployment are adequate. This could be achieved by monitoring closely the outcomes of services provided by public employment offices. The authorities should also continue targeting support at

Figure 2.11. **Expenditures on labour market policies**

Public expenditure on labour market policies per unemployed (% of GDP per capita), 2010[1]



1. 2009 for the United Kingdom and Russia.

Source: Russian authorities, OECD Public expenditure and participant stocks on *LMP Database*, *OECD Economic Outlook Database* and *OECD Annual National Accounts Database*.

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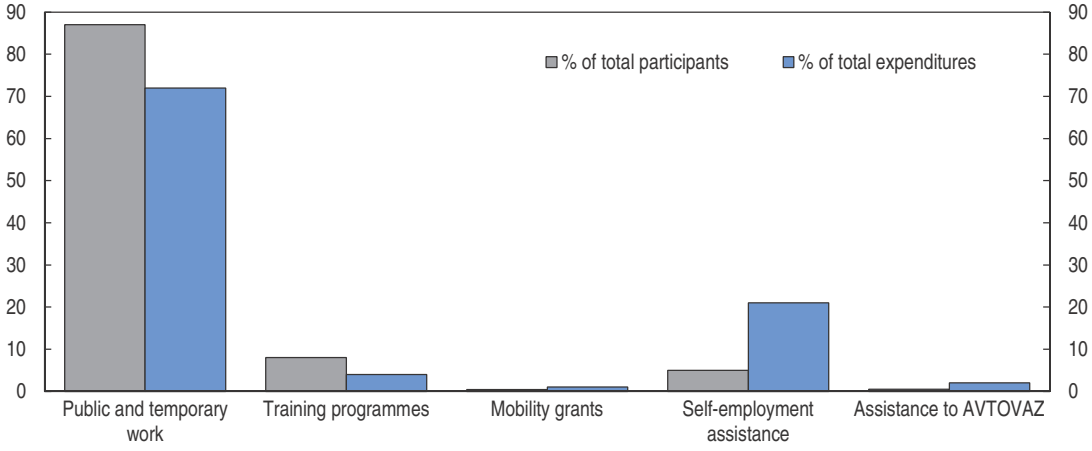
Figure 2.12. **Distribution of spending and participants among programmes during the crisis, 2009**



Note: AVTOVAZ is the largest automobile company in Russia.

Source: *OECD Reviews of Labour Market and Social Policies*, Russian Federation, Box 2.2.

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the unemployed and employees at risk of dismissals in mono-industrial cities, in particular through support to regional mobility and the requalification of workers.

To design efficient programmes and monitor performance, the authorities should develop a robust methodology for cost-benefit analysis and evaluation. Cost-efficiency, the substitution in employment between unemployed engaged in programmes and other workers and success in targeting those with a higher risk of inactivity need to be continuously assessed (O'Leary, 2001), while building on the rich experience of OECD and other transition countries.

Box 2.3. **Efficiency of training: Some lessons from the literature**

OECD countries

- Micro studies show that training may decrease labour market performance of individuals in the short-term (or have only a very low positive effect) because the unemployed person in training is devoting less time to job search (OECD, 2004, 2005; and Card et al., 2010). However, positive outcomes appear when looking at a time period longer than one year and at post-unemployment earnings (Meager, 2009).
- At the macro level, training reduces unemployment and increases employment (Boone and van Ours, 2004). There is also evidence that training can have positive effects even in the short term when considering overall employment of women and seniors. Youth employment is more sensitive to subsidy schemes (Bouis et al., 2012).

Russia

- Retraining programmes have been found to have insignificant effects on average in the Central and Ural Federal Districts. But positive effects are found for older workers, individuals with only general secondary education and the disabled (Benus et al., 2005).
- Training is found to have a significant positive effect on employment probabilities in the Rostov-on-Don region for blue collar participants but this effect disappears after one year. No significant impact was found for white collar participants (Nivorozhkin, 2005; Nivorozhkin and Nivorozhkin, 2006).

Other transition countries

- *Hungary:* While public works and wage subsidies have been found to have negative effects on employment probabilities, retraining increases employment rates, especially for those who had contributed directly to the costs of training (O'Leary, 2001).
- *Poland: i)* Training programmes have been found to have positive effects while public work programmes negatively impact re-employment probabilities (stigmatisation effects) (Kluve et al., 1999; Puhani, 1998); *ii)* the impact of training on employment is positive and estimated at 14% (Kluve, Lehmann and Schmidt, 2008).
- *Romania: i)* Retraining measures raise re-employment probabilities and wages (Benus et al., 2005); *ii)* training, retraining and other programmes such as job brokerage, self-employment assistance increase re-employment probabilities and average earning (Rodriguez-Planas and Benus, 2006).

Increasing support to the unemployed and the efficiency of the public employment offices

Unemployment benefits are very low in Russia, amounting to 5-30% of the average wage (Box 2.4). This is often complemented by social welfare payments from the federal budget. While a low level of income support for the unemployed contributes to high job search intensity and hence to a low unemployment rate, it also forces the unemployed who are financially constrained to accept the first job offer and hence might increase skills mismatches and add to high turnover (Amable and Gatti, 2004). Increasing the level of benefits would allow the unemployed to devote more resources to job search and thereby contribute to better skill matching. Furthermore, international experience suggests that a better safety net in the form of more adequate unemployment benefits supports the transition from the informal to formal economy (OECD, 2004b). The commission recently

Box 2.4. **Main characteristics of unemployment benefit schemes**

The current system of unemployment benefits

- Benefits are calculated as a proportion of the average wage earned in the preceding three months if the individual had at least a full time job during 26 weeks out of the last 12 months: 75% during the first three months, 60% the four months after and then 45%. However, the maximum level of benefits is only RUB 4 900 a month, i.e. less than 30% the average wage.
- Individuals who are not eligible for a standard benefit (those who worked less than 26 weeks, those who are unemployed for more than 1 year, those who are seeking a job for the first time) can receive the minimum benefit which is fixed at RUB 850 (8% the average wage).
- The duration does not exceed 12 cumulative months during a period of 18 months, and 6 months for those entering the labour market for the first time and the long-term unemployed.
- Benefits can be interrupted for three months if two "suitable" job offers are refused.
- All registered unemployed are entitled to the minimum level of unemployment benefits.

The state programme of the Russian Federation "Promoting employment" commits the authorities to improve social support to the unemployed by 2014, while strengthening activation policies. It is expected that the maximum unemployment benefit will be increased to 100% of the minimum subsistence level in 2014 while lowering the duration and the coverage of the benefit, notably by reducing the possibility to extend the unemployment benefits.

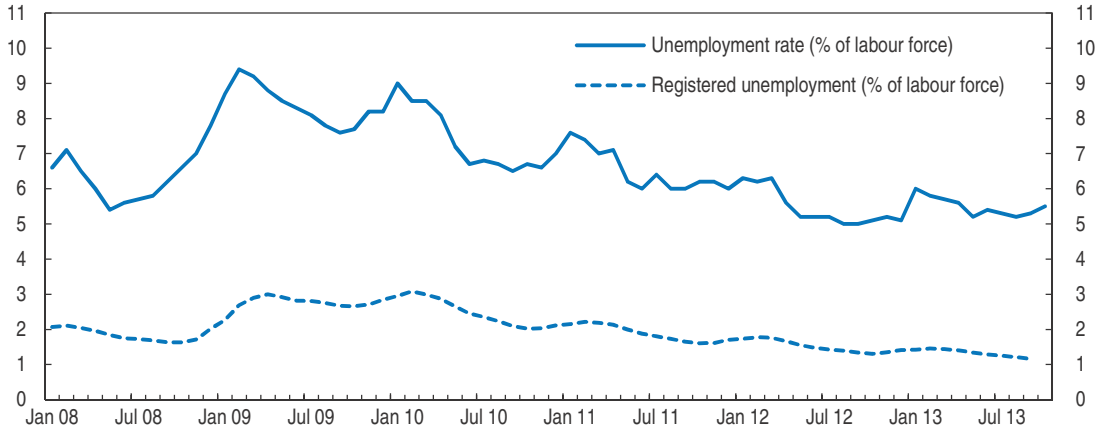
Source: Ministry of Labour.

set up to work on the potential ways of reforming unemployment benefits suggests bringing the maximum level of benefit to 100% of the minimum subsistence level. This might be insufficient and the authorities should consider being more generous.

The unemployment benefit coverage is very high in the current system, with every registered unemployed being eligible for the minimum level of benefits. However, the ratio of registered unemployment to the total number of unemployed is currently very low (Figure 2.13). This can change after the increase in the level of benefits. This change should be therefore accompanied by stronger activation of the recipients. The Hartz reforms in Germany could provide useful guidance, as the authorities successfully achieved the merging of social and unemployed support schemes, allowing the activation of a large number of those without work (OECD, 2012a).

The quality of services provided by public employment offices (PEOs) needs also to be addressed. PEOs tends to attract less attractive candidates and vacancies *i)* half of registered unemployed in employment services are individuals with low employability (long term unemployed, unemployed without work experience or after a long career break); and *ii)* most available jobs offer low wages. Intermediation between employers and workers should be improved. This could be achieved by reducing the workload of officers, which appears high when compared with OECD countries: each local staff has to support 230 registered jobseekers on average which is much more than in other countries such as Germany and France (Hespel et al., 2011; OECD, 2012a). Another direction for improvement

Figure 2.13. **Incentives to register in public employment offices are weak**



Source: Rosstat.

StatLink http://dx.doi.org/10.1787/888932979918

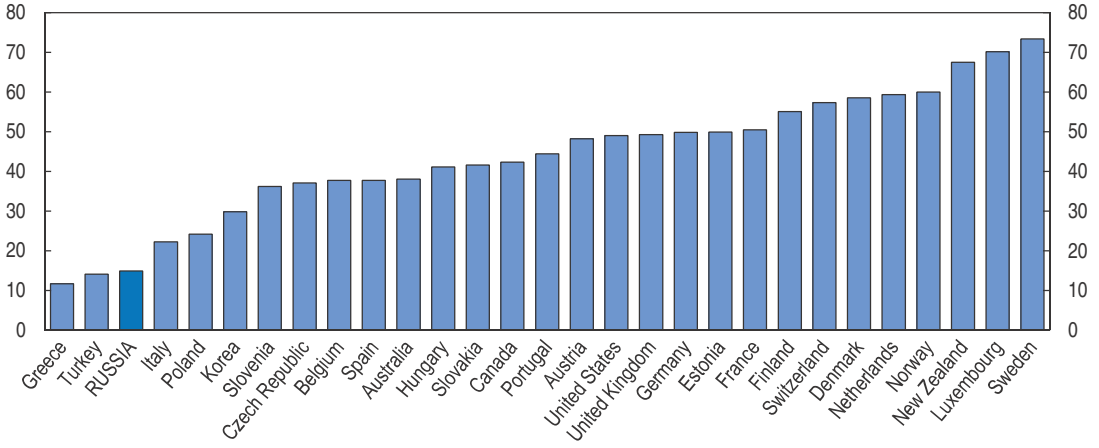
is to develop online databases, automatic registration and a job search engine, as Estonia has recently done (OECD, 2012b).

Developing lifelong learning to increase opportunities for all

Lifelong learning (LLL) could contribute more strongly to improving and matching skills and facilitate the adoption of new technologies (OECD, 2005b). While training is found to increase firm-level productivity by about 22% (Tan et al., 2007), the rate of participation in LLL in Russia is one of the lowest among European countries (Figure 2.14). Spending is also relatively low and employer expenditure has not changed much since 1995, amounting to 0.3% of the payroll in 2007 compared, for instance, to 1.5% in France.

Figure 2.14. **Few workers are engaged in lifelong learning**

Participation in lifelong learning,[1] 25-64 year-olds, % of total respondents, 2011[2]



1. Lifelong learning refers to formal and non-formal education.
2. 2006 for Finland and New Zealand. 2007 for Australia and Turkey. 2008 for Canada. 2009 for Switzerland. 2012 for Russia.

Source: OECD (2012), *Education at a Glance 2012*, Table C6.6; Eurostat, *Adult Education Survey Database* and Ministry of Education and Science of the Russian Federation.

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Several market failures prevent firms from investing in LLL: *i)* the lack of intensive technological innovation which reduces the need to train workers; *ii)* the deficit in the provision of educational programmes; *iii)* the high cost of training, especially for small enterprises; *iv)* the high turnover of workers, implying higher risk of poaching; and *v)* lack of information about the reward from training in terms of productivity and wages (Ok and Tergeist, 2003; Bassanini et al., 2005).

Mechanisms should therefore be developed to provide incentives for firms to engage in LLL. Measures already taken to recognise spending on education as a tax-deductible cost and to provide targeted grants go into the right direction (Box 2.5). There are also federal programmes that provide financial support for lifelong learning in specific specialities, such as engineers and executive seniors. For instance an internship programme for engineers involves 500 companies in 8 regions and aims at training 5 000 engineers per year over the period 2012-14. Federal support is organised through an equal co-financing between the firm and the Ministry of education and is directed at firms that win a competition process. While such a scheme is efficient at targeting the up-skilling of specific specialities, its small scale makes it inadequate for ensuring a broad upgrading of labour force skills. The authorities could consider developing broader instruments, such as vouchers and training funds. The development of vouchers could increase the quality of courses and the matching of supply with firm needs by enhancing competition among providers of educational services. Training funds are efficient when firms are closely involved in their management, when they are organised by sector activity, and when specific support is provided to SMEs and low skilled workers (Müller and Behringer, 2012). The development of in-house training programmes also calls for a wider spread of public and private partnerships and for a strengthening of the capacity of educational institutions to provide training experts.

Box 2.5. **Main legislative schemes supporting lifelong learning**

The Federal Law of January 2009 modified legislation to provide fiscal incentives for training:

- Costs of training of employees are tax-deductible under corporate income tax.
- Individual spending on education are tax-deductible under personal income tax.

Federal Laws, in 2007 and 2012, organised the support to small and medium sized enterprises in the field of training, retraining and skills development

- Small business may be partly reimbursed for expenditures related to the training of managers and employees. Criteria for support depend on specific local conditions.
- Subsidies are also targeted to support education programs for innovative companies.

Source: Ministry of Education.

Another way to stimulate engagement in LLL is to establish mechanisms for recognising non-formal education, which is currently underdeveloped in Russia. Efforts in that direction, notably the possibility for the unemployed to engage in training and certification of skills, should be continued. However this programme is very small: less than 2 000 job seekers underwent professional training in 2012 to obtain documents certifying their professional qualification and 4 300 are expected to be engaged in such

activities in 2013. Also, the programme is targeted at regions with a difficult labour market situation, such as North Caucasus, and should be adopted nationally. There is also a need to disseminate information on the rewards from LLL in terms of productivity and wages, as well as on the availability and cost of services from different providers.

While international studies suggest that LLL improves the labour market outcomes of participants, even for low qualified workers, the latter tend to engage less in LLL (Table 2.3). This may be related to the fact that a lack of general education prevents them from acquiring the skills specific to the firm, while investment in general skills is less profitable for firms given the higher risk for poaching (Ok and Tergeist, 2003). Public support targeted at low-skilled individuals could help them in acquiring those general skills and could hence stimulate subsequent private investment in training.

Table 2.3. **Workers engaged in training by qualification**

Survey realised in 2012
(as a percentage of the number of enterprises that have organised training staff)

Leaders at various levels	57
Highly qualified specialists	66
Employees, officers, technical performers	41
Skilled workers	71
General workers	16

Source: HSE (2012), *Monitoring of Educational Markets and Organizations* (ISSEK HSE).

The engagement of SMEs in lifelong learning is also weak, which may reflect financial and organisational constraints or a lack of customised training (OECD, 2012e). In that context, the development of training vouchers targeted at workers in SMEs would increase the attractiveness of lifelong learning and boost competition among providers to serve the specific needs of small firms.

Rebalancing flexibility and income security by strengthening collective bargaining

Encouraging longer term labour relationships between workers and employers could stimulate investment in human capital and skills matching (Venn, 2009; Belot et al., 2007; Wasmer, 2002). This could be achieved by strengthening the role of trade unions while still allowing firms to adjust their workforce when necessary. Collective bargaining plays an important role in ensuring the improvement of working conditions, stable employment and the access to training for all categories of workers (Keogh, 2009). Whereas trade unions were mere segments of state bureaucracy under the soviet system, their contributions to social dialogue and the management of human resources are important in a market economy. Freedom to express collective interests is also an important building block of the civil society (Hayter, 2011) and effective enforcement of workers' rights and binding agreements is part of the rule of law.

Unions in Russia appear strong at first glance, with a 50% membership and 42% collective wage bargaining coverage. However, in practice collective agreements mostly provide general recommendations but no binding constraints on firms (Lehmann et al., 2011b; Cazes and Nesporova, 2004; Venn, 2009). Since 2010 Russia has ratified eight ILO Conventions, reflecting the willingness of the authorities to move closer to international best practices in that area. However, the limited effective content of collective agreements largely reflects the weakness of trade unions and restrictions regarding the right to strike (OECD, 2011; Box 2.6). The Russian authorities should widen the scope for negotiating

collective bargaining at the enterprise level and ensure enforcement by following the recommendations made by experts in the context of the OECD review on labour market and the ILO Commissions on Freedom of Association and Collective Bargaining (OECD, 2011b; ILO, 2013), in particular by strengthening the bargaining power of workers at the enterprise level and their right to strike.

Box 2.6. **Bargaining power of workers at the firm level is weak**

Provisions ensuring the rights for collective bargaining, freedom of association and strike are provided by the law. However, in practice there are some limitations, related in particular to the enforcement and complexity of the legislation.

Collective bargaining

- At the workplace level, about half of employees are not covered by collective agreements because they work in small firms and outsourced activities. Union requests to negotiate collective agreements are often ignored in small firms.
- Small and new independent unions have difficulties to access to collective bargaining, which are generally negotiated by majority unions, limiting their possibilities for development.

Freedom of association

- Registration rules for non-commercial organisations including unions are complex and costly (if unions use the services of special companies for dealing with registration).
- There are cases of suspected anti-union persecution (physical attack of leaders; arbitrary detention; censured leaflet) and they are currently under examination by the ILO.
- While legislation prohibits anti-union acts, they are not always strongly enforced (applications of penalties are rare, the fine is often not sufficiently dissuasive, the number of labour inspectorates is low and going to Court is difficult).

Right to strike

- The possibility to conduct a strike is limited to collective labour disputes, implying, for instance, that strikes involving issues not included in workplace collective bargaining are not recognized.
- Most strikes are considered technically illegal because of the complexity of procedures. Participating workers can be punished by disciplinary sanctions and union property can be confiscated by Court decision.

Source: OECD (2011); ILO (2013a); ILO (2013b); ILO (2013c); Lyutov (2009); ITUC (2012).

Box 2.7. **Main recommendations to improve labour market performance**

- Strengthen active labour market policies by increasing spending on training programmes, especially targeted at youth (in-work programmes); reducing the caseload per employment office employee; developing intermediation IT tools; developing monitoring and ex-post evaluation studies; and ensuring the equality of support to the unemployed across regions.
- Provide stronger temporary income support to the unemployed by increasing the level of benefits while reinforcing job search requirements for all registered unemployed, including those entitled to minimum benefits.
- Strengthen life-long learning by developing financial incentives for firms and workers (through levies and training vouchers); providing specific incentives for training to the low educated and for small firms; promoting mechanisms for recognising non-formal education; and disseminate information on rewards from lifelong learning.
- Widen the scope for negotiating collective agreements at the enterprise level by enforcing collective agreements, strengthening bargaining power of workers and extending the right to strike.

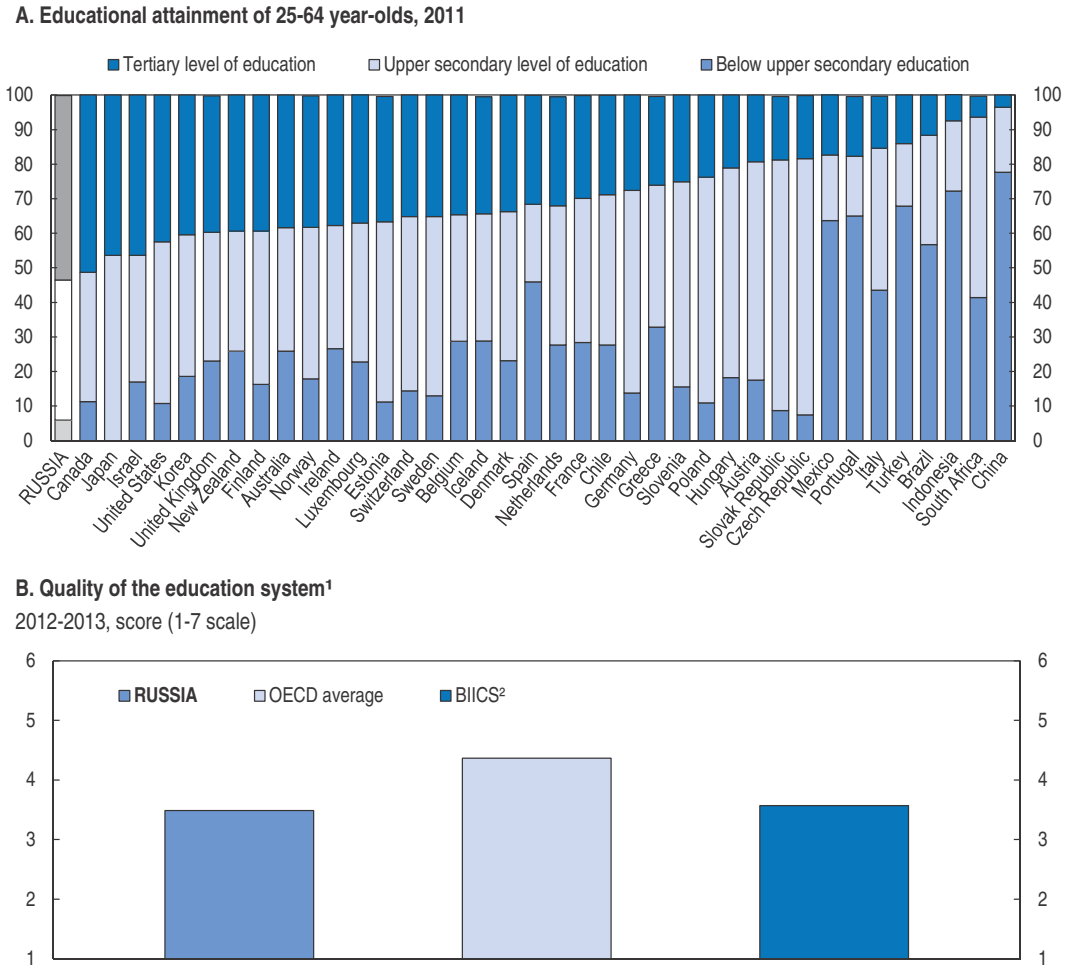
Strengthening the quality of the education system

Russia has achieved outstanding results in terms of enrolment, with 51% of the labour force educated at the tertiary level (OECD, 2013). But the quality of education is at least as important for economic growth as years of schooling (OECD, 2010; Amini and Commander, 2011). Russia is not performing as well in that respect. For example, employers surveyed by the World Economic Forum rank the quality of the Russian education system at 78th out of 140 countries. This is significantly lower than the OECD average and slightly inferior to other emerging economies (Figure 2.15). The ability to apply knowledge in a technology-rich environment seems also to be a relative weakness among adults according to the preliminary results of the inaugural 2013 Survey of Adult Skills (PIAAC). While Russians perform better than the OECD average in terms of literacy and similar to the OECD in terms of numeracy, they lag behind in terms of the ability to use ICT tools efficiently and effectively to solve the types of problem that arise in their everyday lives as workers, consumers and citizens (OECD, 2013b). Improving the quality of education is therefore crucial. In particular, the authorities need to ensure formal qualifications reflect a genuine acquisition of the relevant skills (OECD, 2012e). Intensive reforms of the system have already been decided in the context of the new law on education implemented in September 2013 (Annex 2.A1), and the new federal programmes for education (Box 2.8). However, some challenges remain to match skills supplied by the education system with the needs of a modern economy, to improve equity in the distribution of learning opportunities among students, to assure an appropriate level of spending and to enhance the efficiency of the educational network.

Ensuring appropriate educational standards in secondary education

Results of international tests on educational performance are mixed. Russia belongs to the group of leading countries for PIRLS test (Progress in International Reading Literacy Study), and TIMMS test (Trends in International Mathematics and Science Study) which reflects good academic learning outcomes. However, Russia's performance in PISA is

Figure 2.15. **Tertiary attainment is high but quality of education needs to be improved**



Note: For panel A: for Japan, no distinction available between upper secondary education and upper secondary education. Population aged 25 years and older for China, Indonesia and South Africa. 2010 for China and 2009 for Indonesia.

1. The responses are to the question "How well does the educational system in your country meet the needs of a competitive economy? [1 = not well at all; 7 = extremely well]".
2. Simple average of Brazil, India, Indonesia, China and South Africa.

Source: OECD (2013), *Education at a Glance 2013*, Table A1.1a. and World Economic Forum, Executive Opinion Survey, *The Global Competitiveness Report 2013-14.*

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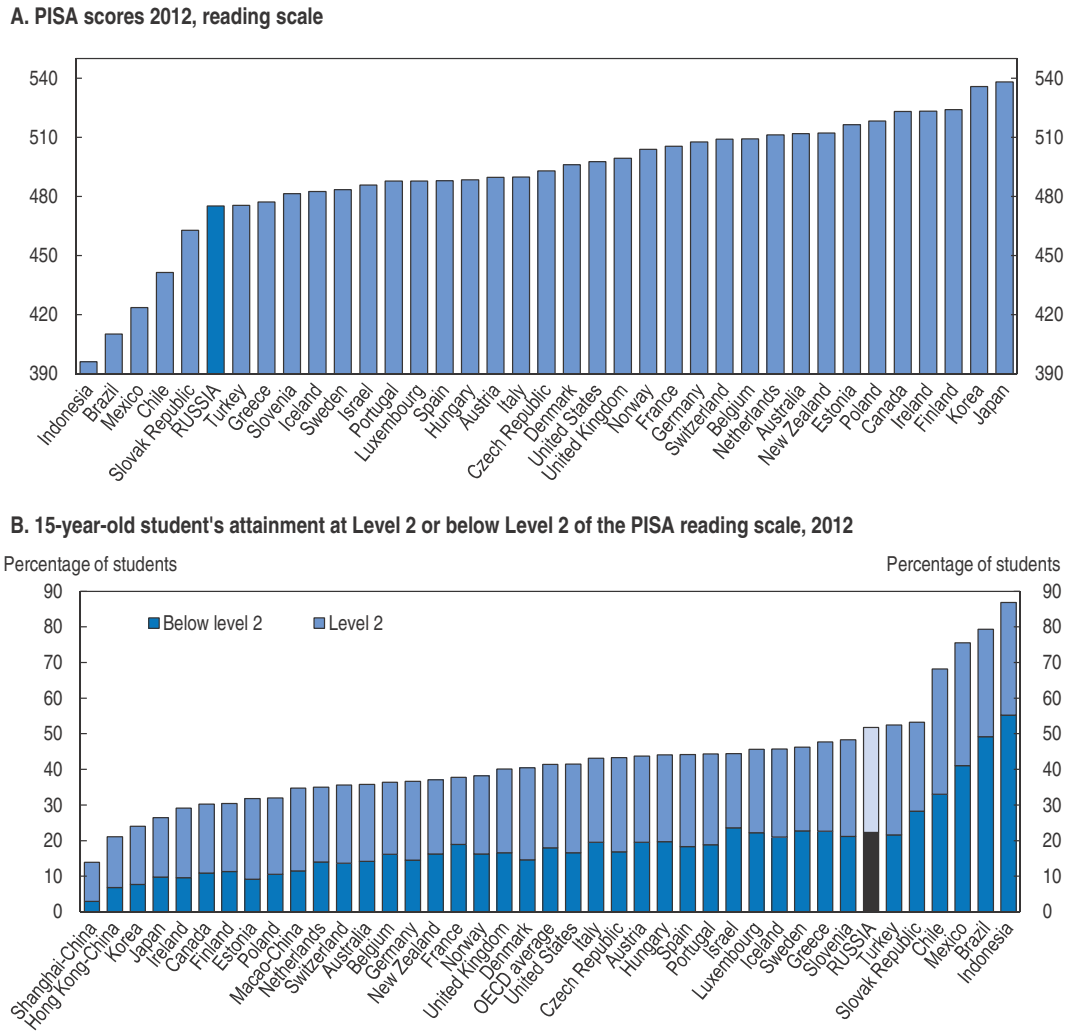
weaker than most OECD countries, pointing to quality issues in education when it comes to apply knowledge in unfamiliar situations. PISA score is similar to that of other emerging countries such as Brazil, India and China, but unlike in those countries it has not improved since mid-1990 (Amini and Commander, 2012). Russia also has a relatively high percentage of low performers, i.e. students who do not reach the baseline proficiency in reading so that they lack the essential skills needed to participate effectively and productively in society: 30% of boys and 15% of girls belong to that category, compared to 24% and 12% in OECD on average (Figure 2.16).

Low performance on the PISA suggests that the current curriculum and methods of teaching in Russia are not effective in generating the ability to apply knowledge to new situations, which is needed in a skill based economy (Khavenson and Tyumeneva, 2012).

Figure 2.16. **A significant number of students do not master basic skills**



Source: OECD (2013), *PISA 2012 Results: What Students Know and Can Do* (Vol. I), Table I.A, Table I.4.1a and Table I.4.2a.

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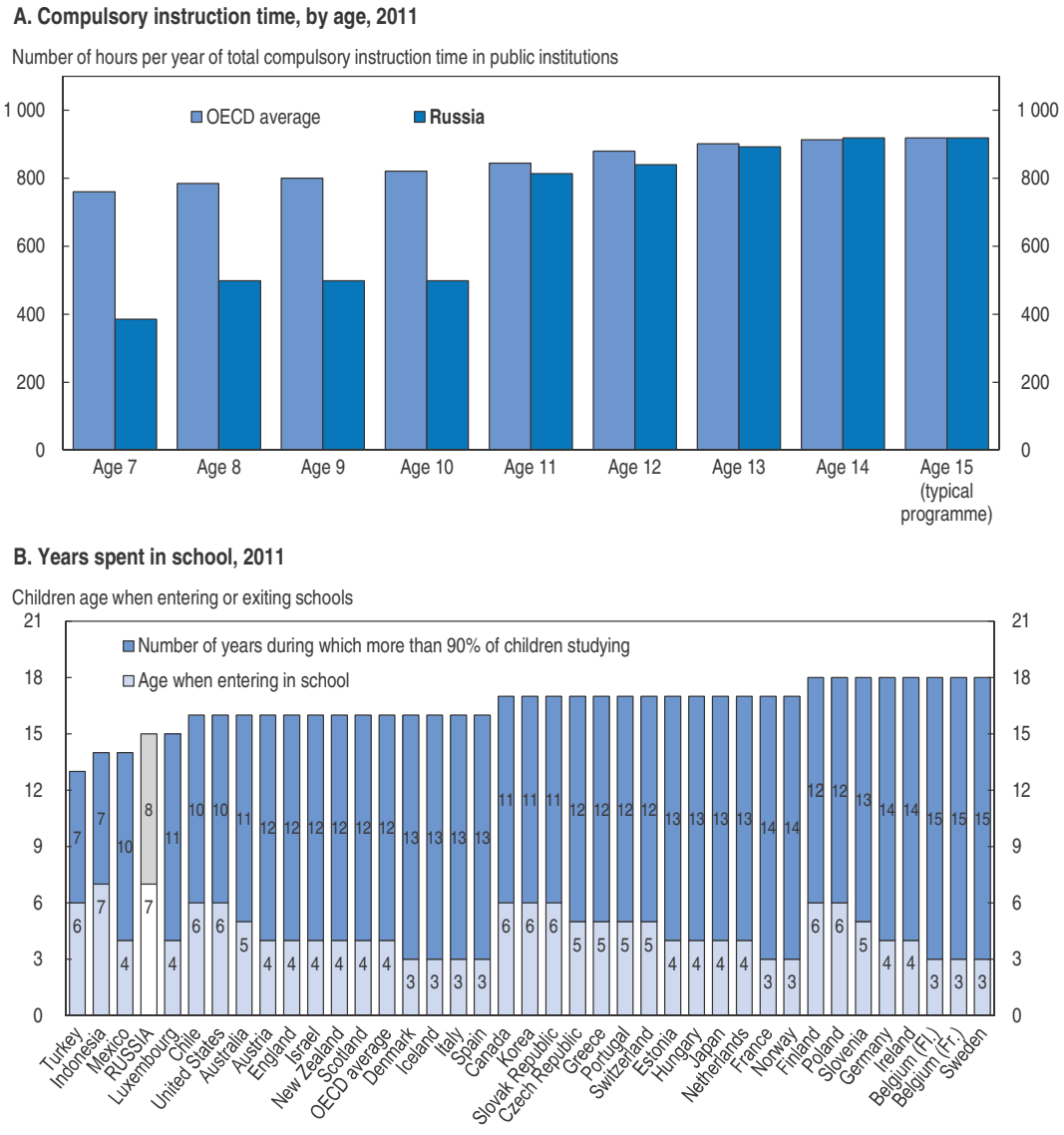
Improving this ability can be developed by strengthening methods such as problem-based learning methods, and individual and group project work (Sasova, 2011; OECD, 2012c). New federal state education standards for primary and secondary education (initiated in 2009 and approved in May 2012) move in this direction, but the authorities should monitor results closely, with possible course corrections.

The low quality level of education may also be related to the overall duration of studies, which appears relatively short. In many countries education begins at the age of 4 years while it is 7 years in Russia, implying that the number of years during which over 90% of the population are enrolled is 8 years against 12 on average in OECD countries. The average time spent on learning is also lower than OECD countries, especially at primary and lower secondary education (Figure 2.17). The new law on education that strengthens the access to pre-primary education should contribute to reducing the gap and better preparing children for further education (OECD, 2011b).

Figure 2.17. **Time spent on learning is low**



Source: OECD (2013), *Education at a Glance 2013*, Table D1.3.

StatLink http://dx.doi.org/10.1787/888932979994

The low level of teachers' wages in Russia makes it difficult to attract good candidates into teaching and may reduce teacher motivation. Their average wages amounted to 64% of GDP per capita against 123% in the OECD on average in 2009. Beyond the current government commitment to raise teachers' wages at least to the regional average in 2013, a more flexible mechanism of teacher remuneration tied to performance might increase motivation. The Ministry of Education recommends that teachers receive 70% of the salary as a fixed based wage and 30% depending on teaching quality, but this new wage setting system is so far applied only in few regions. There is no direct evidence that a performance-based pay system impacts on student performance when considering OECD countries on average. However, such a system delivers positive results in countries where teachers' salaries are low, which suggests that there is scope for implementing it on a larger scale in Russia. However, it is difficult to evaluate the impact of an individual teacher

Box 2.8. **Main federal programmes to modernise the Russian education system**

Priority National Project "Education"

This programme covers different sets of actions including training in universities for people who have completed three years in the army; improving school meals; providing state support to talented youth (concerns 5 350 youth in all regions of Russia); supporting the best teachers notably by the introduction of bonuses; supporting the best institutions that implemented innovative educational programmes; creation of federal universities.

"Our New School"

This programme aims at ensuring the transition of the system to the new educational standards; improving the quality of teaching; providing specific support to gifted students; improving school infrastructure and strengthening the autonomy of schools.

"Modernisation of the regional system of general education"

Several federal transfers are aimed at increasing teachers' wages to the regional average; replenishing resources of school libraries, purchasing vehicles for the transportation of students; purchasing equipment for school cafeterias; training and retraining managers and teachers; supporting distance learning students.

The effectiveness of federal transfers is monitored through a system of value performance indicators (*e.g.* ratio of average teacher wage in the region to average wages in the economy) and in case of non-compliance the subsidy is reduced.

Source: Ministry of Education.

on students' results and a system based on the evaluation of good practices could be more effective than a system based on evaluating student outcomes. Also, it is difficult to measure the impact of individual teachers within the school environment and an alternative would be to reward the performance of groups of teachers, for instance a grade-level team (OECD, 2012f).

Strengthening the matching of vocational education system with labour market needs

Vocational education has been organised until recently around three levels of study: initial, secondary and tertiary. The new law on education modifies this organisation by merging the initial level with other educational institutions. This should improve the vocational education system, as the initial level of education was found to provide insufficient skills due to early specialisation. However, labour market outcomes for graduates from secondary vocational education are also weak (Table 2.4). Also, the

Table 2.4. **Labour market outcomes of graduates**

	Employment rates		Unemployment rates	
	Total	Graduates of 2011	Total	Graduates of 2011
Higher professional education	86.2	82.1	6.1	9.1
Secondary vocational education	78.7	72.2	9.3	14.1
Initial vocational education	78.0	73.8	10.6	13.0

Source: Ministry of Education, Survey 2012.

proportion of graduates from vocational education who continue higher education is high. While providing opportunities to students for continuing studies is welcome, the small number of entrants into the labour market may also reflect the relatively low value of vocational education diploma (Kochetov, 2012). At the same time, national surveys point to the fact that employers prefer to hire university graduates even for jobs that do not require higher education, such as sales persons and receptionists (see in particular the Research Survey "Social Navigation" from the Higher School of Economics).

The current vocational education system, partly inherited from the Soviet period, lacks an emphasis on core transferable skills and mainly trains people for narrowly specialised jobs. As a result, many firms have to retrain newly employed youths (Survey from Centre for Human Resources, RANEPA). International experience suggests that adopting professional standards could contribute to improving the quality of vocational education by ensuring overall consistency in the mix and level of competences acquired (OECD, 2010b). In that context, revising the system of specialisation in vocational education on the basis of updated professional standards could contribute to generating more relevant skills. While this process is ongoing, an *OECD Review* of vocational education could help reform that area.

A stronger involvement of the social partners is also important (OECD, 2010b). Vocational institutions, notably at the secondary level, already have the possibility to raise funds from the private sector, to manage those funds independently, and to determine one third of the curricula in co-ordination with business stakeholders. However, in practice co-operation with firms is weak. Eighty per cent of surveyed firms did not co-operate with a vocational school in 2012 and sixty per cent did not plan to increase this co-operation (Table 2.5). The authorities should encourage school governing boards and strengthen the

Table 2.5. **Co-operation between firms and secondary vocational education**

Panel A. Existing relationships between companies and vocational schools	
Last year did your company co-operate with vocational schools to attract graduates? (% of the total number of surveyed companies)	
Concluded direct contracts for training employees	6
Participated in "open doors day" and career fairs in secondary specialised colleges	7
Organised competition for students and coached best students	1
Organised training and practices at the company	15
Organised regular training sessions and courses in technical colleges for employees	1
Participated in the development of professional standards	0
Participated in the financing, industrial workshops	2
Financed additional scholarship	1
Other	1
Did not co-operate with the technical colleges	79
Panel B. Willingness to increase co-operation with vocational training institutions	
Would you like to expand/begin co-operation with vocational training institutions at different levels, in order to attract their graduates to work? (% of the total number of surveyed companies)	
Want to start/expand co-operation with universities	23
Want to start/expand co-operation with secondary vocational education institutions	24
Want to start/expand co-operation with primary vocational education institutions	23
Do not want to start/expand co-operation with any vocational education institutions	59

Source: HSE (2012), *Monitoring the economics of education*.

role of employers in setting priorities in accordance with local labour market needs. This could be complemented by establishing councils at the federal and regional levels which would survey employers' needs, monitor performance of graduates, benchmark schools and identify best practices.

A dual system of vocational education, with at least 25% of time spent in firms, is currently being considered by the authorities. It would strengthen the co-operation between vocational schools and firms, and contribute to a better school-to-work transition. A federal programme already exists which aims at encouraging firms to offer apprenticeship places by providing compensation to employers. It has been implemented in 15 problem regions for a small number of students in 2012. Russia could be inspired in that area by German, Danish and Swiss experiences that manage to find a balance between the incentives given to employers, the control of the quality of training and the student's contribution to the output of the firm (Westergaard-Nielsen and Rasmussen, 1999; Dionisius et al., 2009).

Vocational education institutions are in urgent need of investment, as their under-financing has resulted in the general obsolescence of the system, and hence its low attractiveness for students (Nokolaev and Chugunov, 2012). A recently implemented regional modernisation programme, is trying to address those challenges through grants from the federal budget and partnerships with the private sector, which contributes two thirds of the budget. While this goes in the right direction, the programme supports only less than 5% of schools.

Improving the governance of higher education

To improve the matching of higher education with local labour market needs, the new law on education allows universities to establish academic departments providing practical learning in close co-operation with employers. Governance in higher education institutions plays also a key role in shaping the right mix of skills. It is organised on the principle of "unity of command and self-governance" meaning that each educational institution is theoretically independent in the implementation of educational, scientific, administrative, financial and economic activity. Since 1999, each university has had the possibility of establishing governing boards, and since 2010 of determining half of the courses in co-operation with the business sector. However, university rectors are currently appointed at the federal level and the executive power of the governing board in the academic and budget areas remains limited. The decisional power of the board should be reinforced, notably by giving it some at least advisory role for the election of the head of the institution. Co-operation with employers should further expanded.

The allocation of free study places among fields of study and among universities is currently determined at the central level (Box 2.9). The government prioritises certain specialisations (such as science, engineering and high-tech) by increasing the number of free study places in those fields. As students apply for free places by field, this practice has maintained demand for traditional fields of study. However, graduates in those fields have in practice lower salary and career opportunities in comparison with service industries. In particular careers, such as an economist, a manager and a lawyer present a higher return on education (Filatova et al., 2012, Kochetov, 2012, Carnoy et al., 2012). While the role of region has been strengthened since 2013, universities should also be given more power in allocating free student places to avoid creating career traps. Universities have indeed a

Box 2.9. **Criteria of allocation of free study places in higher education institutions**

- The quota of free student places in higher education is determined by the Ministry of Education. By the law, the number of free-study places has to be at least equal to seventeen per thousand people.
- Allocation of free places by university and by field within each university is based on the proposal of a commission involving federal executive bodies, regional executive authorities, employers and non-governmental organisations. In practice free places are based largely on their historical number.
- Students are allocated to free places (and universities) according to their score on entrance exams. Until 2001, each university managed its own exam and this system generated corruption. From 2001, the government initiated a national examination in each subject, the Universal State Examination (USE), which was fully adopted as entry criteria by universities in 2009. Universities can complement this national test by a specific test.

Source: Froumin and Kuzminov, 2012; Ministry of Education.

better ability to adjust to students' choices, which have been proven to be sensitive to labour market signals such as expected wages (Rosen and Ryoo, 2004).

The system of "target admission" contributes to improving the matching in the labour market by giving students who have a job offer the right for a free study place in a related field of education. Target admissions amount to 15% of the total number of free student places and can even reach 50% in specific educational fields such as transport and health. The new law on education reformed this system by introducing a tripartite contract (between the university, the employer and the student) that establishes some legal commitment for the student, notably the obligation to reimburse the cost of studies in the case of dropout. The authorities could consider expanding this system if it proves efficient in favouring the access to qualified jobs.

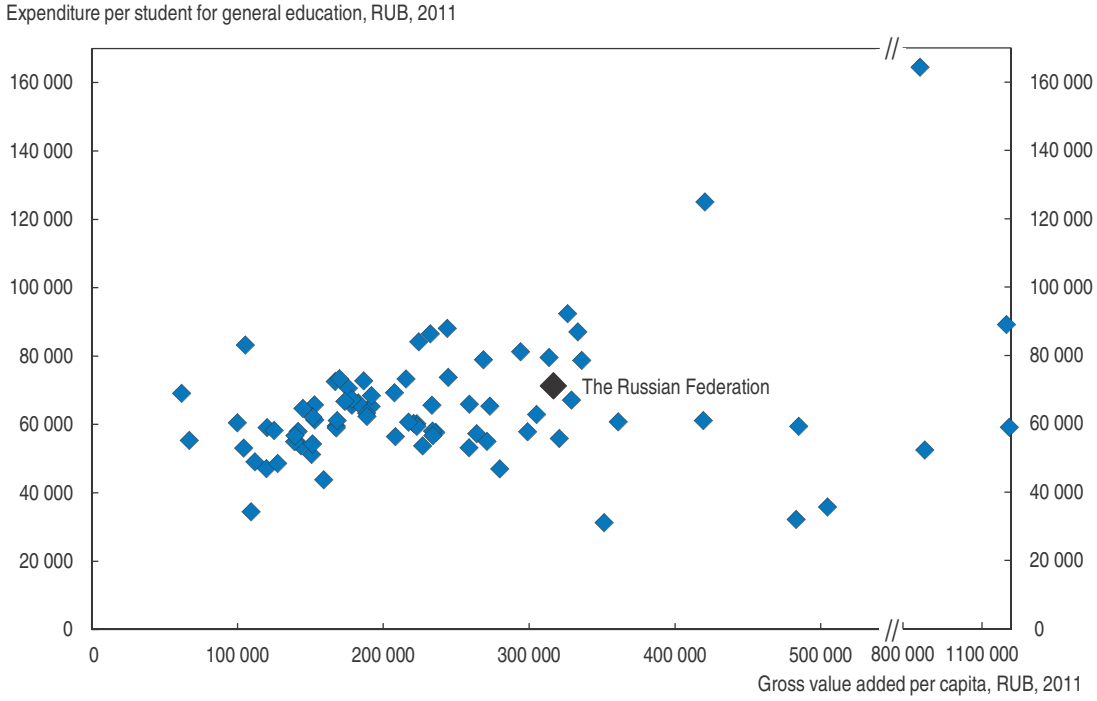
The Russian decision to sign the *Bologna Declaration* in 2003 has resulted in a progressive reshaping of higher education diplomas towards a two-tier system of bachelor and masters programmes. Eighty per cent of students are currently enrolled in bachelors programmes (Filatova et al., 2012). This new educational model should increase the mobility of students and teachers, strengthen the co-operation with higher education institutions in OECD countries, and thereby contribute to the diffusion of best practice in terms of governance. It should also improve skills matching, as the Bologna process is intended to orient education toward the acquisition of the key skills required in the labour market. It is too early to assess its efficiency, as the large cohort graduating from the bachelor programmes will begin to enter the labour market only in 2013 and 2014.

Reducing inequality of opportunity at regional, school and individual levels

While the Soviet education system was highly centralised at the start of the transition, responsibility has been increasingly transferred to regions and municipalities. This positive development has, however, been accompanied by a greater heterogeneity in spending across regions (Amini and Commander, 2011). This partly reflects differences in the costs of education (especially when considering those in remote schools), but it is also

linked to regional financing capacities. For instance, expenditures per student in general education can vary fivefold across regions. Overall, public expenditure on general education as a share of gross regional product per capita ranges from 0.3% to 13.6% (Figure 2.18). The authorities should therefore ensure that adequate resources reach schools and students in all regions and try to prevent education quality differences, in particular by strengthening federal transfers (OECD, 2012d).

Figure 2.18. **Regional disparities in spending**



Source: Rosstat and Ministry of Education.

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The share of university students paying fees has increased in the last two decades and reached 61.5% in 2011. While this has helped to fund the expansion of enrolment, underdeveloped financial aid mechanisms imply a risk of rising inequalities. Low income students go mainly to second or third tier universities, or evening/correspondence courses (Klyachko, 2013). This is related to the fact that: *i)* tuition fees are higher in the most prestigious institutions; and *ii)* the allocation of free study places is based only on academic performance which favours candidates with stronger socio-economic background. The authorities could therefore consider reducing the proportion of students benefiting from free places based only on academic performance. Moreover, half of full time students work (including 16% with a permanent job), which is likely to have adverse effects on their academic performance (Table 2.6).

The authorities should strengthen support to disadvantaged students, notably by expanding student loans, which are currently almost non-existent despite formal implementation in 2009. International experience suggests that student loans with

Table 2.6. **Share of working students**
Question: "Did you work on a fee basis for the last 12 months?"
(Percentage of respondents), 2011

	Students full-time students	Students correspondence courses
Yes, I had a permanent job	16.3	74.2
Yes, I had a temporary contract	17.8	10.2
Yes, I had one-off earnings on irregular basis	18.3	4.9
No, I did not work	47.6	10.7

Source: HSE (2012), *Monitoring the economics of education*, Ministry of Education.

repayment contingent on income are effective both in favouring equality of access to higher education and raising funds for university (OECD, 2012c).

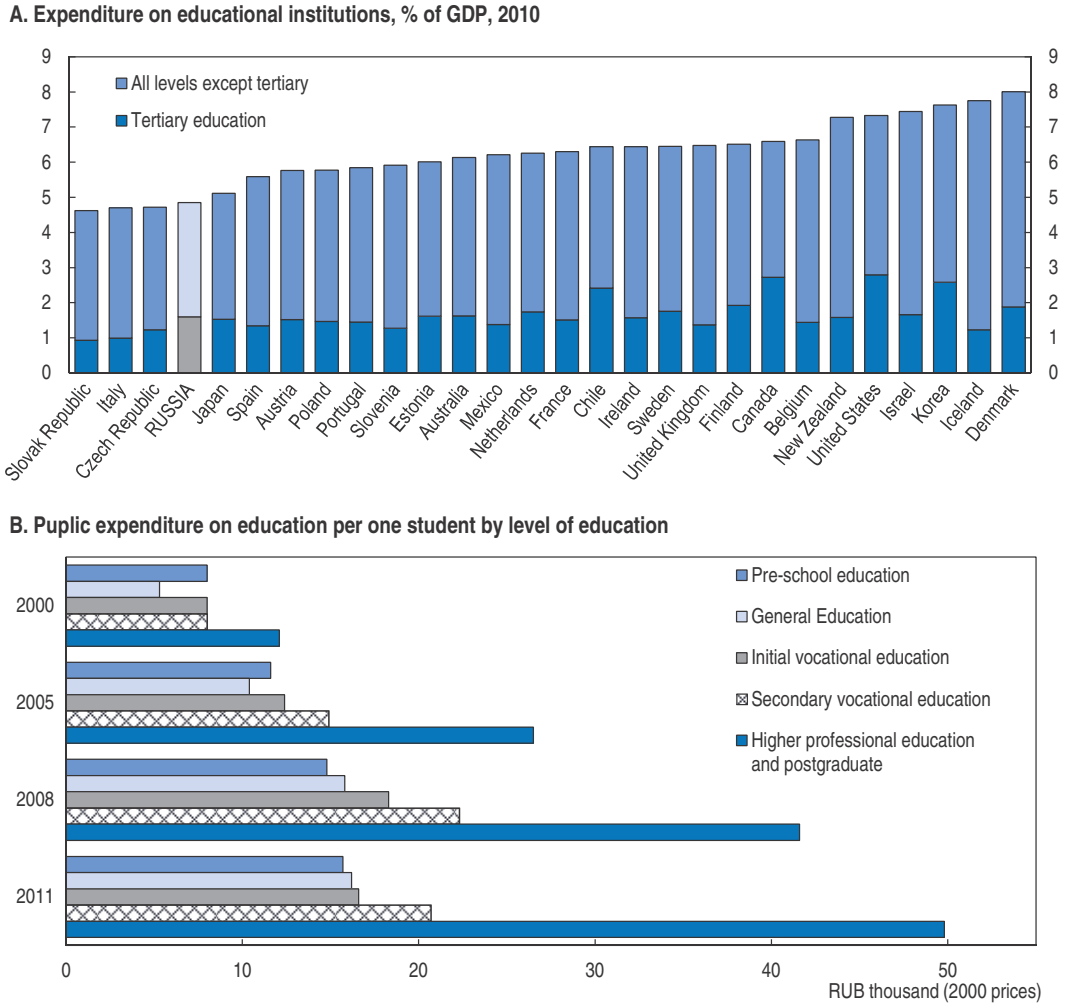
Family background has a significant impact on educational performance in Russia (Amini and Commander, 2012), even though it is weaker than in the OECD and the variation in student performance and school performance is also lower (OECD, 2013). However, low socio-economic background students perform less well than elsewhere: only one among five in Russia, as opposed to one in three in a typical average OECD country, performs in the top quarter of all students (OECD, 2013). In that context, specific support should be targeted at low income households given the rise in educational expenditures for this group: over the 2004-10 period, expenditures for education increased 2.5 fold for the poorest income decile against 2 fold for the richest income decile group (Abankina et al., 2012a).

Education is free in Russia until the end of secondary education as far as mandatory core subjects are concerned. However, equality of opportunities in general primary and secondary institutions may be undermined by the possibility for parents to pay for optional courses for their children (in specific subjects such foreign languages or theatre, but also in additional courses in core subjects). This system encourages the involvement of parents in school management (mainly through the creation of school councils) contributing to better education outcomes. But such system is also associated with higher risk of disparities in the access to quality education. There is some evidence of dualism between schools financed by richer parents that provide additional training courses in specialized and core subjects, and schools with poorer parents where only the compulsory subjects are taught (Andrushchak et al., 2010). Using additional resources to pay teachers reinforces this dualism, as better resourced schools have the possibility to attract more qualified teachers. As a result, initial socio-economic inequalities are likely to be transformed into inequalities of opportunity in working life. Insofar as the authorities should provide similar opportunities of learning for all students in public schools, they should reconsider this system of paid courses.

Scaling up spending while continuing strengthening efficiency

Spending on education should be viewed as a priority in Russia. Expenditure on educational institutions amounts to 5.5% of GDP in 2009, which is below the OECD average of 6.3%. The gap comes from lower spending on primary, secondary and non-tertiary post-secondary education: 2.4% of GDP against 4% (Figure 2.19). Also, the falling number of students and the reduced willingness of parents to pay for education make further rapid expansion of funding less likely than in the past (Filatova et al., 2012). The authorities should therefore increase the level of public spending toward levels observed in OECD

Figure 2.19. **Spending in education remains relatively low in international comparison**



Source: OECD (2013), *Education at a Glance 2013*, Table B2.3 and Ministry of Education.

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countries, while continuing to improve the efficiency of the educational system. Notably, the authorities should continue the restructuring of the educational network, with weak institutions being merged or reformed, especially given the observed demographic decline. This restructuring is needed at all levels, as the declining number of secondary education graduates has begun to lead to a reduction in the number of university students since 2011 (Abankina et al., 2012b).

Box 2.10. **Main Recommendations to improve the quality of the education system**

- Increase the overall education funding, while continuing to restructure the network of education institutions and monitoring closely the effects of the new education law on the relative performance of Russian students. Link teachers' remuneration with their performance.
- Continue updating professional standards for vocational education. Strengthen the co-operation with business and trade unions through the systematic implementation of school governing boards. Encourage firms providing internships while controlling the quality of training,
- Give more decision-making power to university governing boards. Allow universities to determine the allocation of free study places among field of studies. Implement income contingent loans for fee-paying university students.
- Ensure that adequate resources reach schools and students in all regions and prevent education quality differences, in particular by strengthening federal transfers. Consider suppressing school fees for optional courses in non-tertiary education.

Russia has an unused innovation potential

Russia has an important innovation potential, with high tertiary education rates, a large science base inherited from the Soviet Union, strong positions in some science and technology fields and a government that recognizes the importance of innovation. But despite these favourable preconditions, the economy lags behind OECD countries on most measures of innovativeness:

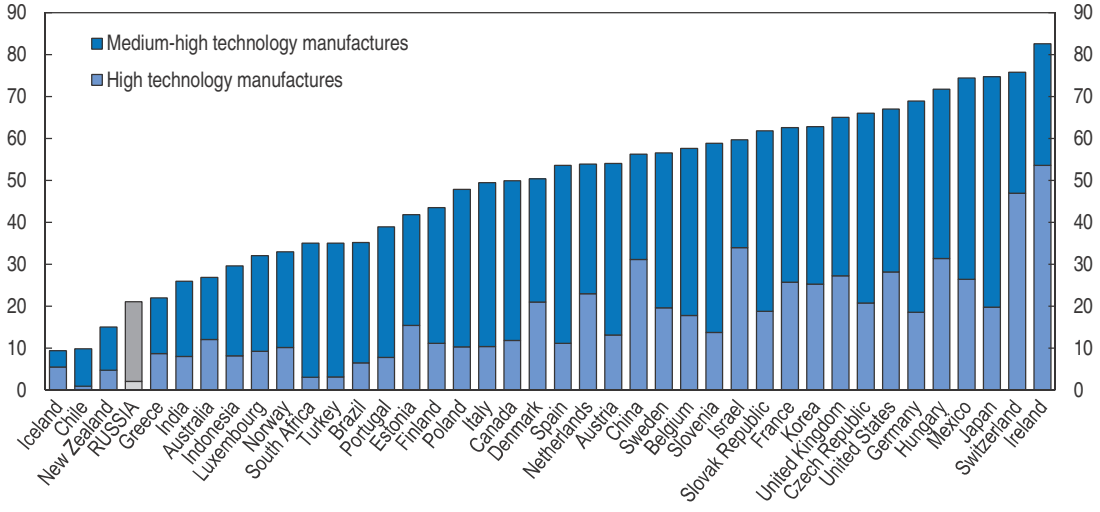
- Russia has less than one fifth of high and medium high technology products in manufacturing exports, which is much lower than the level in most OECD countries (Figure 2.20). This can be partially explained by the predominance of raw materials in Russian exports, though innovations are also essential to sustain oil and gas output (Ahrend and Tompson, 2006) and this industry is becoming increasingly high-tech. Hence, the development of hydrocarbon resources would also benefit from increasing of innovativeness.
- Manufacturing firms are less likely to engage in innovation activities than their OECD counterparts, with innovative activity of any kind reported by only 10% of firms, compared with 60% in the best performing OECD countries (Figure 2.21).
- Gross expenditure on R&D, at just above 1% of GDP, is only one-half the median OECD country level (Figure 2.22). Moreover, the business contribution to R&D expenditures is particularly small, amounting to only 0.3% of GDP, compared to more than 2% in leading OECD economies.

Framework conditions are essential

Among the main impediments to innovation, are the framework conditions discussed in detail in Chapter 1, including barriers to competition and entrepreneurship, high corruption, and poor law enforcement (including intellectual property law). Evidence about the importance of good framework conditions for R&D activity is abundant and most innovation policy initiatives are likely to prove inefficient in their absence (Jaumotte and

Figure 2.20. **High and medium-high technologies in manufacturing exports**

Shares in total manufacturing exports, %, 2011



Note: 2010 for Spain.

Source: OECD STAN Bilateral Trade Database by Industry and End-use category.

StatLink http://dx.doi.org/10.1787/888932980051

Figure 2.21. **Innovation in the manufacturing sector by category**

2008-10, as a percentage of all manufacturing firms

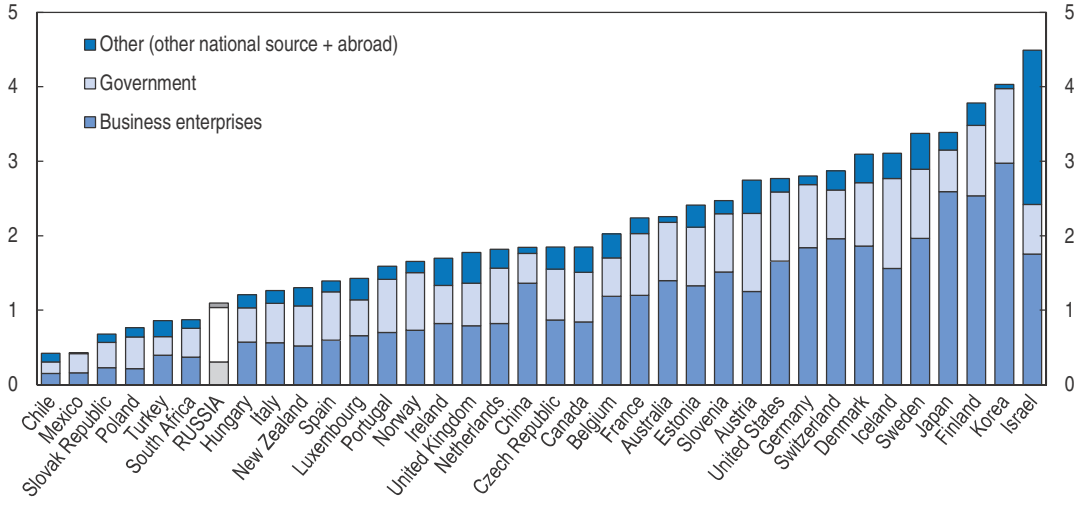
Source: OECD (2013), *OECD Science, Technology and Industry Scoreboard 2013*, Figure 5.1.2. See Statlink note.

StatLink http://dx.doi.org/10.1787/888932979633

Pain, 2005; OECD, 2006). In this regard, competition is a key driver of innovation and productivity growth (Baumol, 2002). Indeed, available data suggest that Russian firms operating in a more competitive environment spend substantially more on R&D, while monopolistic firms innovate the least (Goldberg, 2006). Improving the business climate, with a special stress on stimulating competition, is therefore a crucial step towards increasing innovation in Russia. The supply of appropriate skills is also essential for innovation, with related challenges in this area discussed in earlier sections of this Chapter. The impact of specific innovation policies crucially depends not only on the

Figure 2.22. **R&D expenditure (GERD) by source of financing**

Percentage of GDP, 2011 or latest year available[1]



1. 2010 for Canada, Chile, France, Germany, Italy, Portugal, Spain; 2009 for Belgium, Iceland, Israel, Netherlands, South Africa; 2008 for Australia, Switzerland.

Source: OECD, *Main Science and Technology Indicators Database*.

StatLink http://dx.doi.org/10.1787/888932980070

implementation capacities of designated bodies, but also on the overall quality of public governance.

The innovation policy is becoming more balanced

Two-thirds of overall R&D expenditure is financed by government in Russia compared with one third in most OECD countries. This reflects low spending by business on innovation, since the level of government spending as a share of GDP is close to the OECD average. Moreover, Russia's innovation policy remains unusually focused on direct support of publicly owned organisations, which perform almost 75% of all R&D (HSE, 2010), including a large share of government funds going to publicly owned branch research institutes and design bureaus (OECD, 2011d; Gershman, 2013). In this setting, the role of private sector institutions is weak, while best experience from OECD countries suggests that there is complementarity between business and public research (WB, 2010; OECD, 2011d). However, business is placed more at the centre of innovative policies in the "Innovative Russia 2020" strategy adopted in 2011 (Box 2.11), including through promoting innovation at state-owned enterprises, creating innovation clusters and technology platforms, and involving business more systematically in innovation policy planning.

The effectiveness of this new toolkit is hampered by a lack of continuity of innovation support programmes as new initiatives are often launched before the lessons are learnt from previous programmes. While the system of key performance indicators is being increasingly introduced, excessive attention is still paid to monitoring inputs rather than outputs, and short- rather than long-term outcomes (Kuzyk and Simachev, 2012). These shortcomings are aggravated by problems in the interaction between federal, regional and local level policies. Greater policy co-ordination, a more systematic evaluation process based on standardised evaluation methodologies and an incremental change approach would thus serve to strengthen the quality of policy making. The increasing role of

Box 2.11. **Innovative Russia 2020**

The strategy "Innovative Russia 2020" was accepted in 2011 as a strategy to improve innovativeness of Russia economy.

- The strategy sets ambitious objectives to increase R&D expenditures to 2.5-3% of GDP (from the current 1.3%), with over 50% covered by private sector (from the current 33%), to increase share of innovative products in total Russian volume of production to reach at least 25-35% (from current 12.4%), and several other more specific targets.
- As part of the strategy implementation, total domestic expenditures for education should increase from 4.8% to 7% of GDP, with public expenditures going up from 4 to 6% of GDP.
- Government funding of fundamental research will be raised from EUR 0.5 bn. in 2010 to EUR 3.9 bn. in 2020, funding to applied research and IPR commercialisation will grow from EUR 0.7 bn. to EUR 3.6 bn., and funding to innovation infrastructure development will be increased from EUR 0.5 bn. to EUR 1.5 bn.

The first report about the results of this strategy was published in April 2013 (RVC, 2013). Expert surveys point to improving environment and infrastructure for innovations, but low demand for innovation from the real sector remains the most important barrier for the commercialisation of R&D, followed by administrative burdens and the quality of R&D results.

foresight studies in designing innovation policies at federal regional and corporate levels is an important recent development (Meissner et al., 2013; Sokolov and Chulok, 2012).

Existing support for business innovation is geared towards large businesses, and in particular SOEs, with more than 80% of business investment in innovation in Russia currently carried out by large SOEs. However, the current strategy to stimulate innovation in those firms is heavily biased towards top-down and command and control measures. The flagship "Innovation Enforcement Initiative" was started in 2011. It involves 60 large SOEs which account for over 25% of Russian GDP and one third of industrial production. Participating enterprises are obliged to adopt and implement programmes of innovative development based on technological audits and increase innovation spending oriented at improving labour productivity, energy efficiency and high-technology. Stronger co-operation with higher education institutions, scientific institutes and SMEs is also targeted.

A survey conducted in 2012 among two thirds of participating SOEs showed that they have considerably increased innovation spending, although half of the funds were spent on acquiring new machinery and equipment (Gershman, 2013). According to current estimates, the increase will amount to 0.4% of GDP between 2010 and 2013. It is too early to assess the efficiency of such spending, but there might be instances of imitating innovation by shifting existing expenditures from one innovation activity heading to another, or meeting innovation commitments without a real impact on business activity. A strict monitoring of programme results based on well-defined key performance indicators is therefore essential. But while this policy might eventually prove effective, it is a second-best policy, motivated by the deficient competition environment in which SOEs operate. The policy should thus be viewed as a complement and not a substitute to setting market-based incentives through exposing enterprises to competition and properly regulating

natural monopolies, as practised in most OECD countries, and as discussed in Chapter 1.

SMEs make an important contribution to the innovation system in leading OECD economies, contributing more than quarter of R&D expenditure (OECD, 2011c), but in Russia this share is less than 2%, and in 2010 only 1.6% of SMEs spent money on innovation (OECD, 2013c). The Global Entrepreneurship Monitor (GEM) survey showed that in 2011 70% of early stage and 80% of established entrepreneurs in Russia recognised that the novelty content of their activity was low (Xavier et al., 2013). The proportion of employment in high technology activities also remains small. According to the surveys, the main barrier to innovation in SMEs is the lack of financial resources within the company (more than 60% of respondents chose this option) and the lack of availability of external financing (50% of respondents).

The promotion of SME innovation is a government priority and several instruments are being implemented (Box 2.12). However, the funds allocated to innovation in SME sectors are still relatively small as compared to the size of other government R&D spending. For the period 2011-13, the government is providing RUB 60 billion or only 0.1% of GDP for all SME support programmes, of which around 10% is directed at supporting innovative SMEs and 10% is allocated to creating and developing support infrastructure, such as business incubator zones, industrial estates and technological parks. Of particular importance is the "Innovation Lift" programme that brings together several institutions to set up a system of financial and non-financial support throughout the innovation cycle: from the concept to production phase. In a positive step, funds allocated to supporting innovation at SMEs will increase further in 2014-16, both through direct support and investment in infrastructure.

Box 2.12. **Innovation support for SMEs**

- 31 Innovation technology centres in 19 regions.
- Over 100 technology transfer centres and 34 technology platforms approved by the state.
- Cluster centres (25), design and prototype centres (6), centres of collective usage (30).
- At least 80 techno parks in 35 regions.
- Fund for Promotion of Development of Small Businesses in the Scientific and Technological Sphere.
- Foundation for Assistance to Small Innovative Enterprises (FASIE).
- Skolkovo Foundation.
- Plans for 55 Centres of Creativity in higher education institutions, equipped with 3-D scanners/printers, laser cutters, to train people on the their use and promote innovation activity.
- Mechanisms for promoting innovation co-operation between SOEs and SMEs.

Source: OECD (2013), Ministry of Education and Science, Ministry of Economic Development.

Another problem is that support is excessively concentrated on grants. While this instrument may be efficient at stimulating start-ups and resolving some specific market failures holding back innovation, it may be less effective in allocating higher amounts of public funding given the difficulties in picking future winners. Grants should therefore be more widely complemented by horizontal tools, such as effective tax credits, which in turn

should be more targeted than currently at SMEs, to avoid the risk of supporting market incumbents, which would have a limited impact on innovation and productivity. Promoting the use of R&D tax credits by SMEs could be achieved by simplifying the existing scheme (EBRD, 2012) and by promoting a more effective form of tax credit, for instance through the exoneration of payroll taxes for researchers involved in R&D activities in SMEs, as done in France (Hallepe and Houlou-Garcia, 2013). The coverage of the current tax credit scheme is also narrower than in other countries, as it excludes traditional industries and mainly focuses on advanced technologies (EBRD, 2012).

Policies are focused on high-tech

Businesses applying for grants have to undergo a technical audit and an expert evaluation, after which they obtain the status of "innovative business". Current business support is also limited mostly to technology-driven innovations and puts little or no emphasis on process, organisation and marketing innovations. This is at odds with the importance of innovations in low-technology and service sectors, particularly in regions where low-technology industries dominate (OECD 2013b). Even a doubling of Russia's share of high-tech industry by 2020 would not make it the major engine of economic development (McKinsey, 2009). Hence, support for high-tech projects should be increasingly complemented by broader policies supporting medium- and low-tech innovation. There seems to be a general need for more tailored and targeted advice, for example on entering a market with an innovative product or on finding business partners abroad as well as for educating entrepreneurs in general (OECD, 2011d).

The emphasis on high-technology is also visible in the support for clusters and incubators. In 2012, 25 territorial clusters were selected on competitive basis to receive additional federal support in fields such as pharmaceuticals, ICT, nuclear technology, new materials supercomputers and biotechnology. The Ministry of Economic Development is supporting the creation of a network of regional and municipal business incubators. In 2012 there were 104 state-supported business incubators, hosting 1 554 small enterprises with 7 860 workers and annual turnover of RUB 7.4 billion. In theory, these initiatives are linked to regional development goals and fostering cluster development. But regions without an academic and scientific infrastructure originating from the Soviet Union are strongly disadvantaged. The question also remains whether such science-based cluster development is always based on genuine regional strengths and advantages, or whether it follows federal support directives and trends.

Skolkovo is a particularly ambitious project (Box 2.13). It is still too early to assess its real economic impact, but it clearly has a potential to become an important hub in the innovation system for fast-growing high-tech industries. At the same time, the project illustrates several concerns that need to be tackled by policy makers:

- Skolkovo attracts disproportional share of attention and funding partly because is designed for hi-tech businesses. Its high visibility should not overshadow a need of supporting more broad-based innovation in low and medium technology sectors that are also of great importance for Russia.
- Skolkovo is an isolated project that aims to stimulate innovations, partly by reducing entrepreneurship and innovation barriers for a small group of selected firms. This should not lead to complacency in removing such barriers more systematically for all firms across the country.

- A large scale project involving substantial public funds and directed at rather intangible results is often associated with an increased risk and waste. As recent events have shown Skolkovo is not an exception, hence special attention should be paid to governance issues.

Box 2.13. **Skolkovo**

To stimulate business innovation Russian government established in 2010 Skolkovo – an innovation centre with special privileges to its future residents:

- Direct public financial support.
- Tax incentives for companies: ten-year exemption from profit, land and property taxes, lower rate for compulsory insurance (14% instead of 34%), customs privileges, etc.
- Simplified technical regulations, procedure for transferring land, conditions for interaction with the government and ministries.
- Availability of the services of new R&D centres for the five "technological priorities": power industry, information technologies, telecommunication, biotechnologies and nuclear technologies.
- Establishment of special departments of RosPatent that will register and protect IPR more speedily.
- Attraction of foreign scientists and entrepreneurs by securing for them free arrival in Russia and movement throughout the territory of the country.

Skolkovo is a very ambitious project. It received public funding of RUB 34 billion in 2010 (or 0.05% of GDP which is comparable to annual research budget of all Russian universities) and 50 to 60 billion in 2012-13. In turn, it granted RUB 3 billion of subsidies to its 750 resident companies, which so far applied for more than 100 patents.

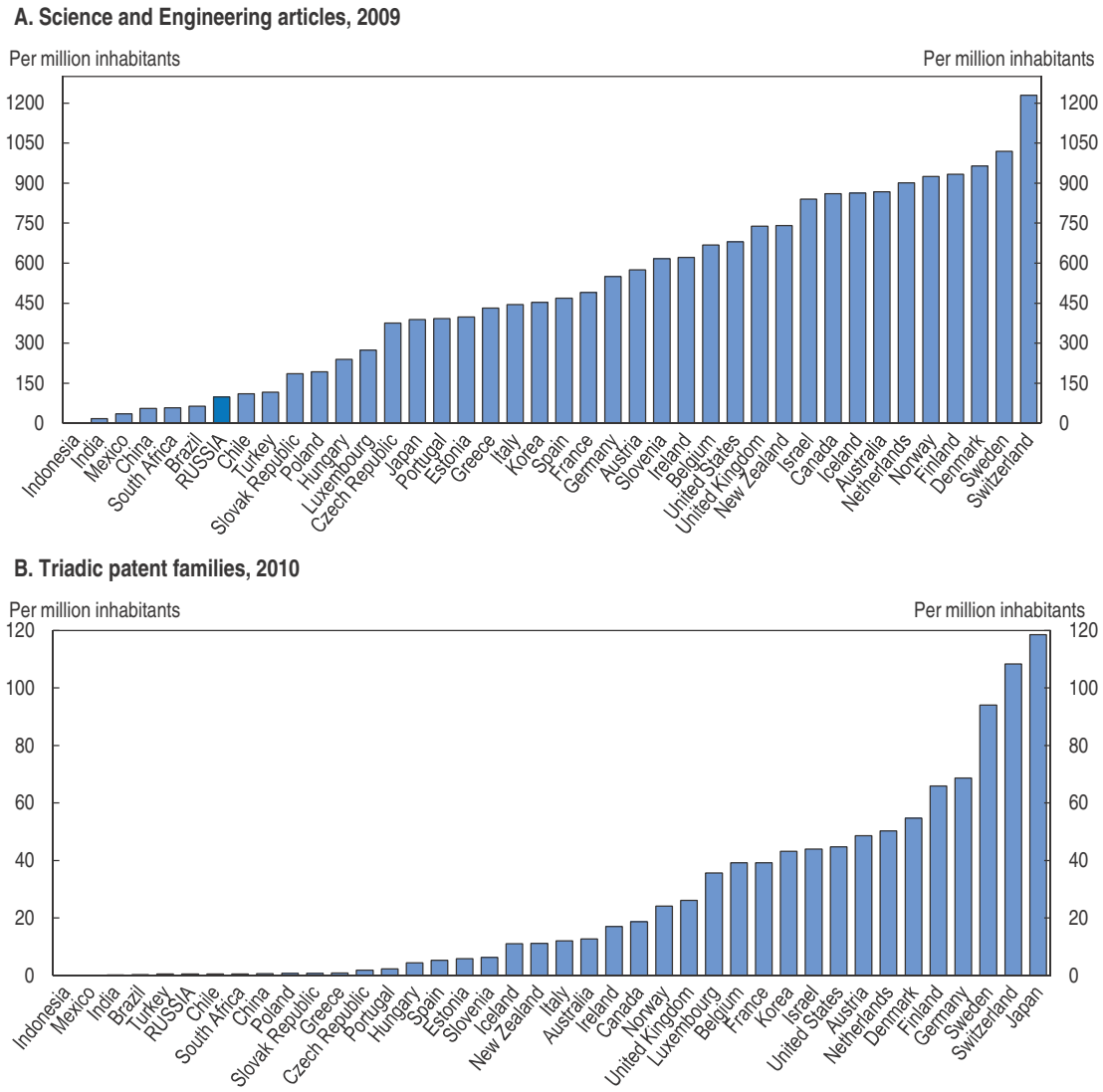
So far, 34 technology platforms have been created. They seem to be broader-based in terms of stakeholders and objectives, even as they seek to promote development in rather narrow specialised fields. These platforms are trying to unite the interests and views of government, business, the science community and consumers and they aim not only to develop strategic research programmes and government policy to support innovation, but also educational standards.

Reforming public research sector

While the weak appetite for innovation among Russian firms is the most acute challenge, the supply side is also a problem. Russia performs worse than most OECD countries in terms of number of scientific articles published in peer-reviewed journals, despite its reputation for scientific and technological sophistication. Russia also lags behind in patenting: the ratio of patents to population is many times lower than the OECD average (Figure 2.23) and has continued to decrease in recent years. An unusually high share of total R&D spending is absorbed by public research institutes, mostly inherited from the Soviet Union, the problem of a "knowledge supply gap" seems to be closely linked to the unfinished process of reform of this sector.

Branch research institutes and design organisations still perform around 50% of total R&D and remain the weakest point of Russian knowledge infrastructure (OECD, 2011d).

Figure 2.23. **Scientific output indicators**



Note: Article counts from set of journals covered by Science Citation Index (SCI) and Social Sciences Citation Index (SSCI).

Source: National Science Foundation's National Centre for Science and Engineering Statistics, *Science and Engineering Indicators 2012*, Appendix Table 5-27; World Bank, WDI online database and OECD (2012), *OECD Factbook 2013*.

StatLink http://dx.doi.org/10.1787/888932980089

Despite intensive restructuring and downsizing, the majority of the remaining institutes are state-owned and dependant on government funding, and most of them are largely disconnected from both firms and universities (OECD, 2011d). This sector should therefore be restructured further, for instance by encouraging their merger with production-oriented enterprises and by forcing the further closure of non-performing institutes, not least by increasing a share of competitive funding in this sector. As long as core funding is systematically renewed on a yearly basis with insufficient consideration for performance, public resources and research talents will remain misallocated.

The Russian Academy of Science (RAS) is the single largest research institution. It accounts for 14% of total R&D spending, performs more than half of basic research in the country, and employs half of Russia's Doctors of Science. The performance of RAS is,

however, very mixed, with islands of excellence operating next to research of inferior quality. This situation is linked to the Academy's insufficiently reformed and non-transparent structure, with its several often poorly governed specialised institutes. The share of competitive performance-based funding stood at only 12% in 2011, and while the government planned to increase it to 25%, it fell further to 10 % in 2012. The remaining block public funding is based on historical patterns, using the current head-count and is not linked to performance. As a result, headcount is kept high, while only half of the employees are actually engaged in research, which is well below OECD country practices (OECD, 2011d). In turn, salaries tend to be too low to retain and especially to attract top researchers contributing to the brain drain problem discussed above. Moreover, the mechanisms for the distribution of competitive funds is non-transparent and does not properly reflect actual performance (Russkaya Gazeta, 2012). The government should therefore further promote competitive and performance-based funding while increasing transparency. Institutes that do not do well on performance-based assessments should be forced to reform or close down. While the recently proposed and highly controversial reform addresses some inefficiencies (by integrating RAS with other specialised academies and reducing burden of non-research tasks), it does not address these fundamental problems.

Box 2.14. **Main federal programmes to promote research and innovation at the universities**

Development of co-operation between Russian universities and enterprises

- This federal programme provides subsidies for manufacturing enterprises for a period from 1 to 3 years for financing projects in high-tech production carried out jointly with universities. Recipients are determined according to a competition process that selects the most innovative projects. Each project should be at least 50% co-financed by enterprise. The total budget for 2010-12 is RUB 19 billion.

Development of innovation infrastructure in Russian universities

- This programme aims at supporting the development of innovation infrastructure, including business incubators, technology parks, engineering centres, transfer centres, certification…The budget amount to RUB 8 billion for 2010-12. As a result of the competition process, 56 schools have already been selected.

Attracting leading scientists to Russian universities

- Government allocates a budget in the form of grants to attract leading scientists. The primary goals of scientific research conducted by leading scientists in Russian universities is to create top-quality laboratories, produce world-class research, train highly qualified specialists, and transfer know-how to the economy. The total funding for 77 projects in 2010-12 amounted to RUB 8.3 billion and resulted in 42 laboratories being created. This funding will be extended to other research institutions (scientific institutions of the state academies of sciences and public research centres) until 2016.

Source: Ministry of Education.

Universities in most countries act as major centres of research and an important channel for transferring knowledge to firms. This has not been the case in Russia, due to the historical role played by RAS and its branch institutes, respectively. Only half of

universities are currently conducting research activity and universities (and other higher education institutions) account for only 7% of total R&D spending, the corresponding share of 0.07% of GDP being well below the OECD average of 0.4%. This gap between science and education has affected the quality of teaching, and among other effects it reduces the supply of skilled researchers (Gokhberg and Roud, 2012). Some attempts to strengthen research activity in the universities have been initiated in recent years by the creation of National Research Universities, which benefit from additional financing and more autonomy. They are aimed at generating knowledge and are expected to compete at the world level in terms of academic performance, based on the explicit objective to have five Russians universities among the top hundred of world leading universities. Their role is also to ensure an effective transfer of technology to the economy. These goals are also supported by a set of federal programmes (Box 2.14). Such a policy direction is in line with OECD best practices, but its effectiveness and the cost efficiency of supporting programmes need to be carefully evaluated. The authorities could also strengthen the incentives for firms to fund research in universities, while removing existing barriers to commercialisation of knowledge, such as regulations which complicate taking out patents and establishing start-up companies (Nokolaev and Chugunov, 2012).

Box 2.15. **Recommendations for strengthening innovation**

- Continue with broad-based support for innovation and for the adoption of new technologies, in particular to improve energy efficiency.
- Finalise the reform of the public R&D sector; in particular by shifting more research from the reformed Academy of Science to universities, increasing the share of competitive grant funding and streamlining state-owned research institutes.
- Develop appropriate monitoring strategies and evaluate innovation policies more systematically.

Bibliography

Abankina, I. et al. (2012a), "The effects of reform on the performance of Higher Education Institution", *Journal of Applied Research in Higher Education*, Vol. 4.1.

Abankina, I. et al. (2012b), "Impact of public demand and funding model in higher education restructuring", *mimeo*.

Ahrend, R. and W. Tompson (2006), "Realising the Oil Supply Potential of the CIS: The Impact of Institutions and Policies", *Economics Department Working Papers* 484, OECD Publishing.

Akhmedov, A., I. Denisova and M. Katseva (2003), "Active labor market Policies in Russia: Regional interpretation determines effectiveness?", *CEFIR Working Papers*.

Amable, B. and D. Gatti (2004), Product market competition, job security, and aggregate employment, *Oxford Economic Papers*, Vol. 56.4.

Amini, C.and S. Commander (2011), "Educational Score: How does Russia fare?", *IZA Working Papers* 6033.

Andrushchak, G.V. et al. (2010), "New pay system in schools. Experience of the Novgorod Region", *Higher School of Economics Working Papers Series* No. 05.

Bassanini, A. et al. (2005), "Workplace Training in Europe", *IZA Discussion Papers* 1640.

Baumol, W. (2002), *The Free-Market Innovation Machine*, Princeton and Oxford.

Belot, M., J. Boone and J. van Ours (2007), "Welfare Effects of Employment Protection", *Economica*, Vol. 74.

Boone, J. and J.C. van Ours (2004), "Effective Active Labour Market Policies", *IZA Discussion Papers*, No. 1335.

Benus, J. et al. (2005), "Re-training programs in Russia and Romania: Impact evaluation study", *CEFIR Working Papers*.

BIS (2013), "Youth Unemployment: Review of Training for Young people with Low Qualifications", *BIS Research Papers* 101.

Bouis, R. et al. (2012), "The Short-Term Effects of Structural Reforms: An Empirical Analysis," *Economics Department Working Papers* 949, OECD Publishing.

Bukowski, P. and J. Earle (2014), "Measuring Productivity Dispersion across Russian Manufacturing Firms, 2003-2010", *Economics Department Working Papers*, forthcoming, OECD Publishing.

Card, D., J. Kluve and A. Weber (2010), "Active labour market analysis policy evaluations: A meta analysis", *Economic Journal* 120.

Commander, S. and I. Denisova (2012), "Are skills a constraint on firms?, New evidence from Russia", *IZA Working Papers* 7061.

Carnoy, M. et al. (2012), "The economic returns to higher education in the BRIC countries and their implications for higher education expansion", *Higher School of Economics Working Papers* 02/EDU.

Cazes, S. and A. Nesporova (2004), "Labour markets in transition: Balancing flexibility and security in Central and Eastern Europe", *Revue de l'OFCE*, Vol. 5.91.

Denisova, I. (2012), "Income Distribution and Poverty in Russia", *Social, Employment and Migration Working Papers* 132.

Denisova, I. and M. Kartseva (2004), "Impact evaluation study of social adaptation and public works programs in Russia", *mimeo*.

Denisova, I. and M. Kartseva (2008), "Return to Levels, Types and Quality of Education", in Gimpelson, Kapelyushnikov (ed.), *Wages in the Russian Federation: Evolution and Differentiation*, State University – Higher School of Economics, Moscow.

Dionisius, R. et al. (2009), "Cost and Benefits of Apprenticeships Training: A comparison of Germany and Switzerland", *Applied Economics Quaterly*, 55.1.

Dorsett, R. (2006), "The new deal for young people: Effect on the labour market status of young men", *Labour Economics* 13.

EBRD (2012), "Diversifying Russia: Harnessing regional diversity", *EBRD Transition Report*.

Ehlert, C., J. Kluve and S. Schaffner (2011), "Training + Temporary Work = Stepping Stone?, Evaluating an Innovative Activation Program for Disadvantaged Youths", *Ruhr Economic Papers* 249.

Filatova, F. et al. (2012), "Education Development trends in Russia", *Journal of US-China Public Administration*, Vol. 9, 10.

Froumin, I. and Y. Kuzminov (2012), "Universal higher education and its social and economic impact", *mimeo*.

GEM (2012), *Global Entrepreneurship Monitor, GEM 2012 Global Report*.

Gershman, M. (2013), *Programmy innovatsionnogo razvitiya kompanii s gosudarstvennym uchastiem: Pervye itogi* (Innovation Development Programmes for the State-owned Companies: First Results), *Foresight-Russia*, Vol. 7, No. 1, pp. 28-43.

Gimpelson, V. and R. Kapeliushnikov (2011), "Labor market adjustment is Russia different?", *Higher School of Economics Working Papers* 3.

Gimpelson, V. et al. (2009b), "Profession Choice: Where was studied and where are working?", *Higher School of Economics Working Papers* 3.

Gimpelson, V. and D. Lippoldt (2001), *The Russian Labour Market: Between Transition and Turmoil*, Rowman & Littlefield Publishers.

Gokhberg, L. and V. Roud (2012), *The Russian Federation: A New Innovation Policy for Sustainable Growth/ Global Innovation Index*. INSEAD, Fontainebleau.

Goldberg, I. (2006), "Competitiveness and the Investment Climate in Russia: An Assessment by the World Bank and the Higher School of Economics", Moscow, presented to the 10th annual *St. Petersburg International Economic Forum*, 12-14 June.

Hallépée, S. and A. Houlou-Garcia (2013), *Évaluation du dispositif JEI*, DGCIS Evaluation.

Hayter, S. (2011), *The Role Of Collective Bargaining In The Global Economy*, International Labour Office, Switzerland.

Hespel, V., P.-E. Lecerf and E. Monnet (2011), *Étude comparative des effectifs des services publics de l'emploi en France, en Allemagne et au Royaume-Uni*, Rapport N° 2010M06402 de l'Inspection générale des finances.

HSE (2012), *Monitoring the economics of education, Survey 2012*, HSE-ISSEK.

HSE (2013a), *Indicators of Innovative Activity: 2013*, HSE, Moscow.

HSE (2013b), *Science and Technology Indicators in the Russian Federation. Data Book*, HSE, Moscow.

ILO (2013a), *Report of the Committee on Freedom of Association cases*, ILO, Geneva, November 2012, GB.316/INS/9/1.

ILO (2013b), *Report of the Committee on Freedom of Association cases*, June 2013, GB.318/INS/5/1, ILO Geneva.

ILO (2013c), *Report of the Committee of experts on the application of conventions and recommendations, Report III* (Part 1A), ILO, Geneva.

ILO (2011), *Employment and Labour Market strategies in Russia in the Context of innovations economy*, proceedings of the Conference, Moscow, September 2011.

ITUC (2012), *Annual Survey of Violations of Trade Union Rights, Russian Federation*, *www.refworld.org/docid/4fd8892ac.html*.

Jensen, P., M. Rosholm and M. Svarer (2003), "The response of youth unemployment to benefits, incentives and sanctions", *European Journal of Political Economy* 19.

Jaumotte, F. and N. Pain (2005), Innovation in the Business Sector, *Economics Department Working Papers* 459, OECD Publishing.

Jorgenson, D. and K. Vu (2011), "The Rise of Developing Asia and the New Economic Order", *Journal of Policy Modeling* 33 (5).

Kapelyushnikov, R. (2000), "Russia's labour market: Adjustment without restructuring", presented at the NATO Colloquium, *www.nato.int/docu/colloq/colloq99.htm*.

Kapelyushnikov, R., A Kuznetsov and O. Kuznetsova (2012), "The role of the informal sector, flexible working time and pay in the Russian labour market model", *Post-Communist Economies*, 24.2.

Karabchuk, T. (2012), "Temporary employment in Russia: Why mostly men?", *The European Journal of Comparative Economics*, Vol. 9.2.

Keogh, H. (2009), *The State and development of adult learning and education in Europe, North America and Israel*, Regional synthesis report, Hamburg, Germany, UNESCO Institute for Lifelong Learning.

Khavenson, T. and Y. Tyumeneva (2012), "Teacher characteristics and student achievements in TIMSS", *Higher School of Economics Working Papers* 06/EDU.

Kluve, J., H. Lehmann and C.M. Schmidt (1999), "Active Labor Market Policies in Poland: Human Capital Enhancement, Stigmatisation and benefit Churning", *Journal of Comparative Economics*, Vol. 27.

Kluve, J., H. Lehmann and C.M. Schmidt (2008), "Disentangling Treatment Effects of Active Labor Market Policies: The role of labor Force Status Sequences", *Labour Economics* 15.

Klyachko (2013), "Key Trends in Education: 2012 results", in *Russian Economy in 2012: Trends and Prospects*, No. 34.

Kochetov, A.N. (2012), "Professional Education and the Labor market", *Russian Education and Society,* Vol. 54.3.

Kyui, N. (2010), "Returns to education and Education-Occupation Mismatch within a transition Economy", *CES Working Paper* 31.

Kuzyk, M. and Y. Simachev (2013), "Russia's Innovation Promotion Policies: Their Evolution, Achievements, Problems and Lessons", *Russian Economy in 2012: Trends and Outlooks*, Issue 23, Moscow.

Lehmann, H. and A. Zaiceva (2013), "Informal Employment in Russia: Extent, Incidence, Determinants and Labor Market Segmentation", *Economics Working Paper Department* 1098, OECD Publishing.

Lehmann, H., Razzolini T. and Zaiceva A. (2011a), Job separations and informality in the Russian labor market, *IZA Working Paper* 6230.

Lehmann, H., T. Razzolini and A. Zaiceva (2011b), "The wage and non-wage cost of displacement: Evidence from Russia", *Recent Working Papers* 60.

Lehmann and Kluve (2008), "Assessing Active Labor market Policies in transition Economies", *Working Papers, Dipartimento Scienze Economiche, Universita' di Bologna* 646.

Lemieux, T., W. MacLeod and D. Parent (2009), "Performance Pay and Wage Inequality", *Quarterly Journal of Economics,* Vol. 124.1.

Lyutov, N. (2009), "The evolution and some problems of workers' representation law in Russia", *Issues of Business and Law*, Vol.1.

Martin, J. and D. Grubb (2001), "What work and for whom: A review of OECD countries 'experiences with active labour market policies", *Institute for Labour Market Policy Evaluation Working Papers*, No. 14, IFAU.

Meager, N. (2009), The role of training and skills development in active labour market policies, *International Journal of Training and Development*, 13.1.

Meissner, D., L. Gokhberg and A. Sokolov (eds.) (2013), *Science, Technology and Innovation Policy for the Future. Potentials and Limits of Foresight Studies,* Springer, Heidelberg/New York/Dordrecht/London.

Müller, N. and F. Behringer (2012), "Subsidies and Levies as Policy Instruments to Encourage Employer-Provided Training", *Education Working Papers* 80, OECD Publishing.

Nivorozhkin, A. (2005), "An evaluation of government sponsored vocational training programmes for the unemployed in urban Russia", *Cambridge Journal of Economics* 29.

Nivorozhkin A. and E. Nivorozhkin (2006), "Do government sponsored vocational training programmes help the unemployed find jobs? Evidence from Russia", *Applied Economic Letters,* Vol.14.1.

Nokolaev, D. and D. Chugunov (2012), "The Education System in the Russia Federation", *World Bank Education Brief.*

O'Leary, C.J. (2001), "Evaluating Active Labor market Programs in transition Economies", presented at *"Active Labor market Programs: Improvement of Effectiveness" Conference*, Moscow, Russian Federation, September.

OECD (2013), *Education at a Glance 2013*, OECD Publishing.

OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills,* OECD Publishing.

OECD (2013c), *Review of SME and Entrepreneurship Issues and Policies in Russia*, OECD Publishing, forthcoming.

OECD (2012a), *OECD Economic Survey of Germany 2012*, OECD Publishing.

OECD (2012b), *OECD Economic Survey of Estonia 2012*, OECD Publishing.

OECD (2012c), *Education Today 2013: The OECD Perspective,* OECD Publishing.

OECD (2012d), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing.

OECD (2012e), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies,* OECD Publishing.

OECD (2012f), "Does performance-based pay improve teaching?", *PISA in Focus 16*, OECD Publishing

OECD (2011), *Reviews of Labour Market and Social Policies, Russia Federation*, OECD Publishing.

OECD (2011b), "Does participation in pre-primary education translate into better learning outcomes at school?", *PISA in Focus 2011/1.*

OECD (2011c), *Science Technology and Innovation Scoreboard 2011*, OECD Publishing.

OECD (2011d), *Reviews Innovation Policy, Russian Federation*. OECD Publishing.

OECD (2010), *The High Cost of Low Educational Performance the long-run economic impact of improving Pisa outcomes*, OECD publishing.

OECD (2010b), *Learning for Jobs*, OECD Publishing.

OECD (2006), *OECD Employment Outlook 2006: Reassessing the role of Policies and Institutions for Labor Market performance*, OECD Publishing.

OECD (2005), "Labour Market Programmes and Activation strategies: Evaluating the Impacts", in *OECD Employment Outlook,* OECD Publishing.

OECD (2005b), *Promoting Adult Learning,* OECD Publishing.

OECD (2004), "Improving Skills for More and Better Jobs: Does training make a Difference?", *OECD Employment Outlook,* OECD Publishing.

OECD (2004b), "Informal employment and promoting the transition to a salaried economy", *OECD Employment Outlook*, OECD Publishing.

Ok, W. and P. Tergeist (2003), "Improving Workers' skills: Analytical evidence and the role of social partners", *Social, Employment and Migration Working Papers* 10.

Poppe, N., J. Strawn and K. Martinson (2003), "Whose Job Is It? Creating Opportunities for advancement", in Giloth, R.P. (ed.), *Workforce Intermediaries in the 21st Century*.

Puhani, P.A. (1998), "Advantage through Training? A microeconomic evaluation of the employment effect of ALMP in Poland", *ZEW Discussion Papers* No. 98-25.

Rodriguez-Planas, N. and N.J. Benus (2006), Evaluating active labor market programs in Romania, *IZA Working Papers* 2464.

Rosen, J. and S. Ryoo (2004), "The Engineering Labor Market", *Journal of Political Economy,* Vol. 112.1.

Russkaya Gazeta (2012), Interview with Russian Academic Georgiy Georgiev, *www.rg.ru/2012/02/01/georgiev.html*.

Sasova, I.A. (2011), "Technological Education or labor training?", *Russian Education and Society* Vol. 53.6.

Sokolov, A. and A. Chulok (2012), "Long-term forecast of S&T development in Russia to 2030: Key features and first results", *Foresight-Russia*, V. 6 (2012), No. 1, pp. 12-25.

Smirnykh, L. and A. Wörgötter (2013), "Why do Russian firms use fixed-term and agency work contracts?", *Economics Department Working Papers* 1014, OECD Publishing.

Schneider, F., A. Buehn and C.E. Montenegro (2010), "Shadow Economies All over the World New Estimates for 162 Countries from 1999 to 2007", *World Bank Policy Research Working Papers* 5356.

Tan, H. et al. (2007), "Skills Shortage and training in Russian enterprises", *Higher School of Economics Working Papers* 04.

Timmer, M. and I. Voskoboynikov (2013), *Is Mining Fuelling Long-run Growth in Russia? Industry Productivity Growth Trends since 1995*, GGDC Research Memorandum.

Venn, D. (2009), "Legislation, collective bargaining and enforcement: Updating the OECD employment protection indicators", *Social, Employment and Migration Working Papers* 89, OECD Publishing.

Wasmer, E. (2002), "Interpreting Europe and US Labor Markets Differences: The Specificity of Human Capital Investments," *IZA Working Papers* 549.

WEF (2011), "The Russia Competitiveness: Laying the Foundation for Sustainable Prosperity", *World Economic Forum Report*.

Westergaard-Nielsen, N. and A.R. Rasmussen (1999), "The Impact of subsidies on the number of Aprenticeships", *Research in labor economics* 18.

World Bank (2010), *The Innovation Policy: A guide for Developing Countries*, World Bank Publications, Washington, DC.

Xavier, R. et al. (2013), *Global Entrepreneurship Monitor: 2012 Global Report*, Babson College,Wellesley, MASS.

ANNEX 2.A1

Main characteristics of the new law on education

Law on Education in the Russian Federation N 273-FZ was signed by Russian President Vladimir Putin on 31 December 2012. This Law replaced two other laws adopted in 1992 and 1996 – the Law on Education and Law on Higher and Post-Graduate Professional Education. The New Law on Education stipulates norms for all levels of education, including pre-school education. The Law took effect 1 September 2013, except where stipulated otherwise. Main provisions of this Law include:

Pre-school and Primary Education

- Pre-school education is now part of the general education system. It can be delivered in kindergartens, schools, but also at home.
- Higher role is given to parents by allowing them to choose learning subjects.
- Average wages of teachers cannot be below the average wage in the region.
- Parents registering their children to the closest school in the living area have a priority.
- Selection of children to enter in schools with specialised subjects can only be done after the primary level of education.
- The possibility to close a school in a village takes into account the official position of the local assembly.

Secondary education

- Initial vocational education became part of vocational education in the form of training programs for skilled workers.
- Secondary vocational education now provides two types of educational programs – training of skilled workers and training for middle managers.
- Vocational education institutions have the right to determine programs and to select students.

Higher education

- The Uniform State Exam (USE) results which determine the entrance to universities will be valid for 5 years (against 2 years before).
- Higher education institutions, including private ones, will be monitored by the Education Ministry in the context of restructuring of higher education institutions network.

- The minimum number of state-subsidised places is fixed by the law at 800 students per 10 000 people aged 18 to 30 living in the Russian Federation.
- Universities are organised in a two-tier system of Bachelors and Masters. Colleges deliver only bachelor degrees and institutes diplomas for bachelors and specialists.
- Academies deliver only additional education and prepare post-graduates and doctoral candidates.
- Post-graduate education is considered as the third level of higher education aimed at training highly qualified personnel.

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