

WHY RUSSIA IS NOT SOUTH KOREA

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By January 1992, the Soviet Union had dissolved and the new Russian government had liberalized prices for most goods and services, ushering in a new Russian economy. In 2010, this economy turned eighteen years old and has, in Russian terms, come of age. In this article, we assess the current state of the Russian economy and its long-term prospects. Where is the Russian economy today, and where is it heading?

The situation in 2010 is very different from that of 1992. Eighteen years ago, the Russian economy was in a dire state, but the direction of change was promising. In contrast, the economy is doing relatively well in 2010. Russia's per capita income was at an historic high before the 2008 to 2009 crisis struck. Crisis notwithstanding, Russia in 2010 is firmly in the upper-middle income group of countries.¹ Even at the height of the crisis, the approval ratings of Russia's President Medvedev and Prime Minister Putin were over 60 percent. Household surveys also show a steady increase in Russians' self-assessed life satisfaction.² At the same time, though, there is overwhelming evidence that the Russian economy is moving in the wrong direction, and while the agenda for reform is clear, there is little political will to undertake necessary reforms.

President Dmitry Medvedev proclaimed modernization as the primary goal for Russia's medium-term future.³ Modernization is necessary to catch up with the Organisation for Economic Co-operation and Development (OECD) countries. One model Medvedev suggests for the proposed modernization is South Korea, which made a spectacular economic and social transformation into a developed, modern, and rich country since the fall of dictatorship. Can Russia follow South Korea's path? This is particularly interesting given that Russia mimics year-to-year Korea's Gross Domestic Product (GDP) growth as of eleven years ago.

In this article, we argue that Russia's political institutions are unfit for modernization and economic development. Despite the seemingly solid economic

growth of the last decade, the Russian economy will revert to stagnation and will not catch up with the economic level of OECD countries in the next ten to twenty years unless its political institutions undergo a drastic change, a prerequisite for the continuation of economic reforms.

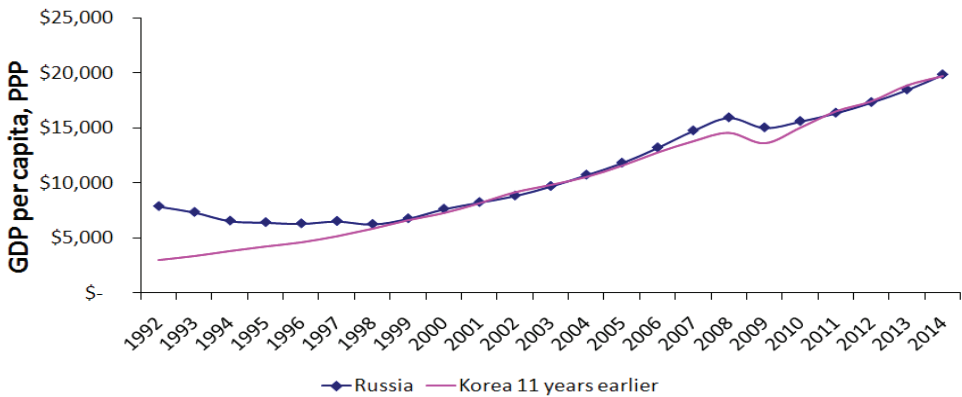
THE RUSSIAN ECONOMY AT EIGHTEEN

Before 1992, Russia was a command economy with regulated prices, state ownership over the vast majority of production assets, a state monopoly over international trade, and comprehensive state planning. There was no competition between enterprises and the respective ministries set their production and distribution plans. The ruble exchange rate was also determined purely through administrative decisions. There were no financial markets.

Since the beginning of the 1990s, Russia has transformed beyond recognition. It is no longer a command economy; instead Russia is now an emerging market, namely, a normal developing economy with upper-middle income. Even though a bulk of the corporate sector has been nationalized since 2003, it is still a predominantly private capitalist economy with imperfect but functioning markets.

Russia's growth record between 1999 and 2008 has been impressive, with most analysts forecasting positive growth to resume in 2010, although at a slower rate than previously.⁴

Figure 1: Gross domestic product per capita adjusted for purchasing power parity in Russia and South Korea eleven years earlier.



Source: International Monetary Fund, authors' calculations.

Figure 1 shows that after the initial transition from the recession of the 1990s, Russia began to follow South Korea's path of income after an eleven-year lag.

The similarity of economic performance between Russia and South Korea with an eleven-year lag is striking, but what does this mean? South Korea is generally praised as a success story of modernization, economic growth, and convergence with the OECD economies, but do these data imply that Russia is also on the right track? Will the future Russia be similar to today's South Korea, i.e. a by-and-large successful, advanced, and modern economy by 2020?

On the one hand, Russian economic growth in recent years has been very tangible and has trickled down to most parts of society and industries. Between the two crises of 1998 and 2008, Russia's per capita GDP doubled, wages more than tripled in real terms and unemployment and poverty decreased by more than one half from 13 percent to 6 percent and from 29 percent to 13 percent, respectively.⁵ This decade of growth transformed Russian society. It created a banking system, led to an increase in the credit to GDP ratio from 10 to 40 percent and introduced Russians to concepts such as credit histories and retail lending, including car loans, mortgages, student loans, suburban malls, and even venture capital, all of which were unheard of before growth picked up.⁶ Russia's per capita income exceeded those of Mexico, the Czech Republic, and Hungary in the 1990s, when these countries joined the OECD (measured both in absolute terms and as a share of U.S. levels).⁷ At the same time, Russia's basic human capital remains high. For example, the adult literacy rate now stands at 99 percent.⁸

Russians now live better in terms of improved housing and car, computer, mobile and landline phone ownership.⁹ At the end of the day, Russians' self-reported life satisfaction has increased substantially. In Figure 2, we portray self-assessed life satisfaction in a representative panel of Russian households and their real incomes (see Figure 2).

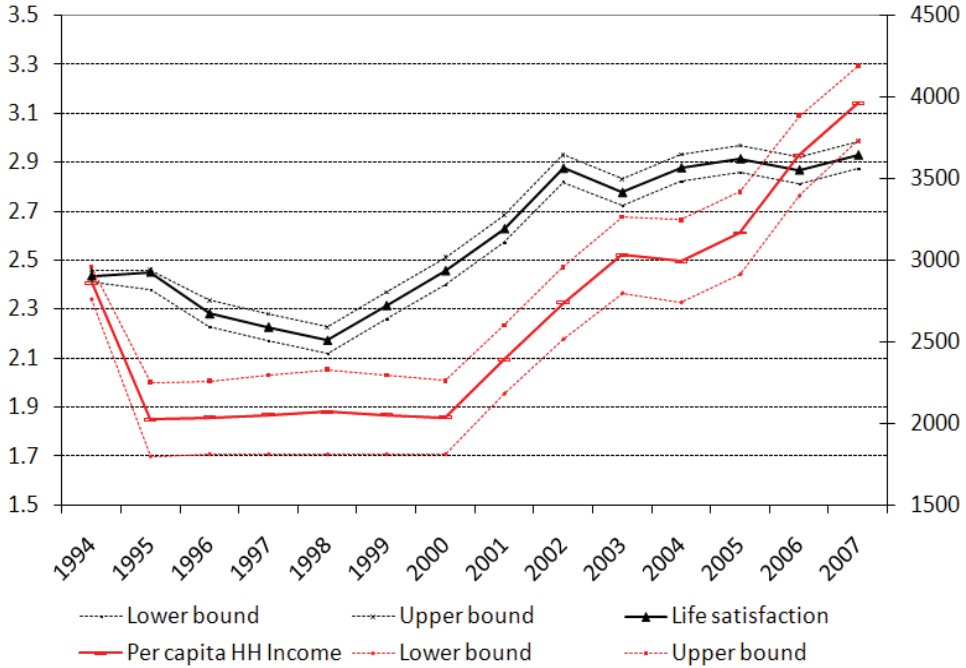
On the other hand, there are many reasons to believe that the Russian economy will experience a substantial slowdown. The similarities between Russia and South Korea shown in Figure 1 are misleading. The list of impressive achievements above neglects the fact that unlike South Korea in the 1990s, Russia has much weaker political and economic institutions and, more importantly, its development trend points to the fact of their deterioration, despite the observed growth of real income.

Economists have long argued that economic and political institutions, such as property rights and contract enforcement, democratic procedures for electing the political leaders and constraints on the executive, are crucial for long-term eco-

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conomic growth.¹¹ Recently, this view was shown to be consistent with the empirical evidence on economic growth, such as cross-section regressions with and without instrumental variables.¹²

Figure 2: Self-assessed life satisfaction (left scale) and the annual household income per capita in 2005 US dollars (right scale), both with confidence intervals, controlling for household and individual characteristics and fixed effects.



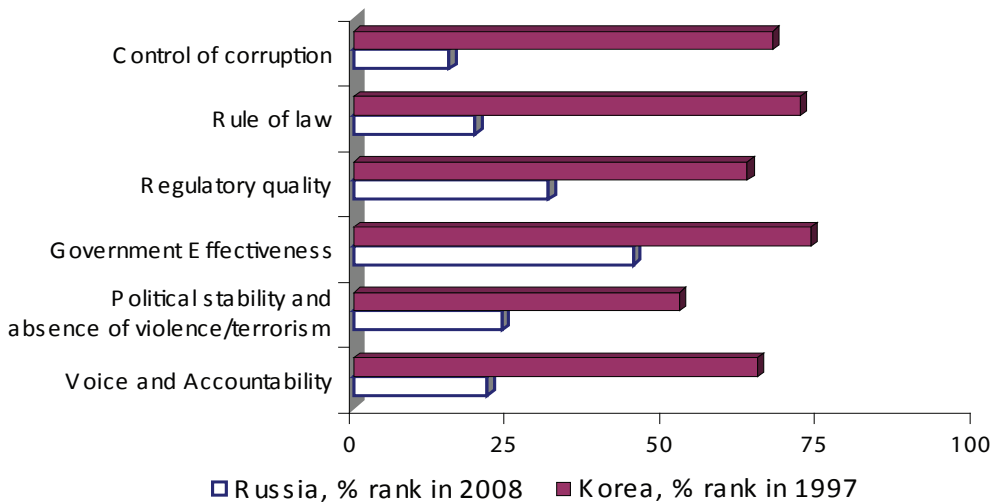
Source: Russian Longitudinal Monitoring Survey¹⁰

There are examples of countries, the most prominent being South Korea, where initial economic growth and institutional change were triggered by policies of an enlightened and unconstrained dictator, but subsequent growth was sustained and reinforced by improved institutions.¹³ Nonetheless, the experience of almost every country, with the exception of China, suggests that the sustainability of growth depends on robust political institutions.¹⁴

To compare the institutional development of Russia today and South Korea eleven years ago, we plot the most conventional measures of institutions in Figure 3 – the World Bank Institute’s Governance Indicators.¹⁵ These measures identify the quality of political institutions needed for building the economic institutions required for sustainable economic growth.¹⁶ The difference between Russia today

and South Korea eleven years ago is astonishing. While South Korea in 1997 was in the top quartile with regards to key institutional indicators such as the rule of law, control of corruption, and government effectiveness, Russia is now at the bottom quartile on the rule of law and control of corruption and in the lower half for government effectiveness. Notice also that the sample of countries has expanded over time through the addition of poor countries, and therefore, the state of Russia's political institutions is even worse than these figures show as the average institutional quality of the comparison group decreased between 1997 to 2008.

Figure 3: Institutions in Russia, 2008, and South Korea, 1997. The numbers show the percentile of each country among all the countries in a given year (100=best, 0=worst).



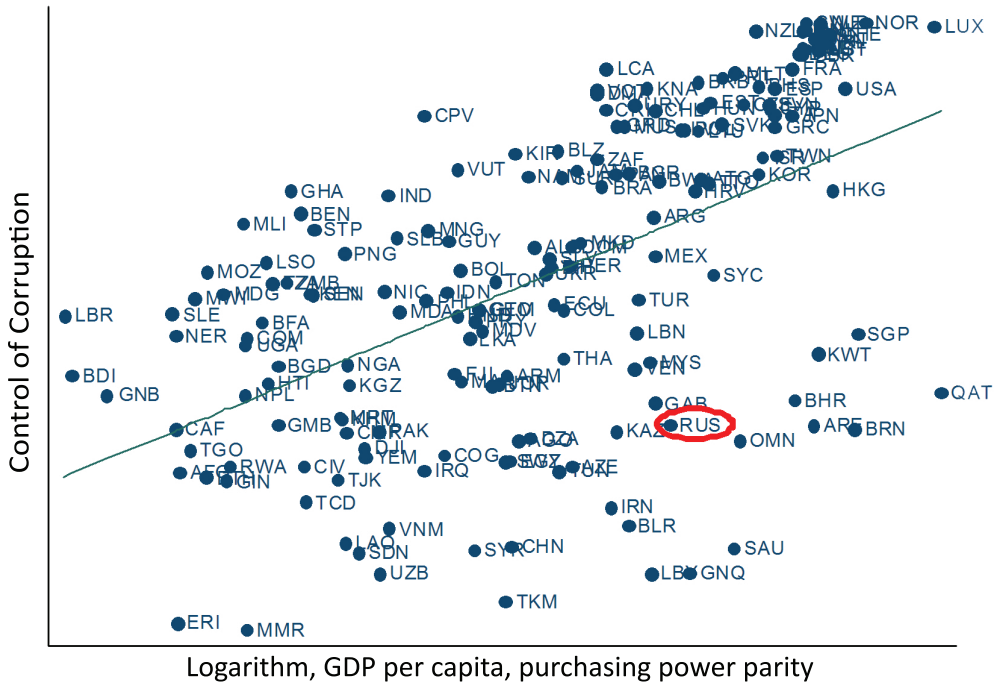
Source: Governance Indicators, World Bank Institute. (Because the data for 1997 are not available, we use the simple average of 1996 and 1998)

This striking difference is not limited to the World Bank Institute's Governance Indicators. The widely-used Corruption Perception Index from Transparency International gives today's Russia a score of 2.2 out of 10 on control of corruption, ranking 146 among the 180 countries included in the 2009 surveys.¹⁷ In 1998, South Korea received a score of 4.2 out of ten and ranked 43 out of 85 countries.¹⁸

Another measure of political institutions is the degree of constraints on the executive, which is measured by Polity IV.¹⁹ This variable captures the extent to which laws are clear and consistently enforced and are not at the discretion of the current ruler. In 2008, Russia had a score of 4 out of 7; in 1997, South Korea scored 6 out of 7.

These indicators imply that Russia today is lagging behind a comparable South Korea as of the late 1990s by a huge margin in its institutional development. Moreover, Russia’s institutions are much worse than they should be given the country’s relatively high income. Figure 4 plots the level of corruption in 2008 against GDP per capita for a broad cross-section of countries. Richer countries usually have better corruption outcomes but Russia is more than one standard deviation below the regression line which represents the predicted level of corruption for each level of per capita income. Corruption in Russia is similar to that of countries that are an order of magnitude below Russia in terms of per capita income.

Figure 4: Control of corruption and logarithm of GDP per capita (purchasing power parity) in 2008. Source: World Bank Institute’s Governance Indicators, IMF’s World Economic Outlook, authors’ calculations.



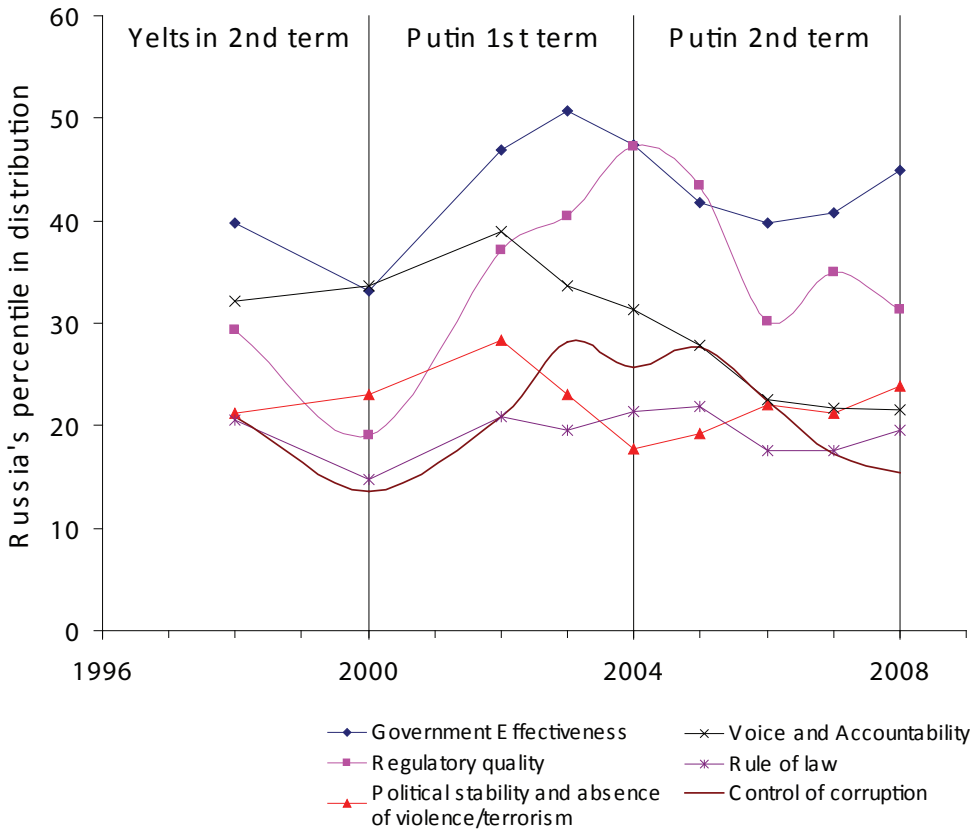
Source: World Bank Institute’s Governance Indicators IMF’s World Economic Outlook, authors’ calculations.

In addition, indicators of various aspects of government quality have shown a decline in Russia, starting from approximately 2003 onwards.²⁰

This raises the very questions that are vital for understanding Russia’s growth and modernization potential. Why is Russia, an upper-middle income country, so

corrupt and so lawless? And if institutions are so bad, why has Russia experienced such spectacular growth in recent years? In what follows, we argue that the answers to both questions are closely related to the fact that Russia is a resource-rich country. First, recent growth is explained—to a large extent—by a vast increase in the global price of oil. Second, the very presence of natural resource rents reduces incentives to improve political and economic institutions.

Figure 5. Governance indicators over time for the second presidential term of Yeltsin and the two presidential terms of Putin.



Source: Governance Indicators, World Bank Institute.

OIL PRICE AND ECONOMIC GROWTH IN RUSSIA

To what extent is recent growth in Russia driven by the increase in oil prices? A number of economists have tried to use the variation in the oil price in recent years to understand the magnitude of its contribution to Russia's economic growth. The relevant econometric and numerical models surveyed in Guriev and Tsyvinski provide estimates of the elasticity of Russian GDP to the world oil price.²¹

While this research is subject to many caveats, it still provides a reasonable

benchmark for estimating the effect of oil on Russian GDP. These estimates imply that long-term elasticity is about 0.2; in other words, an increase in oil price by 10 percent results in a 2 percent increase in Russian GDP. This means that if the price of oil increases from \$17 (in 1998, constant 2008 dollars) to \$97 per barrel (in 2008), then GDP should go up by a factor of 1.4, or grow at a rate of 3.5 percent a year for 10 years. Therefore, the increasing price of oil explains about one half of Russia's total growth. If the oil prices had remained constant, then between 1998-2008 the Russian economy would have grown at 3.5 percent a year—a decent growth rate for a country at the economic frontier, but slower than the world's average, and slower than the average annual growth rate of other successful emerging economies during this period, and certainly well below that of poorly-endowed-with-resources South Korea both eleven years ago or even now.

RESOURCE CURSE

The fact that Russia's growth of the last decade is to a large extent driven by the unpredictability, or even luck, of oil prices does not mean that Russia is doomed. In particular, one could argue that Russia—once it has achieved a reasonably high income level—can improve its institutions and therefore build foundations for sustainable long-term growth, just as did South Korea or Taiwan. This is consistent with the famous modernization conjecture by Seymour Lipset, who argued that high income is a precondition for sustainable democratic institutions.²²

While it is true that there are almost no rich non-democratic countries, a higher income per se does not create institutions. Institutions do not emerge out of thin air: while short periods of economic growth can be caused by mere luck, institutional change cannot. Institutions are built only if the ruling elites have incentives to create them. And this is where Russia's resource abundance plays a negative role, despite it being responsible for the recent growth spurt. The 2009 Transition Report by the European Bank for Reconstruction and Development (EBRD) argues that Russia is a typical example of the "resource curse."²³ The resource curse describes the effect of resource abundance on institutional development in countries where institutions are already weak.²⁴

In every such country, the ruling elite faces a trade-off. On the one hand, in order to foster economic growth, the elites need to build economic and political institutions. On the other hand, these institutions increase political and economic competition that reduces the elite's chance to hold on to power and to enjoy rents. Natural resource abundance directly affects the resolution of the trade-off in non-democratic countries. If the ruling elites are not constrained by checks and balances, the presence of the natural resource rents tilts them in favor of impeding institutional development. This enables elites in order to stay in power and receive

large resource rents.²⁵

Is the Russian elite aware of the problems associated with Russia's unusually low institutional development or the reasons behind it? In the spring of 2008, at the height of Russia's reign as an energy superpower, the New Economic School surveyed leading Russian businessmen on major risks for the Russian economy.²⁶ The most popular response—besides demographic challenges—was corruption. The most important economic problem perceived was the lack of diversification of the Russian economy. Russia's President Medvedev agreed with this list. His programmatic article, "Go, Russia!" that came out in the fall of 2009, put together a very similar list of main challenges for Russia: "resource dependent economy," "chronic and comprehensive corruption," and "paternalism."²⁷

Even though the trap of the "resource curse" is fully understood, the current leadership is focusing on preserving the status quo rather than on restructuring the economy and/or political institutions. In the following sections we provide two examples of such policies. First, we consider the federalism policies. Second, we discuss Russia's response to the crisis in 2009.

FEDERALISM

One of the most drastic reforms of Putin's "stability age" was the reform of the state apparatus. Immediately after coming to power, President Putin began implementing political centralization and had largely completed it by 2005. Putin undertook a number of important steps aimed at increasing the political influence of the central government and reducing the political power of regions in determining policy design and its implementation at all levels. The main milestones of this reform were: the replacement of regional governors by professional representatives in the upper house of parliament to reduce political influence of regions in federal policy-making; establishment of federal districts with presidential envoys as watchdogs of implementation of federal policies in the regions; abolition of regional-level elections; and abolition of single-member district elections for the lower house of parliament. All of these reforms were publicly motivated by the need to restore "the vertical of power" as the regional governments were subject to capture by local elites engaged in rent-seeking, and were largely unaccountable.²⁸ Putin called his centralization "the logical development of Russia's federalism."²⁹ The reform largely copied the Chinese model of provincial-central relations, which provides provincial leaders with efficient incentives to deliver growth; some provincial party secretaries are promoted for delivering growth and demoted for failing to do so.

Did "the vertical of power" really restrain misbehaving governors, strengthen incentives at the regional level, and limit the extent of state capture? In evaluating

the results of this reform, we can see that none of the proclaimed objectives were met by this centralization.³⁰

First, there was no decline in the overall level of state capture at the regional level in Russia between Yeltsin's era and Putin's first term in power despite political centralization. The only real change was a shift in the bargaining power from private firms and firms owned by regional governments to firms in federal government ownership. Thus, instead of limiting the extent of state capture, the reform has only led to a change in the identity of the captors; the reform simply re-allocated rents from regional elites to those in Putin's close circle.

Second, and perhaps most importantly, the center has not used its power to appoint governors (effective from 2005) to replace local mafia bosses notorious for gross violations of federal legislation in their regions. An analysis of the pattern of reappointments proves that there is no relationship between economic performance and the reappointment of regional governors. If anything there is a negative correlation between regional economic performance and the probability that the president extends his trust to the governor for the next term. Why would a strong central leader reappoint badly-performing governors? One possible answer again is reallocation of rents from the regional to the central elite. The central government can use the threat of dismissal to persuade local authorities to give up a greater part of their rents to the federal officials. It is also possible that reappointments of the most inefficient governors are politically motivated. Inefficient governors are unpopular and, therefore, cannot become independent political figures who could potentially challenge the ruler.³¹

Overall, Putin's reform of fiscal federalism was nothing more than just a further centralization of power, even though it was intended to reduce state capture and give high-powered career incentives to the regional governors. Contrary to the expectations of many scholars, the recent federalism reform in Russia has not contributed to an improvement in political and economic institutions, which is the key to modernization and development as the South Korea case illustrates.³² It is worth noting, however, that South Korea is a very homogenous and compact country and therefore, it can afford being a centralized unitary state.³³ Unlike South Korea's situation, Russia's modernization cannot be managed from the top-down due to its vast size, high ethnic and religious diversity, and low density of population, which all make some form of federalism in Russia unavoidable.

RUSSIAN ANTI-CRISIS POLICY

Russia's government policy in 2009 provides another convincing piece of evidence that the government is more interested in preserving the status quo rather than using the crisis as an opportunity for restructuring the economy.

How would a “restructuring” policy differ from “preserving the status quo?” A government focused on restructuring would allow inefficient enterprises to go bankrupt and would concentrate support on the unemployed via targeted social assistance, raised unemployment benefits, subsidized training, and assistance for families moving to lower-unemployment regions. A pro-status quo party would use the bulk of the anti-crisis policy on bailing out inefficient enterprises.

The government’s anti-crisis plan for 2009 gives a good indication of the weight that the Russian government assigns to these priorities.³⁴ Direct social assistance to the unemployed (raising unemployment benefits and supporting region-level active labor market policies) constitutes 74 billion rubles (about US\$3 billion, or 2.5 percent of GDP). The support of the business sector is an order of magnitude higher: 675 billion rubles (US\$20 billion).³⁵ This is roughly equally divided between “targeted” and “general” support (373 and 302 billion rubles, respectively).

The former is to provide assistance to specific industries and, in most cases, to specific enterprises; the bulk (282 out of 302 billion rubles) of the “general support” is the reduction in the corporate profit tax rate. While this seems to be general, it is actually benefitting a few specific enterprises—primarily Gazprom and other raw material exporters—that remained profitable even during the crisis.

Thus, Russia’s actual fiscal priorities clearly indicate that the Russian government is more interested in preserving the status quo than restructuring its economy.

It is interesting to compare the crisis response of the Russian government to that of the South Korean government. The South Korean economy is also export-oriented and has therefore been hit hard by the global crisis as well. Yet, the South Korean anti-crisis response was fast, resolute and aimed at building a new, greener economy.³⁶ These policies provided support to low- and middle-income families through job creation and tax cuts. South Korea also pursued a free trade agenda rather than instituting protectionist measures, supporting flexibility of the labor market and a better investment climate. As a result, South Korea’s 2009 GDP declined by just 1 percent, a huge difference from Russia’s 9 percent decline.

It is even more striking to compare Russia’s response to the 2008 crisis with South Korea’s policies eleven years before in 1997. Interestingly, in 1997, South Korea also responded to an economic crisis in a way similar to South Korea in 2009: the intervention focused on the financial sector, evaluating and cleaning up banks’ balance sheets. Direct fiscal stimulus to the real sector was very limited.

The Russian government is more interested in preserving the status quo than restructuring its economy.

On top of this, South Korea eased regulations for foreign investment and increased labor market flexibility, all of which differed from Russia's 2009 policies.³⁷

WHAT NEXT?

What would have to be done if Russia's government wanted to pursue long-term growth and increased accountability to the Russian people? Interestingly, the same Russian government discussed above has adopted a very ambitious and detailed plan for reform known as "Russian Federation's Development Strategy for 2000-2010." This strategy, also known as "Gref's Program," was commis-

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sioned by then-President Putin from his incoming economy minister Herman Gref in 1999-2000 when the oil price was only a fraction of the price ten years later. Unfortunately, only a handful of the reforms were actually implemented, mostly during Putin's first presidential term. Moreover, during Putin's second presidential term, when oil prices reached historic highs, some of the reforms were reversed. Given our earlier discussion of the "resource curse" this is not surprising. Yet, if Russia is to break out of the resource curse trap, these reforms must be implemented, including, among others: further priva-

tization; deregulation of business; macroeconomic stabilization and disinflation; membership in the World Trade Organization; reform of the judiciary, education, healthcare, and pension system; and reform of natural monopolies. These reforms might raise productivity and the efficiency of Russia's economy, improve long-term growth perspectives, and, most importantly, create the stakeholders that will defend the pro-growth institutions and encourage further reform. Unfortunately, these reforms are an elusive target because of the rent-seeking incentives possessed by Russia's leadership.

CONCLUSIONS

Eighteen years ago, the Russian system started a long journey toward a market economy. In the 1990s, the main institutions of the market economy were built, resulting in fast growth between 1998 and 2008. This decade of growth helped solidify Russia as a "normal country" with a developing market economy, albeit one with a corrupt and non-democratic state. This growth, however, was to a large extent driven by the increase in world prices for export commodities and has not been accompanied by the development of political and economic institutions. Additionally, growing resource rents undermine the incentives needed to

build market-supporting institutions and institutions that would ensure political accountability. This implies that Russia's long-term prospects are rather bleak. The economy is doing much better today than it was in 1992, but in hindsight, the reformers might have been in a better position eighteen years ago. Now it is clear what needs to be done but the political elite has no incentive to undertake these reforms. The political equilibrium is unfortunately very similar to that of the late Soviet Union.³⁸ Resource rents tilt the political elites' choice toward preserving the status quo rather than undertaking the necessary reforms.

Thus, despite the apparent similarity in the income dynamics of Russia and South Korea, the development patterns of the two countries are likely to diverge. Russia is precluded from South Korea-like modernization because its resource curse slows the development of its economic and political institutions.

This, in turn, indicates that Russia is very likely to embark on a slow-growth trajectory. Even in the best-case scenario, it will not catch up with advanced economies in the foreseeable future and, in the worst case, Russia will follow the fate of the Soviet Union. ♀

NOTES

¹ The World Bank classifies countries into the upper middle income group if their 2008 GNI per capita, calculated using the World Bank Atlas method, is between \$3,856 and \$11,905. <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20420458~menuPK:64133156~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> (accessed on 23 February 2010).

² Sergei Guriev and Ekaterina Zhuravskaya, "(Un)Happiness in Transition," *Journal of Economic Perspectives* 23, no. 2 (Spring 2009), 143-168.

³ Dmitry Medvedev, "Go, Russia!" 10 September 2009, http://eng.kremlin.ru/speeches/2009/09/10/1534_type104017_221527.shtml.

⁴ In addition to the IMF's World Economic Outlook forecast for Russia (Figure 1), positive growth rates after 2009 are also forecasted by Russia's Ministry of Economic Development (see the forecasts for 2010-2012 as of September 2009 and December 2009, <http://www.economy.gov.ru/minec/activity/sections/macro/prognoz/doc1254407742765> and <http://www.economy.gov.ru/minec/activity/sections/macro/prognoz/prog2010>, respectively, accessed on 23 February 2010, [in Russian]) and by professional economists (see the consensus forecast in "Neft Vsemu Golova", *Vedomosti*, 22 December 2009, <http://www.vedomosti.ru/newspaper/article/2009/12/22/221905> and the Fall 2009 consensus forecast run by the Development Center http://www.dcenter.ru/archive_forecast.htm [in Russian]).

⁵ See the Russian official statistics at the website of the Federal State Statistics Service <http://www.gks.ru/wps/portal/english>.

⁶ European Bank for Reconstruction and Development, "Transition Report 2009: Transition in Crisis?" (2009), <http://www.ebrd.com/pubs/econo/tr09.htm>.

⁷ International Monetary Fund, *World Economic Outlook Database*, <http://www.imf.org/external/ns/cs.aspx?id=28>.

⁸ Central Intelligence Agency, "Russia," *The World Factbook*, January 2010. <https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html>.

⁹ Sergei Guriev and Ekaterina Zhuravskaya, "(Un)Happiness in Transition," *Journal of Economic Perspectives* 23, no. 2, (Spring 2009), 143-168.

¹⁰ Irina Denisova, Markus Eller, Timothy Frye, and Ekaterina Zhuravskaya, "Who Wants to Revise Privatization? The Complementarity of Market Skills and Institutions," *American Political Science Review* 103, (2009), 284-304.

¹¹ Douglass C. North, *Structure and Change in Economic History* (New York: Norton & Co., 1981); See also, Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press, 1990); Daron Acemoglu, Simon Johnson, and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review* 91, no.5 (2001), 1369-401; William Easterly and Ross Levine, "Tropics, germs, and crops: how endowments influence economic development," *Journal of Monetary Economics* 50, no. 1, (2003), 3-39.

¹² Philip Keefer and Stephen Knack, "Why Don't Poor Countries Catch Up? A Cross-National Test of Institutional Explanation," *Economic Inquiry* 35, no. 3, (1997), 590-602; See also, Robert E. Hall and Charles I. Jones, "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" *Quarterly Journal of Economics* 114, no. 1, (1999), 83-116.

¹³ Edward L. Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "Do Institutions Cause Growth?" *Journal of Economic Growth* 9, no. 3, (2004), 271-303.

¹⁴ Dani Rodrik, "Growth Strategies," chap. 14 in *Handbook of Economic Growth*, eds. Philippe Aghion and Steven Durlauf, 1st ed., vol. 1, 967-1014. Rodrik argues that all growth success stories build good institutions such as property rights, contract enforcement, competition and macroeconomic stability, but many do it in a non-conventional way. This view may be consistent with the conjecture that modern China built good institutions, but these are so specific that they are not well captured by conventional measures. Nevertheless, as we argue below, modern China is very different from modern Russia.

¹⁵ For each indicator, Figure 3 presents the percentile of each country among all countries in the respective years. Alternatively, one can look at indicator scores, where the difference between Russia and South Korea is even more striking, but as the indicators are normalized to keep the world average at zero for each year, the relative scores are not easily comparable across years. This is why we present the percentiles. As the coverage of the dataset increases over time to include less developed countries, there is a bias toward improving the 2008 ranking relative to 1997. Hence, Figure 3 underestimates Russia's institutional backwardness.

¹⁶ The data, detailed definitions, and sources for each of these variables are presented at <http://www.govindicators.org>. See also, Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi, "Governance Matters V: Aggregate and Individual Governance Indicators for 1996-2005," *World Bank Policy Research Working Paper No. 4012* (Washington, D.C., 2006); Daniel Kaufmann, Aart Kraay, and Pablo Zoido-Lobaton, "Governance Matters," *World Bank Policy Research Working Paper No. 2196* (Washington, D.C., 1999); Daniel Kaufmann, Aart Kraay, and Pablo Zoido-Lobaton, "Governance Matters II: Updated Indicators for 2000/01," *World Bank Policy Research Working Paper No. 2772* (Washington, D.C., 2002).

¹⁷ Transparency International, "Corruption Perceptions Index 2009," (2009), <http://media.transparency.org/imaps/cpi2009/> and http://www.transparency.org/policy_research/surveys_indices/cpi/2009/cpi_2009_table.

¹⁸ Ibid., http://www.transparency.org/policy_research/surveys_indices/cpi/previous_cpi/1998.

¹⁹ Edward Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "Do Institutions Cause Growth?" *Journal of Economic Growth* 9, no. 3, 2004, 271-303.

²⁰ See Figure 5.

²¹ Ibid.

²² Seymour M. Lipset, *Economic Development and Political Legitimacy* (Bobbs-Merrill, 1959).

²³ European Bank for Reconstruction and Development, "Transition Report 2009: Transition in Crisis?" (2009), <http://www.ebrd.com/pubs/econo/tr09.htm>; See also, Sergei M. Guriev, Alexander Plekhanov, and Konstantin Sonin, "Development Based on Commodity Revenues," *European Bank for Reconstruction and Development Working Paper No. 108* (2009), <http://ssrn.com/abstract=1520630>.

²⁴ Richard M. Auty, *Sustaining Development in Mineral Economies: The Resource Curse Thesis* (London: Routledge, 1993); Macartan Humphreys, Jeffrey D. Sachs, and Joseph E. Stiglitz, eds., *Escaping the Resource Curse* (New York: Columbia University Press, 1993).

²⁵ Georgy Egorov, Sergei M. Guriev, and Konstantin Sonin, "Why Resource-Poor Dictators Allow Freer Media: A Theory and Evidence from Panel Data," *American Political Science Review* 103, no. 4,

(2009), 645-668. Egorov provides an example of this trade-off for the case of media freedom in non-democratic countries using a simple theoretical model and a cross-country panel dataset.

²⁶ Igor Fedyukin and Sergei Guriev, *Challenges 2020: The View from Russian Business* (Moscow: New Economic School, 2008), http://www.nes.ru/files/Challenges_2020_eng.pdf.

²⁷ Medvedev, "Go, Russia!"

²⁸ Fedyukin and Guriev, http://www.nes.ru/files/Challenges_2020_eng.pdf.

²⁹ See Putin's programmatic speech cancelling direct gubernatorial elections and announcing other drastic centralization reforms on 13 September 2004, <http://vip.lenta.ru/doc/2004/09/13/speech/>

³⁰ Ekaterina Zhuravskaya, "Federalism in Russia," *Russia after Crisis* (Washington, DC: Peterson Institute for International Economics, 2010).

³¹ Georgy Egorov and Konstantin Sonin, "Dictators and Their Viziers: Endogenizing the Loyalty-Competence Trade-Off," *Journal of European Economic Association* (forthcoming 2010).

³² See, for instance, Jodi Koehn's summary of the lecture "The Impact of Putin's Reforms on Russia's Governors," given by Robert Ortung on 15 October 2001 at the Kennan Institute (http://www.wilsoncenter.org/index.cfm?fuseaction=events.event_summary&event_id=3900).

³³ The prospect of unification of the North and the South will undoubtedly create some pressures for creating a federalist system in South Korea.

³⁴ <http://premier.gov.ru/anticrisis/1.html>

³⁵ There are also intermediate policies such as support of mortgage market, 60 billion rubles (US\$2 billion) and support of small business, 36 billion rubles (US\$1 billion)—which support both the enterprises and the socially vulnerable households.

³⁶ Jeung-hyun Yoon, "Timely Steps Propel Korean Economy," *Korea Times*, 26 October 2009.

³⁷ Antonio Spilimbergo, Steve Symansky, Olivier Blanchard, and Carlo Cottarelli, "Fiscal Policy for the Crisis," IMF Staff Position Note 08/01 (Washington, DC: International Monetary Fund, 2008), 29 December, 2008

³⁸ Yegor Gaidar, *Collapse of an Empire: Lessons from Modern Russia* (Washington, DC: Brookings Institution, 2007).