NBR-HUDSON INSTITUTE DISCUSSION WORKSHOP:

RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS

April 24, 2008, Washington, D.C.

NBR THE NATIONAL BUREAU *of* ASIAN RESEARCH
Informing and Strengthening Policy in the Asia-Pacific

NBR-Hudson Institute Discussion Workshop, Washington, D.C., April 24, 2008

Russia's Political Economy: Trends and Implications

Organization of the Report

RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS

Workshop Summary

SUMMARY REPORT FOR NBR DISCUSSION WORKSHOP ON
"RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS"

THURSDAY, APRIL 24, 2008, THE HUDSON INSTITUTE, WASHINGTON D.C.

Introduction

The *Global Trends 2020* report on Russia identifies the "tension between resource dependence and economic diversification"[1] as the key economic challenge facing Russia today. Russia's increasing dependence on resource extraction for economic wealth at the expense of investment in human resources and capital not only bears inherent risks for Russia's ability to sustain domestic economic prosperity and stability in the long run, but also has significant implications for Russia's future political outlook and foreign policy framework. The disturbing characteristics of Russia's emerging political economy, compounded by its rent-seeking tendencies and indicators of a looming demographic and health crisis, posit cause for concern both within Russia as well as in the international community.

Building on its past and current initiatives assessing trends and developments in Russia's infrastructure, demography, political and economic culture, and foreign policy, The National Bureau of Asian Research (NBR), in partnership with the Hudson Institute, hosted a one-day discussion workshop on April 24, 2008, addressing "Russia's Political Economy: Trends and Implications." Workshop panelists investigated the complex and dynamic forces shaping Russia's emerging political economy, and the implications thereof for Russia's domestic and foreign policy outlooks. This workshop was particularly timely in the context of Russia's recent presidential elections and the implications of current trends and policies for the post-Putin era.

Workshop panelists discussed and assessed the complex interplay among social, economic, and political pressures impacting Russia's political economy today, their influence on Russia's emerging domestic and foreign policy environments, and the attendant implications for current and future U.S. policy toward Russia. Panelists addressed trends and challenges in Russia's demographic pressures; human resource sectors, particularly in the areas of health and education; domestic natural resource development; public finance infrastructure; and domestic and foreign policy outlooks, and assessed the confluent influences of these forces on shaping Russia's emerging political economy.

This report provides a summary analysis of the workshop discussion with main findings and key policy implications from each discussion panel. The summary report is followed by papers prepared for the workshop.

[1] National Intelligence Council, *25 April 2004: Global Trends 2020 Workshop Summary: Russia* (Discussion paper – does not represent the views of the U.S. Government), http://www.dni.gov/nic/NIC_2020_2004_04_25_intro.html.

Panel 1: Russia's Demographic Challenges

Russia's population decline is distinct from similar phenomenon in other industrialized countries, and masks chronic underlying problems in Russia's governance and health care systems. The country's population decline is characterized not only by decreasing fertility rates, but also by high mortality rates and worsening health indicators compared to the Soviet era; younger generations in Russia are less healthy than prior generations. Russia's declining population trends pose an alarming risk to the country's future, particularly in terms of human resource investment potential in light of Russia's recent rapid economic growth and expansion. While the Russian economic and financial infrastructure today is predominantly dependent on natural resource wealth, human resource investment is critical for the long term health of most economies. Thus, Russia's declining population posits a risk not only for the physical well-being of the nation, but also for the country's long term economic health. While demographic considerations have been a central theme in Russian political rhetoric, neither those in power nor mass public opinion are effectively positioned to cope with Russia's demographic challenges. While not lacking in political will,[2] the Russian government's approach to resolving the population dilemma has been ideological and populist, rather than practical, often relying on ineffective measures based on mistaken projections and assumptions.

Key Findings

- Although hailed by the government, Russia's "Concept of Demographic Policy in the Russian Federation until 2025" is unpopular among experts and academics, who view it as primarily a political tool and are skeptical of its ability to achieve its stated goals.
- Contrary to most developed country cases that demonstrate a strong direct relationship between increasing economic welfare and improved health indicators, the Russia case reveals an inverse relationship whereby as economic output has increased, the country's overall state of health has actually declined.
- The chief proximate causes of death in Russia are cardiovascular disease and from injury and poisoning. Although there is a strong correlation between morbidity and alcoholism, there is no clear government policy to address this problem, and no proper controls are imposed; the issue of alcoholism is not even addressed in the official concept paper.

Policy Implications

- There are likely to be more ambitious plans like the 'Concept' on issues of health and public policy emerging from the Kremlin in the near future. However, real reform is unlikely to occur as long as the government continues to favor politically pleasing projections that appear effective but do not allow for effective and efficient reform, rather than on objective expert analyses and realistic demographic projections to inform policy.
- Russia would do well to follow the example of its Eastern European neighbors, which experienced an increase in health indicators in the post-Soviet era directly correlating with a sharp increase in GDP and health and education investment. If the Russian government were to likewise prioritize planning and investment in the country's health and education sectors, improvements would occur.

[2] Despite a presidential commitment by Putin in 2006 to reduce mortality, encourage migration, and increase the birth rate, while debates on fertility rate and migration are popular in Russia actual health improvement policies remain unclearly defined at official levels.

Panel 2: Trends and Policy Priorities in Russia's Health and Education Sectors

Russia has been both a beneficiary and a victim of the global resource boom, and it will be hard to change the trajectory of the Russian economy or its health and education sectors as long as this remains the case. Shortcomings in Russia's education system have led employers to report a dearth in qualified workers with appropriate expertise, exacerbated by a declining population. Russian mortality rates remain high, and contribute to intensifying the existing trends toward a dwindling population. While Russia's current fiscal surplus enables the government to proclaim and launch ambitious programs to tackle the country's health and education challenges, there is a lack of effective and cohesive planning in policy implementation. Despite the state's financial commitments to addressing the problems, the fundamental weaknesses in Russia's health and education sectors remain. Monetary investment without real reform has led to chaotic expenditures driven by political expediency and rife with nepotism and corruption. This endemic inefficiency is further exacerbated by a general ambivalence toward internationalization and modernization, as Russian academic elites remain complacent in their belief that the Russian education system is still one of the best in the world.

Key Findings

- Notwithstanding critiques against Russian healthcare, there have been some encouraging indicators in recent years; however, unless the government follows through on its healthcare rhetoric, the recent optimism over Russia's health and demographic wellbeing will likely be temporary and unsustainable.
- There is some indication that the 2005 Priority National Health Project (NHP), the centerpiece of Russia's health reform agenda, will be adopted in some form as a permanent federal program. Most improvements in Russia's health status can be attributed to the economic growth and health reforms initiated under Putin.
- Unhealthy Russian societal practices, particularly bad diets and high levels of substandard alcohol consumption, remain significant barriers to improving Russia's overall health status. While there is some recognition that healthcare reform alone is not enough to reverse current mortality trends, this is not a majority view and the national project does nothing to effect a lifestyle change, even though poor lifestyle habits account for a quarter of mortality incidents.
- Education is increasingly regarded in terms of enhanced social and cultural capital, rather than the acquisition of practical, job-enhancing skills. This may be due to the increasing disconnect between the education offered in Russian academic institutions and the actual needs of the job market as, increasingly, graduates end up working in areas not of their academic specialization.

Policy Implications

- The decline in Russian education quality standards has important implications for the country's productivity and economic competitiveness. Businesses constantly report difficulties in finding qualified candidates for jobs. While Russia's current economic strength is mostly due to high resource prices, once these prices start declining, the absence of a knowledgeable, innovative, and healthy workforce will seriously threaten and undermine Russia's competitiveness in the global economy.

Panel 3: Trends and Policy Priorities in Russia's Natural Resource Development

As a resource state, Russia invites skepticism as to the long-term sustainability of its growth, particularly in light of "resource curse" and Dutch disease theories. From an economic perspective, a strong energy sector will ensure Russia's continued growth trajectory in the short term, despite its endemic political, health, and demographic challenges. The Russian economy is more complex and differentiated than a "resource curse" label would imply, and there is sufficient growth and development remaining to be achieved in the non-resource sectors of Russia's economy to prevent it from getting Dutch disease. The most pressing problems Russia faces in the current and near term are inflationary pressures and growing inequality, particularly the latter as current levels of inequality growth indicate an increasing number of poor and disenfranchised, leaving the country potentially vulnerable to political challenges that the Russian state is not ready or ill-equipped to handle. Long-term sustainability, on the other hand, remains an unclear question, particularly in the event that oil and gas extraction becomes hard and more expensive thereby impelling a reduced dependency on natural resource-based wealth. This is a possible eventuality that the Russian government needs to seriously plan for and, toward this effort, take corrective measures to address current systemic weaknesses. Significantly, despite plans to diversify in technological and human capital, there has been little improvement in Russia's competitive capability in cutting edge industrial sectors.

Key Findings

- Russia is investing in the development of many sectors, including construction, retail and manufacturing, thereby contributing to improved living standards. While there is postponed development in the oil and gas sector, Russia continues to invest money wherever there is potential for a short-term political and/or economic pay-off.
- Unlike most oil exporters, Russia has a developed industrial base, and is endowed with both oil and natural gas resources. Further, the high percentage of manufacturing in Russia's GDP indicates that Russia has not fallen victim to the Dutch disease.
- Russia cannot be assessed in terms of Dutch disease presently because of continued growth in manufacturing capacity, as well as in its services and construction sectors. These indicators show that oil wealth is being spent in non-tradable, internal activity. Russia's fiscal policy is akin to Norway's (a stable, successful oil economy) rather than Nigeria's (a volatile and unstable oil economy).
- Russia's political economy differs in four major ways from the typical resource-curse model: i.e., in terms of state tradition; pluralism of ownership; dual energy sector; and a strong manufacturing base.

Policy Implications

- Russia needs to be assessed in a different light than through the normal paradigm of the "wealth leads to democratic tendencies" path. The Kremlin's fusion of state and oligarchic power renders hopes of trickle-down economics very dim in Russia. Although Russia generates immense wealth from its energy revenue, this wealth is not transmitted to the general populace. As corporations have been acquired and are managed by the central government, the population does not benefit from the windfall of Russia's energy wealth as might be expected; small businesses and independent operations, in particular, are squeezed.

Panel 4: Trends and Policy Priorities in Russia's Public Finance Infrastructure

The fortunes of Russian public finance are closely tied to world oil prices. While this may not pose problems in the short run, to evade a crisis in the long run, Russia will need to diversify its economy before its supplies of oil and gas run out. However, oil prices and demand are not likely to decline anytime soon, and a commodities crash is unlikely; hence, Russia is well-positioned to experience a conservative 6-7 percent growth in 2008, despite the global economic slowdown. While Russia's economy is exploding from its energy revenue, the country's public finance infrastructure, which is generally inefficient and particularly vulnerable in the civil service and pension sectors, needs significant reform. Reform efforts thus far have been based on fiscal centralization under Putin, akin to centralization in all other sectors of the Russian government. However, this trend risks hurting Russia if continued. Russia's main short term concerns are with regard to its public finance infrastructure and general institutional weaknesses (e.g., vis-à-vis property rights, corruption, and education), rather than with its economy. Theoretically, Russia can continue to sustain high growth rates in the foreseeable future as long as it addresses its institutional shortcomings; however, without effective decentralization by the government, which continues to impose a tight hold on all sectors, real change will be very hard to achieve.

Key Findings

- Russian reforms were planned with gloomy prospects of a debt peak in 2003; to address this, Russia implemented a policy of fiscal consolidation and centralization of revenue from regional governors. While this policy may have been beneficial in the short run, it adversely affects the ability of provincial governments to provide public services and infrastructure.
- Though the ruble has appreciated considerably of late, there is no evidence of an overvaluation of the ruble, indicating a lack of Dutch disease. In fact, there is no reason to believe that the ruble cannot sustain further appreciation.
- Even as Russia possesses the fiscal resources to achieve reform and productivity, it lacks efficient state machinery to enable changes in public finance, further hampered by the state's continued centralization of power and revenue. Insufficient coordination and poor linkages between various reform initiatives are the most pressing problems Russia needs to tackle in order to enable reform and support public services.
- Russian health, demography, and public finance are inextricably linked. While an increase in the retirement age by five years would solve the pension crisis, it would also push the retirement age beyond current Russian life expectancy.

Policy Implications

- Russia's current economic strength and fiscal security provides no incentive for any Russian administration to scale back centralization and initiate widespread reform. A Russian authoritarian central government is here to stay as long as Russia continues to receive large amounts of oil revenue; only a threat to the state's revenue-generating capacity would incite the government to initiate change.
- If Russian administrations manage to improve the institutional inefficiencies, Russia's economic power and influence has the potential to parallel the trajectory of a rapidly developing Japan in the 1980s, emerging as a multi-sector, global competitor to the United States and China.

Panel 5: Impact of Russia's Resource-based Economy on Russia's Regions

Russia's heavy dependence on natural resource wealth (from not just its energy sector but also its mining and other raw materials sectors) has both good and bad implications for the development of Russia's regions, as well as for the Russian political economy as a whole. While resource wealth has led to large revenue generation, current account surpluses and strong economic growth, it has also resulted in an inflexible and increasingly authoritarian central government that has become complacent with its revenue base at the risk of ignoring critical economic diversification needs, the implications of climate change, and the impact of intensifying regional inequities (particularly in the Russian Far East) that could threaten to destabilize Russian society and economy in the future. In order to evade becoming a "resource-cursed" state, the Russian government needs to realign its national priorities, currently solely geared toward energy and economic growth, to accommodate environmental regulation and consider loosening its grip on its provincial governments. Currently, Russia faces two region-oriented threats due to its resource-based economy: 1) regional disparities and lack of diversification; and 2) lack of climate change policy at the risk of ignoring serious negative implications that climate change could entail for the Russian economy.

Key Findings

- There is a huge inequity between Russia's resource-rich and resource-poor regions. Though civil society has the potential to alleviate Russia's problems, the Putin administration's zero-sum approach to power sharing between the center and provinces has resulted in the centralization of power within the Kremlin at the expense of pursuing institutionalization of genuine federalism.
- The bulk of Russia's revenue comes from natural resource rents, not taxes; hence, the Russian government can afford to be less responsive and accountable to its citizens, reinforcing the emasculation of Russia's regional governments.
- Temperature increases due to climate change will adversely affect Russia's energy sector, as well as greenhouse gas emissions, with serious implications for Russia's resource-based political economy.
- The central remedy to safeguard Russia is economic diversification and, consequently, a more equity-based regional development policy to evade a Nigeria-style fragmentation, systemic corruption, and political instability.

Policy Implications

- Russia's ratification of the Kyoto Protocol, in contrast to the United States' failure to do so, has partly contributed to Russia's image as a multilateral player in tacking climate change and reinforced the image of the United States as an uncooperative unilateralist. This has played into the Kremlin's staunch anti-Western stance and helped fuel the trend. The politics of the Kyoto agreement are a microcosm of the larger political atmosphere.
- Putin has promised to allocate more money to rebuild the military both for security and as economic stimulus; the budget is set to increase 20 percent in 2008. In terms of Russia's regional perspective, certain politicians see Russia's Far East regions as being at risk from dynamic Asian neighbors such as China. Russia will need to strike a balance between strategic friendship with China, while remaining mindful of China's growing military might along their common border.

Panel 6: Impact of Russia's Resource-based Economy on Russia's Domestic Politics and Foreign Policy Outlook

Russia's resource-dependent political economy has enabled its increasingly powerful central government to use the revenue and power generated from high energy prices to further consolidate power in the seat of the Presidency as the most important authority in Russia. Russian politico-economic rhetoric is increasingly focused on the West as an enemy as the principal justification for Putinism. Further, Russia's domestic and foreign policy is geared toward keeping energy prices high, and strategically exploiting the leverage offered by its energy wealth, to benefit the Kremlin's interests. The Russian government is very influential and has sought political and commercial alliances with the largest energy companies in the country, gradually bringing them, and the oligarchs at their head, under central control. The result is an astonishing concentration of wealth in the government that has enabled it tremendous leverage in politics and in foreign policy, bypassing the need for a truly democratic system as legitimacy for the Kremlin. The argument that the development of such a form of authoritarian capitalism in Russia is more important than full democracy (in hopes that increased wealth will itself spread across the economy and promote democratic tendencies) is unfounded, as it ignores the actual nature of Russian capitalism. Rather than achieving a dynamic and transparent market economy, Russian capitalism has exacerbated the merging of government and corporate power, and the institutionalization of corruption. The Russian system will hamper Russia's evolution into a successful post-industrial society, and the system is unlikely to survive given its inherent vulnerabilities.

Key Findings

- While incoming President Medvedev's speeches may hint at attempts to achieve economic liberalization and return to reforms, regardless of his intentions, real changes are unlikely given his lack of true leverage in many policy areas.
- The Putin system cannot hope to follow a Pinochet-like model of introducing liberal reforms under an iron fist as in Chile or certain Southeast Asian countries, as these countries were transitioning from agrarian to industrial societies. Russia, however, is transitioning from industrial to post-industrial society and cannot be judged by the same parameters.

Policy Implications

- Kremlin advisors make no secret of Russia's intention to keep oil prices as high as possible by prolonging tensions in the Middle East, especially Iran. A best-case scenario for the Russians would be preemptive Israeli action to hurt Iranian nuclear facilities: this would disarm Iranian nuclear ambitions and would inflate oil prices due to the political fall-out, both outcomes very much in Russian interests.
- It is a mistake to assume that Russian inefficiencies and inertia to reform are merely due to Putin's authoritarianism: there is such an underlying belief among Russia's political elite that Russia's economic growth and achievements are evidence of the efficacy of the government's approach that the government has grown complacent, leading to an apathetic "Russian disease" of sorts.

Summary Conclusion

Russia's economy has performed exceedingly well in the past decade, with most of the growth owed to its vast natural resource wealth. The high price and demand for oil and natural gas have enabled Russia to capitalize on its resource wealth, and contributed to sustained increases in Russia's GDP. As the value of energy resources has grown, so too has Russian reliance on energy exports as the chief determinant of its economic well-being.

Yet, while the economic boom has been beneficial to Russia, it has also fostered an increasingly authoritarian government that has grown ever more complacent. Russia's currently high levels of resource wealth have enabled the government to ignore most other endemic inefficiencies in Russian governance, and to consolidate centralized power at the expense of democratic processes. Though Russia is in no economic danger in the short term, its long term growth potential, and indeed the health of its socio-economic fabric, will be threatened when Russia either runs out of resources or when global demand and oil prices decrease. For Russia, the chief vulnerabilities, then, are political complacency and a lack of economic diversification. These vulnerabilities are compounded by Russia's looming demographic problems in the face of a declining population and the concomitant challenges of a healthy and viable critical mass working force to contribute to long-term sustainable growth.

Though Russia has not fallen to the level of most other resource dependent states, such as Nigeria, the Kremlin's policies of monopolizing rent and centralizing control have had negative effects beyond the strictly economic and political spheres. Russia inherited inefficient policy practices in critical public sectors such as education, health, and environment from the Soviet era. Russia's resource-wealth driven GDP growth and sustained economic surplus in recent years has allowed the government to ignore these systemic inefficiencies and other internal vulnerabilities, and at the same time strengthen its powerbase at the center at the expense of Russia's regions. In the long term, however, faced with the challenges of a declining population and lack of a diversified economy, Russia needs to shift priorities to accommodate planning for a non-resource based economy.

It is apparent that the Putin style of over-managed democracy, while increasing short-term returns, has made Russia more vulnerable vis-à-vis long-term future stability. At the same time, given the benefits accrued to the government from this very centralized power, it remains unlikely that the system will change any time in the near future. Ironically, the seat of power in the Presidency necessitates a leader willing and open to initiating real reform for any effective change to take place. Whether Medvedev is—or can be, since he still sits in Putin's shadow—this leader remains unclear.

RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS

WORKSHOP DISCUSSION PAPERS

PAPERS PREPARED FOR NBR DISCUSSION WORKSHOP ON
"RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS"

THURSDAY, APRIL 24, 2008, THE HUDSON INSTITUTE, WASHINGTON D.C.

PANEL 1: RUSSIA'S DEMOGRAPHIC CHALLENGES

RUSSIA'S DEMOGRAPHIC CHALLENGES AND POLICY RESPONSE

Sergei V. Zakharov

Sergei V. Zakharov is Deputy Director of the Institute of Demography at the State University "Higher School of Economics', Moscow. Dr. Zakharov's fields of research include demographic transition, demography of Russian generations, and demographic consequences of social crises. He has a Ph.D. in economics of population and demography from the Institute for Socioeconomic Studies of Population, Russian Academy of Sciences.

Executive Summary

Summary
The chief demographic pressures in Russia center around a declining population; low fertility rates and a very high mortality rate combine to pose significant challenges for an economically resurgent Russia. Demographic considerations are a central theme in Russian politics; however, neither the political forces in power nor mass public opinion is prepared to cope with the demographic threats. The Russian demographic policy in response to these pressures includes a primary goal to first stabilize and then begin increasing the population by 2015; nevertheless, the Kremlin's goals are very unrealistic and the government's approach to resolving the population decline has not been practical, but ideological and populist, relying on ineffective measures based on mistaken projections and assumptions.

Key Findings

- In 2006, President Putin listed the top demographic priorities for Russia as: a reduction in mortality, increasing migration into Russia, and an increase in birth rate. The debates on fertility rate and migration seem to be very popular in Russia, while health improvement policies are not clearly outlined at official levels.
- Russia's demographic policy is outlined in a concept paper adopted by the government, entitled "Concept of Demographic Policy in the Russian Federation until 2025"; though hailed by the government, it is unpopular amongst experts and academics, who believe it to be a mere political tool and incapable of achieving its goals of stabilization and population increase by 2015.
- The only variable that may theoretically help achieve the Concept's population goals is migration: if net migration into Russia were sustained at four times the current levels, then it would be possible to stabilize the population. However, both practically and politically, these levels are too high to offer any realistic prospects for implementation.
- With the goal of stimulating fertility, one of the government's chief programs has been the innovative "maternal capital" measure, which gives cash and non-cash incentives for mothers. The implications of maternal capital are still debated, but many experts believe that the policy will have the effect only on the timing of fertility rather that on the total size of families; as such, the effect of maternal capital on long term population decline is expected to be small.

Policy Implications

- There will likely be more ambitious plans like the 'Concept' and similar ones in health and public policy that will emerge from the Kremlin in the future; with Russia's recent rapid growth and development, the Russian political elites are intent on formulating a new national identity towards a "bright" future. However, deep reform is unlikely to occur despite overtures to the former because the central government is not likely to rely on purely objective expert analysts in its projections, but rather on politically favorable projections that appear effective but do not allow reform to proceed with efficiency. Essentially, the Russian government ensures the appearance of trying hard while still retaining strong control over changes.

Introduction

While the 20th century witnessed an explosion in world population, the 21st century is likely to be characterized by a great new resettlement of peoples. Although this perspective is becoming apparent today, it is little understood by the policymakers and analysts who are shaping the strategies for the new century. As it enters the third millennium, Russia remains hostage to generals and their preparations for a war of the past, with traditional stratagems, concepts and legal notions reminiscent of the 20th or even 19th century.

The new global demographic situation is challenging all countries as never before, especially those countries with alarmingly low fertility rates. The current demographic situation in Russia, though similar to common pressures experienced by most European countries, can still be characterized as uniquely Russian. For example, adverse long-run mortality trends, usually not seen in advanced societies, are a huge problem in Russia and are representative of some of the unique features of Russian demographic challenges. However, Russia also faces risks from the more universal list of demographic challenges peculiar to most European countries, such as sustainable negative natural increase, ageing, structural changes of labor force, and immigration pressure. More important, though, is that neither Russian political forces in power, nor mass public opinion or influential expert circles are currently prepared for coping with such threats.

The "Concept of Demographic Policy in the Russian Federation until 2025",[3] adopted by the government and signed by President Putin in October 2007, is an extremely interesting document, especially in a domestic climate where new Russian political elites are set to formulate a new idea of national identity and "the bright" way for Russia's future social and economical development in an increasingly globalized world. For the first time in a long while, Russian political rulers have taken the liberty of setting goals, within a set timetable, for definite quantitative parameters of fertility, mortality, migration and population change in general. In order to counteract the current population decline in Russia, the "Concept 2007" declares that the primary demographic goal is to first stabilize Russia's population by 2015, and then begin achieving positive population growth thereafter. However, as this paper will highlight, even with applying the most optimistic of the Concept's fertility and mortality projections, it remains highly improbable that these goals will be achievable.

In evaluating the recent Concept of Demographic Policy in Russia, it would be apt to describe it as a populist ideological document that, based on out-dated theoretical assumptions and incorrect calculations and projections, sets up utopian goals and proposes ineffective measures.

Quantitative Critique of Russia's "Concept of Demographic Policy"

Projections that have been made using planned indicators set up by the Concept do not give any more validity to the Concept's central idea that the Russian depopulation trend can be reversed by 2015. The accompanying data in the appendix shows the inherent difficulty in achieving just stabilization itself, let alone a growth in population within the next 7 years.

[3] See: http://demoscope.ru/weekly/knigi/koncepciya/koncepciya25.html.

The only variable (see Figures 2 and 3) that may give us some optimism with this regard is immigration: if Russia sustains a very high level of net immigration four times as high as the current level, then stabilization may be realized. However, not only is that an unrealistic hope, but the concept paper's immigration projections themselves forecast a much lower rate than the aforementioned, making the Concept's goals even less viable.

Qualitative Critique of Russia's "Concept of Demographic Policy"

Demographic considerations were a central theme in President Putin's political address to the Federal Assembly in May 2006. Putin listed the priorities in the following order: a reduction in mortality; making Russia a more attractive destination for immigrants; and an increase in the birth rate. While a particular emphasis is placed on the need to stimulate the birth rate, policies concerning replacement migration and aimed at improving public health are not articulated clearly at the official level. The debates over boosting fertility and the necessity of attracting migrants, however, are going on at all levels: among experts, in the mass media, and among legislative and executive authorities.

At the end of 2006, the legislative and executive organs made all necessary decisions and, in 2007, the new measures came into force. Thus, stimulating fertility became the "idée fixe" of top authorities, the regional administrations, and some civil society movements under the Kremlin's control. All measures that came into force in 2007 are the work of Putin's Administration and the Ministry of Health and Social Development. Sceptical comments and constructive proposals of professional demographers and economists were absolutely ignored. Furthermore, a series of discussions and "round tables" with experts served only as a mere formality to endorse decisions that had already been made.

While the size of federal public benefits was significantly increased, the basic system of measures did not undergo any significant change, particularly if seen in light of the continued effort to strengthen the role of regional authorities in bearing the financial responsibility for family policy.

The only innovative measure of "Putin's policy" is the introduction of the so-called "maternal capital", directly oriented to "elevate" or "stimulate" fertility. This specified that 250,000 roubles ($9,600 or 7,200 Euros at the exchange rate of March 2007) be paid to a special individual account for mothers who give birth or adopt a second child starting in January 2007 (the average nominal monthly salary in Russia in 2006 was about 11,000 roubles). The measure also includes mothers who have not previously made use of this benefit, and to mothers of a third or subsequent child. A non-cash benefit is paid once in a mother's life and may be spent only three years after the birth of the child for one of the following purposes: private education for a child of any parity; obtaining housing in the Russian Federation; or the formation of pension investments. Partial expenditure of "maternal capital" is allowed each calendar year and in any proportion for the established purposes.

It is important to note that the authorship of "maternal capital" as an innovative measure is unknown in expert circles. Not one of the variants of the conceptions worked out for "Demographic Policy in the period 2015-2020," presented to a wide circle of specialists for

expert evaluation in 2005-2006, mentioned this measure.

Worldwide, experts argue that the aforementioned policies may indeed have an effect on families, but that the effects will tend to be of a small magnitude and may possibly impact only the timing of fertility rather than the size of the family. Considering these empirical results, the popularity of baby bonus schemes among governments and politicians, as a way of encouraging fertility, is difficult to understand. While the additional financial support is bound to be welcomed by parents, the overall effect on long-term trends in fertility is likely to be small.

Econometric studies which use reliable representative Russian data show a weak elasticity of fertility in response to individual and household income increase. As in many other countries, in Russia, measures of financial support to families contribute, at best, to alleviating the poverty problem rather than to boost fertility.

Pessimism of Theorists, Optimism of Policy Makers, and Common Sense of People

Among popular theories seeking to conceptualize low fertility (such as Demand or Rational Choice Theory, Risk Aversion Theory, Theory of Post-materialism, Second Demographic Transition Theory, or Gender Equity Theory), none provide a positive answer to the key question of whether it is likely that, in the near future, fertility may increase to the level that ensures a replacement level of population in those countries where such a level has not been observed for several decades (i.e., in the majority of developed countries in the world). The major contradiction of contemporary fertility trends results from the need for families to balance careers and family life: the two are competing for an individual's time, and the prevalence of choice for one or the other has important implications for the number of children born. A more successful careerist, by and large, turns out to have fewer children. And conversely, a more successful parent likely has more children, but often at the expense of career opportunities.

Since individual families experience the career vs. family conflict in a variety of diverse ways, depending on each family's individual situation, the government policy is not sufficiently effective in promoting fertility even in the rare instance that it follows sensible recommendations. In principle, the government policies cannot take into account the vast variety of factors affecting individual life choices, and the number of different interests of all social strata in a society. Moreover, measures seeking to influence just an increase in fertility by itself prove far less effective than a broader policy seeking to increase instead choice in the field of childbearing. Finally, as comparative analyses of developed countries show, a policy may have a negative impact in cases when, in order to encourage increased child-bearing, it focuses on appealing to 'traditional family values', or, in other words, when it seeks to support a traditional marriage, traditional gender relations, and traditional education in families and in labor markets.

So, we can argue that the Russian government's current policy strategy to boost birth rates will hardly prove effective because it is based on poor measures: an increase in financial transfers to support families with children may hardly compensate for growing children-related expenditures; the government will never succeed in "purchasing" a second and third child for any amount of financial incentive it offers. Fundamentally, the family policy is doomed to ineffectiveness, because it is based on three naïve assumptions: a) that the return to former traditional family

values and morals of the past in Russia is possible; b) that Russian families have few children because on average the standards of living in Russia are low; and c) that today the Russian state has resources to offer to the Russian youth and to improve their living situation to such a degree that it would avert young people from education and career, towards, as in former times, marriage and earlier child-bearing.

One can only wonder as to where policy makers find a source for optimism not shared by experts. At the same time, if a government policy has populist origins would politicians be inclined to welcome critiques from the academic professional community?

It is important to note that public expectations regarding number of births correlate badly with policy makers' optimism, and are more in line with the experts' pessimistic forecasts. According to a survey which was conducted in spring-summer 2007 in an international study of the "Generations and Gender" Program (including more than 11,000 respondents of both sexes from 32 Russian provinces including Moscow and St. Petersburg), people, understandably, welcomed an increase in family allowances and financial help they currently receive from the government. However, the survey data did not provide any evidence that fertility would grow accordingly. Here are responses that respondents gave to a direct question: "How would Policy Measures-2007 affect your childbearing-related behavior?" [4]

- Would have as many children as planned but sooner then planned – 10%
- Would have, perhaps, more children than planned – 8%
- Will certainly have more children than planned – 1%
- Measures will have no effect: respondents will not change their plans regarding number and timing of births – 81%

Such individual expectations are not sufficient for achieving TFR goals by 2015 as targeted in the official Concept. Since fertility rate is crucial to a revitalization in population, therefore, the prospect of population stabilization by 2015 can prove even more unrealistic than it seems to specialists today. Even if families decide to give birth earlier than planned while keeping the overall number of children the same, the greater the likelihood that in the near future, because of current changes in birth timing, we will witness plummeting Crude Birth Rate and TFR indicators. As a result, by 2015 we will be observing not a slowing down in depopulation, but, on the contrary, a continuing trend of increasing population decline.

[4] Author's calculations based on data of the Second wave of the Russian Generations and Gender Survey (2007). About International Project GGP/GGS see: http://www.unece.org/pau/ggp/Welcome.html.

Appendix[5]

Table 1: Targets for Total Fertility Rate, Life Expectancy at Birth, and Net Migration in the Concept of Demographic Policy and author's population projections resulted from applying target indicators.

	Total Fertility Rate	Life Expectancy	Net migration, thousands	Author's estimates based on target indicators	
				Total Population, thousands	Natural Increase, thousands
2006 (actual)	**1.31**	**66.7**	**140**	**142.3**	**-710**
2015	**1.70**	**70**	**250**	**139.6**	**-360**
2025	**1.97**	**75**	**350**	**139.1**	**-285**

Figure 1: Total Fertility Rate projections according to plan targets set up by the Concept of Demographic Policy-2007, and high and low scenarios by HSE Institute of Demography: Russia, 2006-2025.

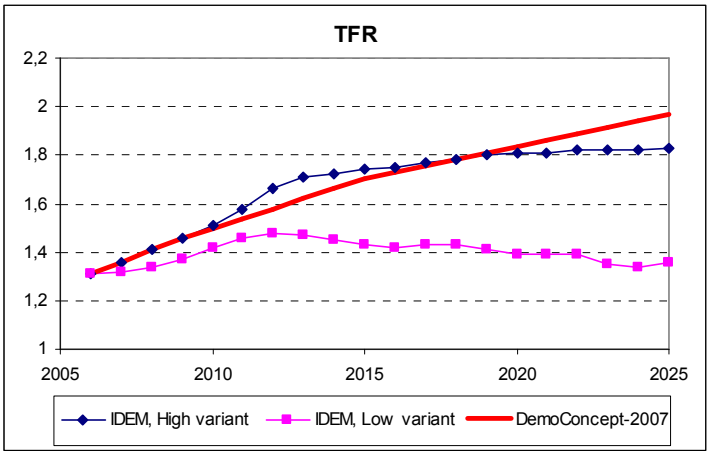
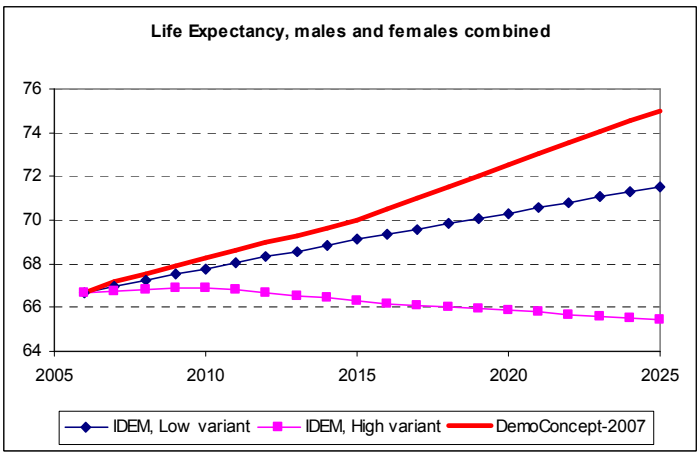


Figure 2: Life expectancy at birth (both sexes) projections according to plan targets set up by the Concept of Demographic Policy-2007, and high and low scenarios by HSE Institute of Demography: Russia, 2006-2025.



[5] All data presented in Table 1 and Figures 1-4 are author's estimates.

Figure 3: Net migration projections according to plan targets set up by the Concept of Demographic Policy-2007, and high and low scenarios by HSE Institute of Demography: Russia, 2006-2025.

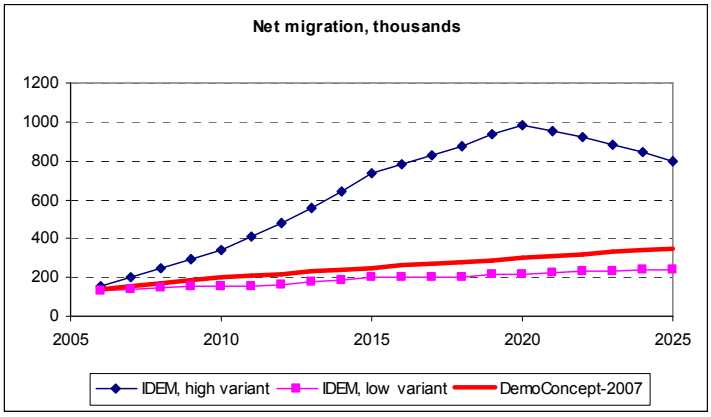
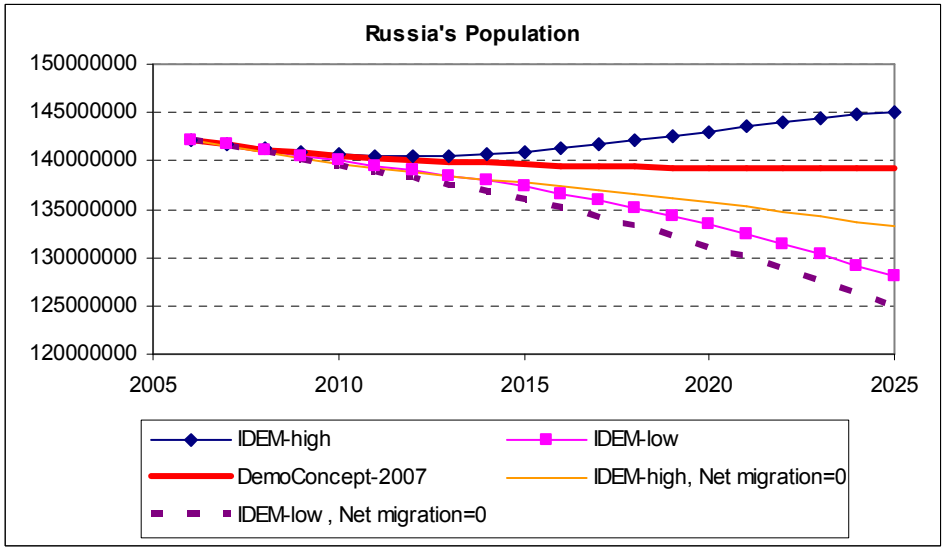


Figure 4: Population projections for Russia according to different scenarios: Low and High variants made by HSE Institute of Demography; Low and High variants with zero Net migration by HSE Institute of Demography; and a variant resulted from applying plan targets for fertility, mortality and net migration set up by the Concept of Demographic Policy-2007.



PANEL 2: TRENDS AND POLICY PRIORITIES IN RUSSIA'S HEALTH AND EDUCATION SECTORS

TRENDS AND POLICY PRIORITIES IN RUSSIA'S EDUCATION SECTOR

Harley Balzer

Harley Balzer is Associate Professor of Government and International Affairs and Associate Faculty Member of the Department of History at Georgetown University. Dr. Balzer's research interests include political economy, Russian domestic politics, education, Russian and Soviet social history, science and technology, and U.S.-Russian relations. Dr. Balzer has a Ph.D. in history from the University of Pennsylvania.

Executive Summary

Summary
The Russian education system has declined in quality since the end of the USSR and is in need of a massive overhaul. While the social elite are able to get good education, for the vast majority of Russians, education suffers not so much from underdevelopment but from "de-modernization" since the Soviet times, in terms of both quality and penetration; degrees are increasingly viewed as evidence of social capital rather than practical knowledge. The underlying problem has been a general ambivalence to internationalization and modernization because the academic elites are convinced that the Russian education system is still one of the best in the world. In order to plan for long term sustainability in Russian development, the government needs to plan for an innovative, knowledge based economy to help Russia move beyond the energy boom era; this is only possible with a well educated and competent workforce.

Key Findings

- Russia inherited a highly uneven system of education from the USSR; economic dislocations following the breakup resulted in a massive system of shadow economy side payments in the provision of public goods.
- Math and science Olympiads in Soviet times identified and recruited the best students; the lack of this positive feature of the Soviet education system represents a serious loss.
- Though the Soviet system had its faults, one of its accomplishments was the establishment of a massive R&D complex and widespread coverage of higher education; one of the most significant problems in Russia today is the lack of coverage, characterized by increasing gentrification: education access is increasingly based on economic circumstances rather than on merit.
- There has been a mismatch between the education offered in institutions and jobs available in Russia: the majority of graduates do not work in their area of specialization.
- Some regard higher education as a formal rationality, as a mark of someone who has acquired social and cultural capital rather than having job-related skills; graduate study is essentially becoming a credential.
- Employers report difficulties in finding qualified workers.

Policy Implications

- As higher education is increasingly seen as a formal credential and as Russian population declines, there is a tremendous pressure on the competing needs for education, employees and conscripts; as a result, the massive increase in the number enrolling in higher education has created a serious problem for the Russian military in meeting conscription targets. The Russian military insists on a necessity of more than one million men in regular service, but are likely not going to be able to meet this target.
- The decline in Russian education quality standards has important implications for Russian productivity and economic competitiveness: businesses constantly report difficulties in finding qualified candidates for jobs. Russia's current economic strength is mostly due to high resource prices. Once resource prices decline, the lack of a knowledgeable and innovative workforce seriously threatens Russia's competitiveness in the global economy.

Introduction

Russia is both a beneficiary and a victim of the current global boom in commodities. It has helped the country to remedy many of the macroeconomic problems of the 1990s, while also creating a slew of well-known difficulties. Like all booms, it will end eventually, through some combination of economic slowdown, new sources of raw materials, and technological innovation (the Stone Age did not end because the world ran out of stones). While the boom lasts, it is extraordinarily difficult for Russia to diversify its economy.

Russian President Vladimir Putin has repeatedly said that diversifying the economy is one of his top priorities. I have no doubt that in the abstract he would like to see Russia diversify into a high technology economy. But getting there will require far more concentrated effort and state capacity than Russia's government has demonstrated in the past decade. Profit margins in the real economy over the past decade are at best one-fifth of the returns in the (legal) natural resources sector. Others will talk about the massive investment needs in the energy sector.

Successful development of a knowledge economy in the medium- to long-term depends on the education system. Russia inherited an extensive and highly uneven system of educational institutions from the Soviet Union. This makes it problematic to think of Russia in the same terms as developing countries, where abundant natural resource endowments inhibit creating basic public goods despite the need for investment in education and health. Yet Russia faces two serious problems, both with roots in the Soviet system.

Firstly, Russia's resource economy has perpetuated and exacerbated a system in which the public goods that were provided tended to be of low quality, with a massive system of shadow economy side payments demanded from all but elite clients. Secondly, despite proliferation of private educational institutions and a discourse of "modernization," the system has not adapted to meet the needs of a knowledge economy, and remains highly resistant to meaningful internationalization that would involve altering traditions and practices that are both ideologically meaningful and economically advantageous to Russian academic elites and to many ordinary members of the education and research communities.

The Soviet Heritage

The Soviet system of free education and health care represented a classic example of "you get what you pay for." Basic services were free, but the quality varied. Outside of special institutions for the elite, side payments were required for anything beyond minimal attention.

In the education system, "presents" for teachers were the norm. Admission to higher educational institutions, which provided draft deferments, frequently involved a system of tutoring for the entrance exams by members of the examining committee or people close to them.

One of the positive features developed in the USSR was a system of recruiting talented young people from across the country for top institutions through contests and competitions. Math and science "olympiads" identified promising students and encouraged them to enroll at the best schools. While not immune to corruption, this system functioned reasonably well, and its demise

represents one of the serious losses since the end of the USSR.

The Soviet system achieved universal literacy; offered day care to 3/4 of children; reached nearly full coverage through "incomplete" secondary education (8 years); but offered only limited opportunities for higher education. There were few universities, but there were many technical and other specialized institutes. Only about 16-18 percent of those graduating from "complete" (10-year) secondary education went on to higher education. An extensive system of vocational (PTUs) and secondary professional-technical education was viewed as the weakest link in the system. Engineers performed much of the work assigned to technicians in other industrialized countries. The one area of expansion since 1990 has been a massive increase in tertiary education, much of it based on formal or informal payments.

Educational content was standardized and involved extensive programs emphasizing memorization rather than creativity. International testing in the 1990s revealed that students from Soviet Bloc countries had command of an impressive amount of information, but performed poorly in solving problems or applying their knowledge in other ways.

Following the breakup of the Soviet Union, the education system suffered severe economic dislocations. These were exacerbated by local officials' behavior. Teachers' salaries frequently were withheld, causing the teachers to go on strike, which allowed the officials to petition for additional funds from Moscow. During many years in the 1990s more than half of the strikes in Russia were by teachers. The large number of these labor actions during summer months suggests a significant degree of collusion.

Natural Resources and Public Goods

The literature on human capital and hydrocarbons tells us that many countries with large natural resource endowments suffer from a "modernization" effect: despite the resource wealth, they fail to invest in public goods like education and health care. The precise mechanism causing this outcome is disputed. Some say that leaders do not perceive the need for education when money can be made so easily. Others attribute the syndrome to a wealthy elite obtaining private education, health care and security for themselves and not demanding (or financing) public goods. A corollary is the failure of resource-based states to develop revenue-extraction capacity that would fund the public goods.

Thorvaldur Gylfasson (2001) has been perhaps the most prolific analyst of the relationship between education and natural resources. He argues that natural resources slow economic growth while promoting income inequality, and that resource-rich countries tend to neglect education. The mechanisms by which this occurs include weakened public and private incentives to acquire human capital; poor policy choices, including inadequate financing for education; and limiting schooling for girls.

Russia is unusual in having reached universal literacy and established a significant system of higher education and a massive research and development (R&D) complex as part of the extensive (if uneven-in-quality) public goods developed in the Soviet era. The problem in Russia is not underdevelopment but rather what might be called "de-modernization." Since the breakup

of the USSR coverage at all but the tertiary level has declined. Day-care is now provided to about 25 percent of children, often for large fees. Secondary coverage has dropped by 10-20 percent. Estimates are that between 1 and 3 million street children (homeless and social orphans) are not achieving basic literacy. These negative phenomena are generally attributed to economic dislocations in the 1990s rather than to a resource curse syndrome. However, the stark social segmentation and decline in public goods provision look similar to conditions in many resource-based economies.

Perhaps the most serious failing, particularly in the past decade of sustained high commodity prices, is the lack of significant modernization or internationalization of the education system. The situation has begun to feel rather Soviet: a government proclaiming major social programs, while on-the-ground reality barely corresponds to the rhetoric.

Modernization of the Education System

Modernization of the education system has been a constant theme since Yeltsin acquired his first education minister. During the 1990s, there was enormous energy and the will to change, but available resources encouraged a survival mentality. Since 2000, the economic situation has improved markedly. However, resistance to change has grown, while much of the support for the modernization project is embodied in one of the four large "National Programs" created in the Putin era. These well-funded initiatives are enormous bureaucratic structures with rigid rules that often force educational institutions to spend large sums quickly for non-essential activities. They demonstrate Gylfasson's (2001: 852) warning that public expenditure on education is not always a good measure of quality or performance: "public expenditure on education may be supply-led and of mediocre quality."

Large expenditures will not bring desired results if the system is not really reformed. The detailed lists of specialties from the Soviet era still guide most VUZ curricula. While it is not always clear what is being taught under these rubrics, anecdotal evidence suggests many institutions have not changed (and historical record shows that this sort of change is slow; in 1930 a majority of teachers were still using pre-revolutionary syllabi). Employers often depend on their own training programs rather than the higher education system. Some studies report that higher education has acquired a sort of formal rationality: it is a mark of someone being from the affluent social strata and having acquired some basic social and cultural capital. It is not considered evidence of job-related skills. Meanwhile, employers in most realms report serious shortages of managerial personnel and people with technical skills.

The social capital role of education reflects a marked change in recruitment. In 1985, 80 percent of the students at Moscow University were from outside Moscow. In 2005, more than 80 percent were Muscovites. This reflects economic circumstances and the demise of support for non-Moscow students, not a change in the relative prestige or quality of other institutions. It is one indicator of a broader shift to higher education access based on economic circumstances rather than merit. While some elite institutions do still offer some opportunities based on merit, they are not numerous, and other institutions charge fees to almost all of their students.

It also reflects a serious mismatch between the specialties offered in Russian VUZy and the

available jobs, particularly jobs that pay well, leading to a majority of graduates not working in their area of specialization. This was true in the Soviet era, and is not unique to Russia. But the specialized character of most higher education makes it a problem. A majority of those specializing in education and medicine do not work in these fields due to low pay. Serious money is paid in construction. Programmers and pharmacists can do well, but the former rarely do more than routine work, while the latter benefit from unique (corrupt) conditions in retail drug sales. Nearly half of higher school graduates report that the Russian economy does not offer jobs demanding higher education.

Graduate study (aspirantura) is now a for-fee proposition for many, becoming essentially just a credential (Dezhina 2006). Just one quarter of graduate students complete the program, and only 10 percent remain in their field. One-third of the dissertations are ghost authored. Those who do work in science spend an average of 6-7 years in the field. Most scientists hold several positions or work on multiple grants simultaneously.

At other levels of education, employers report serious difficulty finding qualified workers. The aircraft industry needs to triple the number of specialists in order to meet its current production targets. Auto plants face strikes by workers demanding substantial wage increases, and are reluctant to lose personnel they have trained. At every level of the system, the education that young people are receiving is not preparing them for the opportunities available in the labor market.

Poor health of young people, declining numbers, and the massive increase in the number enrolling in higher education have created a serious problem in meeting conscription targets. The Russian military continues to insist it needs more than one million men in the regular military services. As the accompanying table indicates, they are not going to be available. This personnel crunch puts tremendous pressure on the competing needs for education, employees, and conscripts.

Among the most significant modernization projects is the Bologna process. Every Rector in Russia has a stack of material on his/her desk about Russian accession to the Bologna system. Few have done much to comply. The discourse is overwhelmingly along the lines of participation being necessary to Russia's future, but it should be done in a way that preserves Russian traditions. Unfortunately, Russian traditions involve a five-year, heavily specialized program of higher education rather than the generalist BA followed by a specialized MA prescribed by Bologna.

Resistance to Bologna is symptomatic of a more general ambivalence to internationalization. Russian academic elites are convinced that they have the best system in the world, that everyone should learn from them, and that any changes to accommodate international projects would represent a lowering of standards. Within Russia a similar attitude about the virtues of individual institutions inhibits horizontal mobility. In stark contrast to China, where four leading universities now hire predominantly or exclusively from Chinese who received their doctorates abroad, Russian universities refuse to recognize foreign degrees.

Finally, while this is dangerous turf, some attention must be directed to the difficulty Russian

social science practitioners have experienced in dealing not only with globalization, but with social policy issues. An anthropomorphic approach reminiscent of 19th century vitalism pervades much of the discussion. Insistence on Russian uniqueness encourages narratives suggesting the demographic problem is self-correcting because powerful ethnoses have a built-mechanism that causes them to breed in large numbers when their survival is threatened. Similar treatises on economics and education appear in leading journals alongside more familiar academic articles. At a minimum, it muddies the debate. A more serious danger is that it deters policy alternatives that might help to mitigate problems of resource dependence.

Appendix: Estimate of the Share of 18-Year-Olds Entering Higher Education

YEAR	Male Births	Males age 18	Higher Ed. Admitted	Full-time	Males Admitted	Males Admitted as % of Admissions	Males Admitted as % of males age 18
1990	1,028,204	1,039,000	583,900	360,800	233,580	40.00%	22.48%
1991	929,394	1,056,000	565,900	368,800	266,360	47.07%	25.22%
1992	829,276	1,031,000	520,700	359,100	208,280	40.00%	20.20%
1993	722,584	1,041,000	590,700	392,400	236,280	40.00%	22.70%
1994	734,721	1,056,000	626,500	396,100	250,600	40.00%	23.73%
1995	700,084	1,083,000	681,000	423,100	272,400	40.00%	25.15%
1996	666,570	1,066,000	729,000	445,800	291,600	40.00%	27.35%
1997	643,146	1,088,000	814,600	488,300	325,840	40.00%	29.95%
1998	655,944	1,122,000	912,900	532,300	365,160	40.00%	32.55%
1999	621,807	1,128,000	1,059,000	589,000	423,600	40.00%	37.55%
2000	649,608	1,190,542	1,292,500	687,500	517,000	40.00%	43.43%
2001	673,515	1,265,483	1,461,600	745,700	584,640	40.00%	46.20%
2002		1,241,000	1,503,900	774,700	601,600	40.00%	48.48%
2003		1,224,000	1,643,000	803,800	657,600	40.01%	53.73%
2004		1,275,000	1,659,100	841,300			
2005		1,269,000	1,640,500	830,700			
2006		1,195,000	1,657,600	826,300			
2007		1,101,000					
2008		1,025,000					
2009		927,000					
2010		826,500					
2011		720,000					
2012		732,000					
2013		697,500					
2014		664,000					
2015		641,500					
2016		653,500					
2017		619,000					
2018		619,000					
2019		647,000					
2020		671,000					

PANEL 2: TRENDS AND POLICY PRIORITIES IN RUSSIA'S HEALTH & EDUCATION SECTORS

TRENDS AND POLICY PRIORITIES IN RUSSIA'S HEALTH SECTOR

Judyth L. Twigg

Judyth L. Twigg is Associate Professor at the L. Douglas Wilder School of Government and Public Affairs at Virginia Commonwealth University. Her work focuses on issues of health, demographic change, and health care reform in Russia. Dr. Twigg has been a consultant to the World Bank and the U.S. government, and recently published a book on *HIV/AIDS in Russia and Eurasia.* She has a Ph.D. in political science from MIT.

Executive Summary

Summary

On the surface, the health of Russians seems better than any other time in the post-Soviet period. Most of the improvements in health can be attributed to the economic growth and health reforms in the Putin era, with the centerpiece of the health reform stemming from the Priority National Health Project (NHP). However, despite recent positive indicators, the Russian demographic and health indicators are unsustainable in the long run, given the lack of attention given to long present structural imbalances in the Russian health care system, lack of critical monitoring and assessment of NHP's influence on health outcomes, and poor lifestyle choices made by Russians themselves. Unless there is follow through on the government's rhetoric on healthcare, the recent optimism regarding Russia's health and demography will likely be temporary and unsustainable.

Key Findings

- Overall mortality declined in 2007 from the previous year, though it has inched up in the beginning of 2008; tuberculosis rates have stabilized (though the incidence is still high), and the growth of HIV seems to have decelerated since the earlier part of this decade. Despite the former, Russia still faces tremendous risks from these diseases compared to other countries.
- Though birth rates are up, there are still many more deaths than births, and the number of childbearing women is set to decline sharply in about five years.
- The NHP was first proposed in the fall of 2005 and there is indication that some version of it will be adopted as a permanent federal program.
- The Putin government has tried to address Russia's demographic and health issues by spending money (200 billion rubles in 2006-07) with the intentions of strengthening health care, increasing accessibility, retraining physicians, and expanding vaccination and disease prevention.
- However, money spent by the government has been criticized as measuring success just by how much money is spent on any program rather than by the quality or health outcomes of the program.
- Unhealthy practices in Russian society, especially bad diets and high levels of consumption of substandard alcohol, continue to remain significant barriers to improvement in Russia's overall health.

Policy Implications

- The Russian government has listed healthcare as an important national priority, and Putin has shown significant attention towards the issue (unlike in economic or governance issues). The problem in Russian healthcare is structural and not intentional, and that distinction is important to understand in order to make sense of the problem. Here, it is not so much the government's complacency and lack of acknowledgment that makes Russian healthcare inefficient, but lack of oversight and a coherent plan that prolongs the issue.

Introduction

Russian governmental officials have been trumpeting what sounds like a symphony of improving health and demographic trends in recent months.

The number of babies born in Russia in 2007 was the highest since 1991, with about 120,000 more births registered in 2007 than in 2006—an 8.3 percent growth in the birth rate. The overall mortality rate declined 4 percent in 2007 from the previous year (although it has inched up again a bit in early 2008). Infant mortality has been declining significantly on an annual basis for several years (with the caveat that infant mortality is still not counted in consistent compliance with international standards).

The number of officers dismissed from the armed forces for medical reasons in 2007 was 13 percent lower than in 2006, while the number of conscripts released due to health concerns decreased by 8 percent. The suicide rate over the last five years has dropped by one-third (although it is still the world's second-highest). Traffic fatalities dropped 16 percent in the first two months of 2008 compared with the same period last year, with the overall number of road accidents falling by the same amount (due largely to a new January 1 law dramatically hiking penalties for serious traffic violations).

The number of deaths due to consumption of substandard alcohols (industrial alcohol, colognes, etc.) has dropped by around half in the last two years (from 40,000 in 2005, to 28,000 in 2006, and 19,000 in January -November 2007). Tuberculosis rates have stabilized (although at a still-high incidence rate of 82.6/100,000), and the growth rate in new HIV infections has decelerated substantially since the earlier part of the decade.

The picture is, of course, not uniformly positive. On virtually every indicator, Russia lags far behind its European neighbors. The growth in births is unsustainable, with the number of women of childbearing age set to decline sharply starting in about five years. There were still about 475,000 more deaths than births in 2007 (although down from more than 675,000 in 2006), with fully half of those deaths (about 1.1 million) due to some form of cardiovascular disease. Another half-million deaths were from the next two leading causes of mortality, trauma/accidents and cancer. Continuing widespread abuse of alcohol and tobacco is the prime culprit, impacting disproportionately the working-aged male population.[6] Diabetes is of mounting concern. Infectious disease, while still causing a small minority of all deaths, remains a looming threat, with multi-drug-resistant tuberculosis emerging as an increasing percentage of new TB cases, debate continuing to rage about whether HIV is transforming from a concentrated to a generalized epidemic, and hepatitis co-infections attracting attention as a serious but previously neglected problem. Still, on the surface, the health of the Russian people looks better today than at any point in the post-Soviet period.

[6] The economic impact of working-age mortality is far from trivial. One recent study estimates that bringing adult rates of mortality from non-communicable disease and injury down from current levels to EU15 levels by 2025 would result in a 3.6 – 7.1% gain in GDP (Marquez et al.).

The Priority National Health Project (NHP)

To what do we owe this improved state of affairs? The Putin era's economic growth and stability can take much of the credit. Almost all commentaries, however, afford equal or greater weight to Putin's health reforms. In addition to widely-heralded maternity incentives that expanded leave benefits and payments, granted new mothers educational and other vouchers for a second child (and any additional children), and gave pregnant women "birth certificates" entitling them to free choice of facility for prenatal care and childbirth, the centerpiece of health reform has been the Priority National Health Project (NHP). First proposed in the fall of 2005 for implementation over the subsequent two years, the NHP has been formally extended, and there is every indication that some version of it will be adopted as a permanent federal program. Many of its provisions are embodied in the seventeen-proposal-strong "Concept for the Development of Healthcare in the Russian Federation through 2020," currently under review by the Ministry of Health and Social Development.

During 2006-2007, just over 200 billion rubles (about 8.3 billion dollars) were allocated to a set of explicit objectives: improve the health status of the population, increase accessibility to and improve quality of medical care, strengthen primary care as well as health promotion and disease prevention activities, and improve access to tertiary care. The NHP's main activities were to include training and retraining of primary care physicians, increasing salaries for primary and emergency care physicians, purchasing equipment for primary care providers, expanding and strengthening vaccination programs, providing physical exams to the entire working population, introducing new protocols for examination and care of newborns, adding new resources for the care of pregnant women, funding HIV/AIDS prevention and treatment, and constructing new centers for high-technology tertiary care. Putin himself has lauded the NHP's outputs: 13 million people received check-ups, 60 million were vaccinated, and 300,000 received "high-tech" medical care. Thousands of new ambulances were purchased and distributed to every region in the country.

But is the national health project, even if made permanent, really the answer? Is there any guarantee that the progress in health outcomes observed over the last year or two is sustainable? In a word, no.

One commentator has remarked that, if earlier the Russian health sector had reforms without money, now there is money without reforms. NHP spending has been chaotic and often thoughtless, with resources allocated according to political expediency over any other criterion. Yet "money spent" has been the primary and official indicator of success. Equipment purchases have barreled forward seemingly without analysis of medical need, training requirements, and probable utilization patterns, so that millions of dollars' worth of machinery stands idle, underused, or used incorrectly. Salaries for primary care providers, while higher than before, are still not at levels sufficient to attract talented students into the profession. Nobody seems to be assessing the impact of all this spending; monitoring and evaluation, with critical assessment of plausible attribution of NHP interventions to actual health outcomes, is absent.

Equally importantly, the NHP has done little to address the structural imbalances that have plagued the Russian health care system since the Soviet period. The majority of care is still

inefficiently provided in the hospital rather than ambulatory sector. The compulsory health insurance mechanism has not delivered the promised set of market-based pressures for higher-quality and more cost-effective care: funding streams remain fragmented between the budget and insurance, intermediate insurers have not fully developed, and provider payment mechanisms present an array of incentives that are confusing, at best. Doctors' base pay rates continue to be rigidly set by level of education and years in service, rather than by quality and success of treatment offered. As a result of this wasteful allocation of resources, the state's supposed guarantee of a minimum package of free health services is ill-defined, and people are too often forced to pay for care that is constitutionally guaranteed to be without charge: 30-60 percent of health care costs are out-of-pocket, and fifty to seventy percent of Russians report foregoing medical care because they cannot pay for it.

Conclusion

These problems are not new. The need for structural reform was identified in the late 1980s; it has long been recognized that more money was a necessary but not sufficient condition to create modern health care in Russia. And even if the resources flowing into the health sector were spent with impeccable effectiveness and efficiency, the best health system in the world cannot overcome the poor choices still made by too many Russians—smoking, excessive and binge drinking, bad diets, lack of exercise—and the unhealthy environments (air, water, and food quality, unsafe roads, etc.) in which many Russians live. President-elect Medvedev has lobbed some constructive rhetoric in this direction. Until there is follow-through on this rhetoric, with significant government investment in the basic infrastructure that must precede good public health, accompanied by a sea-change in attitudes toward a host of self-destructive behaviors (most likely accomplished through the kinds of behavior change communication and social marketing that have been proven to work in the rest of the world), the recent upticks in Russia's health outlook will likely be shallow and unsustainable.

Selected Sources

Blinov, N. N., and A. I. Mazurov, "The National Project 'Health' and Reequipping of the Russian Medical X-Ray Service," *Biomedical Engineering* 41, no. 5 (2007).

Kaplunov, O. A., "Continuing a Discussion on Possible Paths and Directions of Health Care Reform: Reserves Are Far from Exhausted," *Menedzher Zdravookhraneniya*, no. 11 (2007) (in Russian).

Kiseleva, Elena S., and Vera Y. Kononova, "The Millenium Development Goals and Russia's National Projects: Strategic Choices," Institute for Complex Strategic Studies (Moscow, 2006).

Marquez, Patricio, "Better Outcomes through Health Reforms in the Russian Federation: The Challenge in 2008 and Beyond," The World Bank, Europe and Central Asia region, Human Development Department, Russian Federation Country Management Unit (2008).

Marquez, Patricio, Marc Suhrcke, Martin McKee, and Lorenzo Rocco, "Adult Health in the Russian Federation: More Than Just a Health Problem," *Health Affairs* 26, no. 4 (2007).

Sarkisyan, A. G., A. L. Pidde, and Ye. B. Zlodeeva, "Priority National Project 'Health" – An Important Step toward Reform of Health Care," *Zdravookhraneniye*, no. 2 (2007) (in Russian).

Shishkin, S. V., A. S. Zaborovskaya, and V. A. Chernets, "Organization of Financing and Administration of Health Care in Russia's Regions: General Characteristics," Independent Institute of Social Policy (Moscow, 2005) (in Russian).

Tompson, William, "Healthcare Reform in Russia: Problems and Prospects," OECD Economics Department, Working Papers, no. 538 (Paris, 2007).

Treshutin, V. A., V. A. Yelykomov, "Realization of the Priority National Project 'Health' at the Regional Level: Achievements, Problems, and Paths to Their Resolution," *Zdravookhraneniye*, no. 10, (2007) (in Russian).

PANEL 3: TRENDS AND POLICY PRIORITIES IN RUSSIA'S NATURAL RESOURCE DEVELOPMENT

CAN RUSSIA ESCAPE THE OIL CURSE?

Peter Rutland

Peter Rutland is Professor of Government at Wesleyan University. His research interests focus on Russia, the former Soviet Union, and the former East Europe. Dr. Rutland's recent articles cover topics such as the rise of President Putin, the Russian oil and gas industry, the reform of the Russian electricity monopoly, and Russia as an Asian power. He has a D.Phil. from the University of York.

Executive Summary

Summary
The Russian economy has grown by leaps and bounds over the past decade in large part due to oil revenue. As a resource state, Russia risks inviting skepticism as to the long term sustainability of its growth, particularly because of the "resource curse" and Dutch disease that could stifle its phenomenal economic growth. In the short term, Russia's economy is more complex and differentiated than a "resource curse" label would imply; there is sufficient growth and development left to be achieved in the non-resource sectors of Russia's economy to prevent it from getting Dutch disease. Though the Russian system is not perfect, and is vulnerable to issues of inequality, inflation and long-run sustainability, well designed state policies can mitigate most of the damaging effects of resource curse; it is still an open question, however, as to whether the Russian government will succeed in taking measures to avoid the aforementioned dangers.

Key Findings

- Oil revenue surge has produced a surge in consumer spending but has not stimulated recovery agriculture or an increase in industrial capacity; despite plans to diversify in technological and human capital, there has been little sign of improvement in Russia's competitive capability in cutting edge industrial sectors.
- Current levels of inequality growth indicate that the numbers of poor and disenfranchised will grow and may lead to political challenges the Russian government is not ready or equipped to tackle.
- Russian political economy differs in four major ways from a typical resource curse model: through state tradition, pluralism of ownership, dual energy sector, and strong manufacturing base.
- Unlike most oil exporters, Russia has a developed industrial base, and is endowed with both oil and natural gas; furthermore, the high percentage of manufacturing in Russia's GDP (~20.7% in 2006) indicates that Russia has not been affected by Dutch disease.
- Most Russians feel that they have become poorer relative to others since the transition from communism. Most of the wealth has been retained by oligarchs and the Russian state. Russia's increasing wealth has concurrently enabled the fusion of state and oligarchic power that has taken Russia from an oligarchic form of capitalism to state capitalism.

Policy Implications

- Russia needs to be assessed in a different light than through the normal development paradigm of the "wealth leads to democratic tendencies" path. The Kremlin's fusion of state and oligarchic power makes hopes of trickle down economics very dim for Russia: though Russia receives immense amounts of wealth due to energy revenue, the wealth is not transmitted to the general populace because the corporations have been acquired and managed by the central government; the population does not benefit from the windfall as much as would be expected. Small businesses and independent operations are squeezed.
- Any assessments and projections of Russia should not be based on the assumption that Russia is a typical resource-cursed rentier state; though Russia shares some similarities to the former, to classify it so would be inaccurate as it would ignore Russia's complex economy and underestimate Russia's strengths.

Introduction

Western observers are divided over how to assess President Vladimir Putin's economic record. Some credit Putin with having engineered a rags-to-riches transformation of the Russian economy. Others condemn him for having squandered an opportunity to complete the transition to a competitive market economy, a job left half-done in the 1990s.

The raw data is impressive. The eight years of Putin's presidency saw a doubling of living standards, a 70 percent increase in GDP, the paying down of nearly all Russia's foreign sovereign debts, and the accumulation of a war-chest of $402 billion foreign currency reserves as of March 2008 (www.cbr.ru). In current dollar prices, GDP went from $200 billion in 1999 to $1.26 trillion in 2007. Russia moved up from being the twentieth largest economy in the world to the seventh. Trade went from 17 percent of GDP in 1990 to 48 percent in 2004. The World Bank estimates the Gross National Income per capita at $5,780 in 2006, with a GNI of $823 billion. In PPP terms it rose from $5,964 in 1998 to $9,650 in 2005 (World Bank 2007). Total factor productivity grew by 5.8 percent per year, and the World Bank estimates that only one third of that increase came from increased capacity utilization. Firm turnover (i.e., the exit of inefficient firms and the entry of new ones) accounts for half the total improvement. The percent of the population living in poverty fell from 38 percent in 19998 to 9.5 percent in 2004, and the share of family budgets spent on food fell from 73 percent in 1992 to 54 percent in 2004 (Mroz et al, 2005).

Skeptics argue that this economic boom cannot be sustained. The global commodity boom cannot be sustained indefinitely, and will inevitably be followed by a slump. Critics suggest that there is little sign that Russia's political and economic institutions are prepared for such a development. The surge in oil revenue has produced a spike in consumer spending, largely satisfied by imports, but has not stimulated a recovery of Russian manufacturing or agriculture. The lion's share of the wealth has been siphoned off by the new rapacious class of oligarchs, who are investing most of it abroad. The second major beneficiary of the oil boom has been the Russian state, which has doubled the ranks of bureaucrats and tripled spending on the military. During the second half of the Putin presidency, the state has reasserted its control over key industrial corporations, especially in the oil sector, leading to the emergence of a new hybrid form of state oligarchic-capitalism.

Despite lip-service to the rule of law, no serious efforts have been made to dislodge the corrupt elites that rule Russia, except for isolated cases where an individual oligarch fell foul of the Kremlin. And despite ambitious plans to diversify the economy and build on Russia's technological and human capital, Russia has shown little sign of being able to compete in cutting-edge industrial sectors. A downturn in oil prices will expose the shaky foundations of Russia's development model. Even absent a price collapse, only a small proportion of the oil receipts are trickling down to the mainstream of Russian society. The ranks of the poor and disenfranchised will continue to grow, leading to political challenges which Russia's authoritarian regime is ill-equipped to handle.

From Oligarchic to State Capitalism

According to a World Bank study, by 2001 Russia's 23 largest firms accounted for 30 percent of the country's GDP, and these firms were effectively controlled by a mere 37 individuals (World Bank 2004, Guriev 2004). By international standards, this is an astonishing concentration of wealth and industrial power in such a large country. It was all the more surprising given the fact that private ownership had been outlawed for decades, and the entire economic elite did not exist as a class just 15 years earlier.

Some economists have argued that this ownership concentration is a rough and ready solution to the problem of enforcing property rights in the absence of a strong rule of law (Lazareva et al 2007, p. 13). A 2005-06 sample of 1,000 firms similarly found that 35 percent had a single majority shareholder (Guriev 2007). 29 percent of the firms in the sample had a government representative on their board. One anonymous banker told a journalist that "All big companies have to put people from the security services on the board of directors" (Mereu 2008). *Forbes* magazine reported there were 33 individuals in Russia in 2006 with personal assets above $1 billion, the third highest number of billionaires in the world. Their ranks had risen to 87 by 2008, putting Russia in second place after the US.[7] *Forbes* estimates their combined assets doubled from $90 billion in 2005 to $172 billion in 2006, and more than doubled again to $455 billion by 2008.

One disturbing trend in recent years has been the fusion of state and oligarchic power, especially in the oil sector. In the wake of the break-up of Yukos the share of oil output produced by majority state-owned companies rose, from 10 percent in 2000 to 42 percent in 2008 (Elder 2008). The overall state share in the economy rose from 30 percent to 35 percent (Buckley and Ostrovsky 2006). The state's total shareholding portfolio is estimated to have a market value of $469 billion in 2007, equal to 40 percent of the capitalization of Russia's stock market (*Vedomosti*, 6 February 2008).

This growing state-controlled sector was acquired and managed through somewhat unorthodox methods. The state was just as complicit as the oligarchs in using shell companies, offshore banking and other nefarious maneuverings to conceal its economic activity from outside observers. Ironically, Western bankers have played an active role in financing Putin's renationalization program. In 2005-06 Rosneft borrowed $8 billion, Gazprom $13 billion, and Rosneftegaz $7.5 billion. In the first nine months of 2007 non-bank corporations took out a net $72 billion in foreign currency loans, roughly equal to the amount of capital that is being exported (ww.cbr.ru).

This concentration of ownership and growing state role has squeezed small business, which only has 17 percent of total employment, and has done nothing to diminish corruption. The Transparency International index gives Russia exactly the same dismal score (2.3 on a 10-point scale) in 2007 that it earned in 1997.

[7] Kroll 2008. There are 1,125 billionaires on the list, including 439 Americans, 87 Russians and 59 Germans.

Can Russia Escape the Resource Curse?

Clearly, Russia's comparative advantage lies in energy and energy-intensive industries such as metals and chemicals. Oil and gas accounted for 61 percent of Russia's export earnings in 2005 (World Bank 2006), with the value of exports tripling from $76 billion in 1999 to $241 billion in 2005. Manufactures account for only 8 percent of Russia's exports, and only 3 percent are in the medium-high technology category.

Global experience strongly suggests that oil is bad for democracy and bad for sustained economic growth. Carles Boix argues that there are zero examples of a successful transition to democracy in a country where oil generates more than one third of its export earnings, which sounds like a death sentence for Russian democracy. Morton Halperin et al contend that only eight countries in the past 20 years have enjoyed sustained growth under authoritarianism, while 60 authoritarian regimes saw sub-par growth.

Stephen Fish (2005, ch. 5) was not able to find clear evidence that the curse works in Russia through the three vectors identified by Michael Ross—the tendency of oil revenues to delay modernization; their use to buy off social protest (the rentier effect); or their use to fund a repressive state apparatus (Ross 1999, 2001). Russia is clearly a modern society; and evidence for a rentier state is not strong: Russian state spending as a share of GDP (32 percent in 2007) is low by international standards. Russia does have above average levels of military spending, but this long predates the discovery of oil. Instead Fish traces the causal chain through the impact of oil and gas on corruption and economic liberalization—boosting the former and distorting the latter.

However, there are at least four ways in which the structure of Russia's political economy diverges from the resource curse model:

1) ***State tradition:*** First, there is Russia's strong state tradition to consider. Putin was able to draw upon Russia's statist tradition to rebuild state power, taxing the oil exporters, closing down tax shelters, and taking Mikhail Khodorkovsky and dismembering his Yukos Corporation. Clearly, in that case national state power trumped international oil wealth. The "Russian curse" of a strong central state may neutralize and not exacerbate the "resource curse." The two forces will surely interact in complex ways that will probably diverge from predictions based on the experiences of other countries.

2) ***Pluralism of ownership:*** In contrast to other resource-dependent economies, Russia's privatization resulted in a pluralistic ownership structure in the oil industry. The oil ministry was split into a dozen independent corporations, along with hundreds of small independent middleman companies. This plurality of ownership is unusual; only the United States and United Kingdom have significant competition among oil producers—and neither of those countries is resource-cursed. In all the other major producers (even Norway), oil production is controlled by one or two state-owned companies.[8]

[8] Whereas in most countries it is the oil producers who build and own the pipelines, in Russia the state retained control over the pipeline system, through the state-owned corporation Transneft, which handles 71 percent of

This pluralization led to intense political bargaining in Russia, both "vertically" between the federal center and regional bosses, and "horizontally" between rival companies. These corporate battles culminated in the abortive merger of Sibneft and Yukos in 2003, and the subsequent state takeover of Yukos. The pluralism in oil ownership did not extend to foreign companies. Only 3 of 21 planned production sharing agreements (PSAs) were implemented before the regime was abolished in 2003. The only major foreign acquisition that took place was the merger of BP and TNK in 2003. Foreigners have been allowed to take a minority stake in Russian oil companies, with Chevron acquiring 20 percent of Lukoil (Locatelli 2006).

3) ***The dual energy sector:*** Another distinctive feature is that Russia is equally endowed with both oil and natural gas: it is the world's no. 2 oil producer and no. 1 gas producer. Natural gas assets were kept separate from oil, and were privatized into a single nationwide corporation: Gazprom (Stern 2005). Gazprom served as an important political resource for the state, domestically and internationally, and balanced out the aggressive profit-driven maneuverings of the oil companies. The gas market is quite distinct from the oil market, domestically and internationally. It is less volatile, depending on expensive long-term investments. While Russia's domestic oil prices were liberalized and rose close to world-market levels, the natural gas price remains heavily regulated. Currently Russian households pay about $50 per cubic meter and industrialists $60, while Gazprom's European customers pay $370.

4) ***Strong manufacturing base:*** Unlike most other oil exporters, Russia has a developed industrial base. Specialists disagree over the proportion of Russia's GDP that can be attributed to energy, due in part to accounting practices that hide oil and gas receipts in other reporting categories. According to the official statistics agency Rosstat, energy accounts for 9 percent of the Russian economy, while the World Bank put it at 25 percent. Only 56 percent of Russia's crude oil, 34 percent of its natural gas, and 42 percent of refined oil products are exported. The remainder is consumed domestically (Tabata 2005).

Russia's metals sector accounts for 15 percent of exports and includes iron and steel, non-ferrous metals such as copper and nickel, and precious metals such as gold and diamonds. The metal barons developed multi-billion dollar industries largely independent from the oil and gas companies, but with close ties to the coal industry and the electricity monopoly, RAO UES. Their alliances with local political leaders can provide a potential counter-balance to the federal authorities in Moscow. Of the 33 Russians on the *Forbes* 2006 list of billionaires, only 12 are clearly identified as coming out of the oil and gas sector, while 15 were based in the metals industry (often merged with coal interests). Among the 87 magnates on the 2008 list, 15 originated in oil and gas, versus 22 in banking, 20 in mining and metals, 11 in real estate/construction, and 8 in retailing.

The Russian economy is more complex and differentiated than the "resource curse" label would usually imply. There are more trade-offs to be made than in other resource-dependent countries, involving a broader range of political and economic actors.

Russia's crude exports. 14 percent go by rail, 3 percent by the Caspian Pipeline Consortium, and the remainder by sea. EIA 2006

The Dutch Disease

Resource-dependent economies are prone to a variety of maladies: an over-valued exchange rate; fluctuations in revenues that lead to excessive state spending; increased opportunities for corruption due to the concentration of rents; and inefficiencies because of the prominent role of state-controlled enterprises, leading to lower capital productivity and hence slower long-term growth. Russia is certainly showing signs of many of these ailments.

However, the evidence for a Dutch disease impact on the competitiveness of Russia's non-energy sector is far from clear-cut. Manufacturing actually rose from 17.0 percent of GDP in 2003 to 20.7 percent in 2006, with growth concentrated in machinery for transport and power generation. This leads Troika Dialog to argue that "the rather high percentage of the manufacturing sector in GDP means that the Russian economy cannot yet be diagnosed as having the so-called 'Dutch disease'" (Troika 2008b, p. 15). Services, transport and the public sector are all fairly immune to the Dutch disease, being non-tradable. All three sectors are underdeveloped in Russia, leaving plenty of room for non-oil growth. By 2006 services had grown to 56 percent of GDP, while manufacturing accounted for 19 percent and agriculture had shrunk to 5 percent (World Bank 2007). As Dutch disease would predict, growth is concentrated in non-tradable sectors such as construction and retailing, which rose by 24 percent and 14 percent respectively in the first nine months of 2007.

Specific Challenges Arising from the Dutch Disease

1) *Sterilizing the surplus:*
Despite a decade of appreciation, as of 2008 the ruble is still only 72 percent of its PPP level, roughly similar to Mexico, Brazil and South Korea. The Central Bank and Finance Ministry have been doing a decent job of sterilizing the capital inflows, and its fiscal policy has been closer to Norway than that of Nigeria or Venezuela (Bousseni and Locatelli 2005). Government spending increased from $34 billion to $130 billion 2000-04, but the government has run a surplus each year, rising from 4.1 percent of GDP in 2004 to 11 percent in 2006 (with spending at 28 percent of GDP). The Stabilization Fund went from $4 billion in 2004 to $50 billion in January 2006 and $168 billion in January 2008. The new three year budget assumes oil at $74 a barrel. The consultancy group UralSib estimates that the country will begin eroding its surplus if the price dips to $64 (Elder 2008).

Also easing the pressure was the oligarch's predilection for stashing their earnings abroad. Capital exports were running at $20 billion a year in the late 1990s, rising to $42 billion in 2006, $81 billion in 2007, and $23 billion in the first quarter of 2008. On the other hand the enthusiasm of Russian companies for borrowing abroad is increasing Russia's exposure to a possible future payments crisis. Private sector interest payments last year rose to $65 billion—half of the $132 billion trade balance—while the external debt rose to $385 billion by June 2007, 30- percent held by state-owned companies (Shishkin 2008, World Bank 2007). Deputy Prime Minister Aleksei Kudrin argues that external debt is a comfortable 33 percent of GDP, down from 50 percent a year earlier (Itar Tass 30 January 2008).

2) *Spending the surplus:*
The record of stabilization funds in other countries is mixed: their creation is no guarantee that they will be immune to politically-motivated, wasteful or corrupt spending. From February 2008 the Stabfond was split into two: the Reserve Fund which will invest 10 percent of GDP and the National Welfare Fund, which will take excess revenue and invest it inside the country. So far most of the revenue that was spent was used to pay down the state's foreign debts, which fell to $53 billion, 9 percent of GDP, as of January 2008, down from a peak of $150 billion and 150 percent of GDP in 1998 (Rosstat).

Four high profile "national projects" in housing, education, health and agriculture were launched in 2005. But these cost less than $4 billion in 2006, 3 percent of total spending (Butrin 2005). Spending rose to $10 billion in 2007 and, under an October 2007 plan, the goal was for spending to increase to $40 billion (2.8 percent of GDP). Meanwhile, spending on domestic security went from $4 billion in 2000 to $39 billion in 2008 (Nemtsov and Milov 2008, p. 45).

3) *Inflationary anxiety:*
The fact that despite its best efforts the government cannot bring inflation below 10 percent per year, nor prevent the steady appreciation of the ruble against the dollar, signals that Dutch disease pressures do pose a continuing challenge. The main pressure presumably is coming from the inflow of private capital.

In 2007 consumer price inflation rose in 2007, to 11.9 percent, up from 9.0 percent in 2006, producer prices rose 17 percent, and the money supply (M2) 28 percent (World Bank 2007). Consumer price inflation climbed to a 12.7 percent annual rate in February 2008 (Rosstat, News.ru 28 March 2008). Most analysts agree that the government's target of 8.5 percent for 2008 is unrealistic. Milk and bread prices rose by more than 20 percent in 2007, leading the government to introduce informal price controls in October 2007, to last through March 2008. The government also cut import tariffs on dairy products from 15 to 5 percent, and increased the export tariff on wheat by 10 percent and barley by 30 percent. The second most sensitive price is that of housing utilities, which rose by an average of 33 percent a year between 2000 and 2007, climbing from 4.6 percent to 9 percent of average household spending (Nemtsov and Milov, p. 50).

4) *Inequality:*
Russia like other resource-dependent economies has seen a rise in inequality. GDP ranges from $8,000 per head in the Southern Federal District to $28,000 in Moscow (Troika Dialog, 2008a). The city of Moscow, with 7 percent of the population accounts for 25 percent of Russia's GDP in ruble terms, and 16 percent in PPP terms. The top fifth of households in the capital have disposable income over $5,000 a month. The Gini coefficient went from 0.26 in 1991 to 0.41 in 1994, and stayed at around that level for the next decade, rising slightly 0.41 in 2006 (www.gks.ru). In 2007, the top quintile accounted for 47 percent of all income, and the second quintile 23 percent, while the poorest fifth received only 5 percent (www.bof.fi, 11 January 2008). According to the Russian Longitudinal Monitoring Survey, most Russians feel that they have become poorer relative to others. "Only 19 percent of Russians think that the changes of the last 15 years improved their life, while 49 percent think that transition worsened their life" (Denisova 2007).

5) *The politics of subsidies:*
Some of the rents from energy exports are used to keep other domestic sectors afloat, through the maintenance of artificially low prices for domestic consumers of gas and electricity. This has been an important policy instrument for insulating Russia from the effects of Dutch disease. The government's plans since 2000 for a gradual increase in domestic prices have been outstripped by booming global oil and gas prices.

The United Energy System (RAO UES) has been one of the main casualties of this policy. The Federal Energy Commission has held the annual rise in electricity prices well below the rate of domestic inflation, starving UES of the funds needed to replace out-dated generating plants. UES has to pay close to market prices for many of its inputs (fuel oil, coal, rail transport) but faces strict price controls over its sales. Unlike Gazprom, UES does not have sufficient export earnings of its own to compensate. Efforts to raise electricity prices in 2004-05 produced street demonstrations and protests even from some parliamentary members of the United Russia party. Privatization of the electricity sector has been under way since 2000, and once it is complete regional markets may see price liberalization and new investment. But in the meantime, the persisting uncertainty over the future division of rents has deterred investors.

6) *Long-run sustainability:*
Another concern about Russia's oil dependency is its long run sustainability. Will demand persist if the price of oil stays around $100 a barrel? And even at that price, does Russia have sufficient reserves that can be extracted and brought to market at costs that make it a profitable enterprise? The main uncertainty is over the costs of accessing the new reserves. Troika Dialog estimates that "The break-even oil price (the price at which the budget remains balanced) will next year jump up to $58.59/bbl (in stark contrast to 2001-03 when it was well below $20/bbl)" (Troika 2008b, p. 5). In the next two years Russian oil production is expected to rise by 2.6 percent per year—the rate of increase in 2007 ("FSU states" 2007).

Conclusion

Putin himself told a State Council meeting on 8 February 2008 that "we have still not yet succeeded in breaking away from the inertia of development based on energy resources and commodities. […] The state system today is weighed down by bureaucracy and corruption and does not have the motivation for positive change."[9] But the resource curse is not a law of nature. Well-designed state policies can mitigate its most damaging effects. It is still an open question whether Putin's state corporatism may succeed in avoiding the dire consequences for Russia that the resource curse model predicts.

[9] See: www.kremlin.ru.

Bibliography

Boix, C., *Democracy and Redistribution* (New York: Cambridge University Press, 2004).

Bousseni, S. and Locatelli, C., "Towards a more coherent oil policy in Russia?" *OPEC Review*, 29 (2005).

Buckley, N. and Ostrovsky, A. "Back in business - how Putin's allies are turning Russia into a Corporate state," *Financial Times* (June 19, 2006).

Butrin, D., "The national project government," *Kommersant* (December 30, 2005).

Denisova, I. et al, *What Russians Think about Transition: Evidence from RLMS Survey*, Moscow, Cefir, Working Paper no. 113 (December 2007).

Elder, M., "How the state got a grip on energy," *Moscow Times* (March 14, 2008).

Fish, S., *Democracy Derailed in Russia* (New York, Cambridge University Press, 2005).

"FSU states set for solid oil growth," *Petroleum Intelligence Weekly* (July 30, 2007).

Guriev, S. and Rachinsky, A., "Oligarchs: the past or the future of Russian capitalism?" Moscow, Cefir (June 15, 2004) www.cefir.org/papers.

Guriev, S. et al, "Corporate governance practices and prospects in transition countries," Moscow, Cefir (June 28, 2007) www.cefir.ru/papers.

Halperin, M.H., Siegle, J.T and Weinstein, M.N., *The Democracy Advantage: How Democracies Promote Prosperity and Peace* (London: Routledge, 2005).

Lazareva, O. et al, "A survey of corporate governance in Russia," Moscow, Cefir, Working Paper no. 103 (June 2007).

Mroz, T, L. Henderson, and B.M. Popkin, "Monitoring economic conditions in the Russian Federation: The Russia Longitudinal Monitoring Survey 1992-2004" (University of North Carolina at Chapel Hill, North Carolina, 2005) http://www.cpc.unc.edu/rlms/.

Nemtsov, B. and Milov, V., *Putin: Itogi [Putin: the Results]* (February 7, 2008). Available at: http://grani.ru/Politics/m.133236.html#9 and in English at: http://russophobe.blogspot.com/2008/03/boris-nemtsovs-white-paper-in-full.html.

Ross, M.L., "Does oil hinder democracy?" *World Politics* 53, no. 3 (April 2001).

Ross, M.L., "The political economy of the resource curse," *World Politics* 51, no. 2, (January 1999).

Shishkin, M., "Bank of Russia has drawn up the balance," *Kommersant* (April 2, 2008).

Tabata, S. (2005) "Oil and gas revenues and their influence on economic growth in Russia," International Congress of Central and East European Studies, Berlin, 30 July

Tabata, S., "Observations on changes in Russia's comparative advantage, 1994-2005," *Eurasian Geography and Economics* 47, no. 6 (2006).

Tomson, W. and Ahrend, R., "Realising the oil supply potential of the CIS," (Paris, OECD), Economics Department Working Paper No. 484 (May 18, 2006).

Troika Dialog, "Russia's regions: The engine of growth," (Moscow: January 2008a).

Troika Dailog, "Russia: Economic Monthly," (Moscow: January 2008b).

World Bank, *From Transition to Development*, (Washington, DC: World Bank, 2004).

World Bank, *Russian Economic Report* 12 (April 2006).

World Bank, *Russian Economic Report*, 15 (November 2007).

PANEL 4: TRENDS AND POLICY PRIORITIES IN RUSSIA'S PUBLIC FINANCE INFRASTRUCTURE

TRENDS AND POLICY PRIORITIES IN RUSSIA'S PUBLIC FINANCE INFRASTRUCTURE

Augusto López-Claros

Augusto López-Carlos has been the Chief Economist and Director of the Global Competitiveness Program at the World Economic Forum in Geneva. Dr. Lopez-Claros has written and lectured extensively on a wide range of topics in his field, including reform issues in transition economies, and on a broad range of financial and macroeconomic issues affecting emerging markets. He has a Ph.D. in economics from Duke University.

Executive Summary

Summary
The global economy has grown tremendously in recent years, with Russia accounting for a large part of the growth. The Russian economy, along with other strong emerging market economies, is increasingly resilient to economic crises in part due to the reduction of their external vulnerabilities. Besides the recent global economic slowdown, Russia's main concerns are lower oil prices and institutional weaknesses in its society (property rights, corruption and education); however, oil prices are not likely to decrease due to continuing demand and geopolitical tensions. Theoretically, it is possible for Russia to sustain high growth rates for the foreseeable future as long as Russia addresses institutional shortcomings.

Key Findings

- Russia, China and India accounted for nearly one half of global growth in 2007.
- Global energy needs are expected to rise by 50 percent by 2030 and two-thirds of this demand will be from the developing world; average oil prices in 2008 were 34 percent higher than in 2007.
- Though the ruble has appreciated considerably of late, there is no evidence of overvaluation of the ruble, indicating lack of Dutch disease; in fact, there is no reason to believe that the ruble cannot sustain further appreciation.
- Russia can achieve long term growth: it will continue to have large current account surpluses, enabling reform efforts, and also has a history of scientific and technological innovation that could promote diversification of the economy.
- Russia's major hindrances to further sustained growth are institutional, and are likely responsible for the gap between Russian and Chinese/Indian levels of growth. Corruption, transparency and lack of an independent judiciary hamper Russia.
- Education, primarily higher education, is a key driver of growth and productivity, and the Russian authorities need to recognize this fact if Russia is to maximize its potential to sustain high levels of growth in the long term.

Policy Implications

- If Russian administrations manage to improve the institutional inefficiencies, then Russia's economic power and influence will parallel rapidly developing Japan in the 1980s, emerging as a multi-sector, global competitor to the United States and China.
- It is important not to underestimate the growing power and capability of the Russian economy: despite inefficiencies, lack of diversification and education issues, for the foreseeable future, Russian growth and politico-economic influence will still be considerable due to its strategic advantages as an energy supplier and its industrial capacity.
- The Ruble has appreciated considerably against the dollar in recent years; if Russia achieves further economic dynamism, the Ruble stands to appreciate even more strongly against the dollar, especially due to the recent dollar slump.

Introduction

This paper assesses trends and policy priorities in Russia's public finance infrastructure. The paper provides a brief overview of the global economic context and some key challenges confronting policymakers in 2008; examines the likely implications of these developments for Russia's short-term economic outlook; and concludes with a discussion of long-term policy and institutional requirements relevant to the diversification of Russia's economy.

The Global Context

The global economy in recent years has seen a remarkable period of expansion. World output during the four-year period ending in 2007 averaged 4.8 percent per year, a point and a half higher than the rate seen over the previous four-year period. Growth rates have been robust everywhere, even in Japan, where they nearly doubled (from 1.2 percent to 2.3 percent). According to the IMF, in 2007 China, India and Russia accounted for fully one half of global growth, an extraordinary statistic if placed in historical context. Twenty years ago, when China and India where poor developing countries operating in the backwaters of the global economy and Russia was yet to enter its own difficult transition, it would have been an unlikely prediction that, within a generation, these three countries would become a separate engine of global growth.

Indeed, in 2007 growth was robust enough that one saw increasing inflation in a number of emerging markets (e.g., China, India—Chile, China, South Africa all raised interest rates since August), reflecting strong demand pressures and rising food prices. Of course, oil prices also picked up and reached new highs, again owing to strong demand, very little growth in supply and geopolitical concerns focused on some producers.

The big story in 2007 was the deterioration of global credit market conditions since late July. A re-pricing of credit risk sparked increased volatility and a loss of market liquidity, which in turn led to rising uncertainty about the magnitude and distribution of valuation losses and the off-balance sheet exposure of financial institutions. It has been a tough period involving a drying up of corporate bond issues and serious disruptions of liquidity in the interbank market.

Emerging markets have not been immune to these developments, with sovereign spreads widening, stock markets falling and capital flows being scaled back. But, what has been very remarkable compared to other episodes of global financial turbulence is the increasing resilience of emerging markets, indicating that, first, the innovative credit instruments and structures that have been at the center of the storm in the developed markets are less prevalent in emerging markets; and, more importantly, these markets have reduced their external vulnerabilities in major ways.

Russia is perhaps one of the best examples of this. Russia entered the 1997-1998 Asian financial crisis with about $20 billion of reserves, a sizable budget deficit, and not insignificant amounts of short-term debt. Today, it has half a trillion dollars of reserves, has been running a budget surplus for eight consecutive years, and public sector debt has been greatly reduced.

What does this mean for global growth in 2008? A slowdown should be expected, somewhere between 1.0-1.3 percentage points with respect to 2007—this translates into a range of 3.6-3.9 percent for global output growth. Clearly, continued strong domestic demand growth in emerging markets is a central component of this scenario. While China and India will likely largely shrug off the latest market turbulence, the more developed economies can anticipate adequate profitability, low leverage in the corporate sector, and labor markets that, at least by historical standards, are not at all unhealthy. And, in the event that there is a slowdown in capital flows into emerging markets that experienced rapid growth in 2007, this may not be a bad outcome—particularly if it prevents excessive currency appreciation and too rapid credit growth.[10]

Implications for Russia

Given that Russia remains unduly dependent on oil and other commodities, the key issue to consider here is the potential impact of a global slowdown on oil prices. While this is a vast subject, there are a few key trends that can be highlighted. Of particular significance is the reality of tight supplies and limited spare capacity. It is unlikely that China's energy demand will weaken any time soon as it reflects broad structural factors, such as massive migration from the countryside into urban areas with the urban population expected to double by 2030 to over 1 billion. Just to keep up with rising energy demand, China would have to build a one MW (megawatt) plant every month for the next 20 years. Indeed, global energy needs are expected to rise by 50 percent by 2030 and two-thirds of this demand will be from the developing world.

Further, geopolitical tensions in 2008 are predicted to exacerbate, particularly with regard to Iran. The clerics in Iran will continue to be a source of surprise as they become increasingly conscious of the brittleness of their regime.

Finally, not to exaggerate the impact on the global economy of higher oil prices, we must remember that (i) more efficient use of energy has reduced size of energy consumption in global GDP by more than 30 percent in the past 20 years; (ii) deeper financial markets, more flexible labor markets, and better global monetary policy have helped cushion oil shocks; and (iii) effects of higher oil prices are less magnified in rich countries because oil consumption is increasingly concentrated in final goods consumption (transport and heating), rather than manufacturing, which is migrating south.

Therefore, it is reasonable to expect Russia to continue to grow in 2008 in the 6-7 percent range.

Longer-term Issues: The Ruble and Long-term Growth Prospects for Russia

For Russia, the key issue is whether persistent high energy prices, and a resulting stronger ruble, could lead to the onset of "Dutch disease." How would a lack of competitiveness in the

[10] An interesting question to consider would be the impact on growth of earlier episodes of financial market turmoil—can previous crises teach us anything about the current crisis? This discussion is, unfortunately, beyond the scope of this paper.

manufacturing sector, as a result of the adverse impact of an overvalued exchange rate, impact the Russian economy?

Russian authorities have taken certain compensatory measures to ensure that oil will not, as suggested by Jeffrey Sachs, become a "curse." These include the creation of a Stabilization Fund; implementation of a tight fiscal policy; and prepayment of virtually all public external debt.

While the ruble has certainly appreciated in real terms in recent years, the question remains: are these levels *inconsistent* with adequate levels of competitiveness? There is no evidence of overvaluation. Looking at tables of international price comparisons, such as those put out by the University of Pennsylvania that compare the cost of a basket of goods in the United States to the cost of the same basket in other countries, it is apparent that Russia is well below the U.S. benchmark of 100, sometimes noticeably so.

Therefore, to address the question of whether the Russian economy would be able to comfortably sustain further ruble appreciation, the critical questions are: 1) Will there be continued productivity improvements linked to shifting of activity to more dynamic sectors?—There is no question that this is a process which could go on for quite a bit longer; 2) Will we see, therefore, further modernization of the Russian economy, with relatively large shares of imports being concentrated on capital goods and investment?—Clearly, the renovation of the capital stock is essential for future growth; 3) Will we continue to see large inflows in FDI—non-debt capital inflows, in sharp contrast with other parts of the emerging market world?—FDI in 2008 was $55 billion, compared to $3.5 in 2002; 4) Will dollar wages remain lower in relation to those of competitors?—Inflation has remained above the EU average, reflecting continued relative price adjustments (price of previously subsidized goods, such as utilities, food, medical services, transport, housing, etc. continuing to rise to catch up), but have not been offset by price drops of tradables, leading to price pressures and real appreciations.

These factors have reinforced each other. Countries expected to grow more rapidly and to experience real appreciations may attract even more capital inflows and this has been the case in Russia.

The answers to these questions are largely: yes. There is no reason why, *in principle*—like Japan during its miraculous decades (1950s to 1980s) when the exchange rate of the yen vis-à-vis the US dollar moved from 360 to 100 and the country became a world manufacturing powerhouse—Russia could not see improvements in productivity, a rising currency and improved competitiveness.

With respect to long-term growth prospects, one could expect continued large current account surpluses. No external vulnerabilities are likely and reserves are headed for one trillion dollars in a medium-term horizon. This provides an excellent background against which to intensify reform efforts.

Further, Russia has a long history of scientific and technological achievement. The country has already proved that it has the *potential* to be among the most innovative economies in the world,

capable of operating near the edge of the technology frontier. This potential needs to be awakened, and will reduce Russia's dependence on the energy sector and promote economic diversification.

At the same time, however, institutional shortcomings such as an inadequate property rights environment; lack of independence of the judiciary; excessive bureaucracy and red tape; the need for greater transparency and lower levels of corruption, etc., are likely to remain. The authorities need to do more in these areas. One could even conjecture that it is these institutional weaknesses that are mainly responsible for the wide gap in GDP growth rates between Russia, and China and India—two countries that have made remarkable progress in recent years in improving their business climates and the quality of their public institutions.[11]

Russian authorities also need to recognize that education has emerged as a key driver of productivity. As the global economy becomes more and more complex, it is necessary to upgrade the level of training of the labor force and to facilitate the adoption of the latest technologies, in order to ensure integration into the global economy.

Countries that have done this have been richly rewarded: Korea, Taiwan, and ICT in Israel during the past 17 years are excellent examples. The transformation of Israel from an exporter of citrus some 20 years ago into an ICT powerhouse is surely an extremely interesting development story, with potentially useful lessons for many other countries intent on boosting the capacity for innovation.[12]

However, the emphasis should be on higher education—coverage of primary education has risen sharply, even in Africa. But this is no longer good enough. Countries need to do both: improve with respect to their histories, but also look horizontally at what other countries are doing, lest they fall behind.

There is, therefore, no reason why Russia cannot sustain high growth rates for the foreseeable future. Indeed, there is no intrinsic reason, particularly if the authorities move to improve certain features of the institutional environment, why Russia could not rise to a higher growth plateau—closer to what we see in India today: 9-10 percent in real terms. Higher growth is possible, but, of course, not inevitable. Without higher annual growth, in the range of 9-10 percent, the catch up process to average EU income per capita will take much longer.

[11] This is not to suggest that China and India do not need to do more as well. For them, the challenge is to narrow the gap with the more advanced industrial economies.
[12] See: Lopez-Claros and Mia, "Israel: Factors in the Emergence of an ICT Powerhouse," The Global Information Technology Report 2005-2006, World Economic Forum (Palgrave Macmillan, 2006). The paper can be downloaded from www.augustolopez-claros.net.

PANEL 4: TRENDS AND POLICY PRIORITIES IN RUSSIA'S PUBLIC FINANCE INFRASTRUCTURE

RUSSIA'S PUBLIC FINANCE INFRASTRUCTURE: FROM FISCAL STABILIZATION TO ADDRESSING LONG-TERM CHALLENGES

Andrey Timofeev

Andrey Timofeev is a Senior Research Associate with the International Studies Program at the Andrew Young School of Policy Studies, Georgia State University. He is an economist with experience in public sector finance. He has contributed to numerous articles and reports on intergovernmental fiscal relations, tax policy and budget transparency. He has a Ph.D. in Economics from Charles University (Czech Republic).

Executive Summary

Summary
Russia's ageing population and low birth rate trends are likely to negatively affect both the revenue and expenditure sides of Russian public finance, requiring significant reforms in the public finance system. Although public finance reform was initiated following (and in response to) the economic crisis of 1998 and during the Putin administration, much is left to be accomplished. Reform of the public sector and improved productivity in the non-resource based sectors are critical to long term economic health; however, though Russia possesses the fiscal resources to achieve reform and productivity, it lacks efficient state machinery to enable changes in public finance infrastructure. Insufficient coordination and poor linkages between various reform initiatives are the most pressing problems Russia needs to tackle in order to enable reform and support public services.

Key Findings

- Russian public sector reforms have been addressed in the categories of: tax reform, budget reform, intergovernmental relations reform, administrative reform, civil service reform, and pension reform.
- Russian reforms were planned with gloomy prospects of a debt peak in 2003; to address this, a policy of fiscal consolidation and centralization of revenue from regional governors was pursued. While this policy may have been beneficial in the short run, it adversely affects the ability of provincial governments to provide public services and infrastructure.
- Russia's fiscal health is at risk because not only has fiscal consolidation come from reallocation of revenue, but also because this revenue base (mostly natural resources) itself may be unsustainable in the long-term: labor productivity and manufacturing has been slowing down.
- The impact on productivity from bringing Russian infrastructure to OECD levels would be higher than the combined impact of closing the gap through financial development, quality of institutions, and education.
- Russia ranks at the bottom of the Doing Business Report. There have been limited results in terms of service delivery and efficiency of public expenditures thorough budget reform.
- Russia faces a large retiring population; the ratio of working population to pensioners is expected to drop to 0.97 in 2050, foreshadowing a serious crisis with regard to pensions and quality of life for Russia's aged.

Policy Implications

- As Russian fiscal centralization was done primarily as a response to an anticipated negative economic outlook and low oil prices, the current strength of the Russian economy implies dim prospects for widespread socio-economic reform. This fiscal security hence removes any incentive and increases the inertia of any Russian administration to scale back centralization and initiate widespread reform of bureaucracy. Russian authoritarian central government is here to stay as long as Russia receives large amounts of revenue. Only when there are hints of a threat to Russia's revenue making capacity may there be any action from the government to begin change.

Introduction

Recent reforms in Russia's public finance were a natural response to the challenges faced by the federal government in the aftermath of the August 1998 economic crisis. The reforms were designed in the early days of this decade under the gloomy prospects of a debt payment peak in or about 2003. Despite predictions in the recent past of another financial crisis in 2003 similar to the crisis of 1998, public debt repayment has gone smoothly. The federal government's foreign debt was reduced from 55.6 percent of GDP (US$143.4 billion) in January 2001 to just 2.8 percent of GDP (US$44.9 billion) in January 2008.

In part, the avoidance of a new debt crisis was supported by favorable world oil prices during much of the post-crisis period. After 1999, the price for Russian oil remained well above US$20/barrel, compared to the average of US$12/barrel in 1998. In addition, the ruble's devaluation as a result of the 1998 crisis gave Russia's producers a tremendous boost, by making the costs of their inputs several times cheaper compared to the prices of their foreign competitors. Since the Russian economy hit bottom along with the oil price in 1998, it has been enjoying an above 5 percent annual growth. Lately, with the increase in oil prices to over US$100/barrel, Russia's fiscal position has been exceptionally strong: the economy is growing at an annual rate of more than 8 percent, fiscal surplus is above 6 percent of GDP, and foreign reserves stand at US$491 billion as of March 2008. However, the fear remains that a drop in world oil prices could again reverse Russia's economic and fiscal gains of the last decade.

Indeed, many of Russia's fiscal gains can be attributed to unique opportunities that are unlikely to be sustainable in the long run. Fiscal consolidation undertaken to address the 2003 debt peak mainly resulted from wrestling revenue sources out of regional governors' hands. The federal government's share in overall tax collections reached 60 percent by 2001, from a low of 42.5 percent in 1997. In 2002, this share further increased to 65 percent as a result of tax reforms for mineral resources, whereby revenue sharing in these taxes was eliminated for local governments and reduced for regional governments. The centralizing impact of this latter reform became even more pronounced in the post-2004 environment of higher oil prices. While this centralization of revenue sources might have been justified by the immediate fiscal pressures at that time, it is also likely to affect the quality of major social services and economic infrastructure that sub-national governments are responsible for. Among others, sub-national responsibilities include general and higher education, primary to tertiary healthcare, regional and local transport, and so on. Essentially these are the public services that are key to solving some of the long-term challenges facing Russia today.

Besides the fact that fiscal consolidation has come from a one-time intergovernmental redistribution of revenue, the growth of the underlying revenue base might not be sustainable in the long run either. In fact, the period of import substitution due to the ruble devaluation appears to be running out of steam, as imports have been on the rise for the last year or so. The labor productivity growth from previously underutilized capacity has been recently outpaced by rising wages. Not surprisingly, exports of manufactured goods have been slowing down. And that is despite the fact that energy inputs of Russian producers still cost only a fraction of that faced by the foreign competition.

Fortunately, these most recent economic dynamics have been offset by growth in construction and household consumption, in part fueled by booming consumer credit. However, the slowing down in the latter two sectors as a result of the global credit crunch at the beginning of 2008 raises concerns about the robustness of Russia's economic growth. In addition, Russia is facing new demographic challenges, as its post-war baby-boomers are starting to retire in increasing numbers while fewer people are expected to enter the labor force due to the fertility decline of the 1990s. These demographic trends will negatively affect both the revenue and expenditure sides of Russia's public finance.

The long-term viability of Russia's economic growth hinges on the improvement of productivity in the non-resource-based sectors of the economy. Over the last decade, productivity has improved in all sectors, especially services. Initially this was driven by utilization of excess capacity within firms. Since 2001, productivity has also been improving through reallocation of resources from exiting obsolete firms to newly-created more productive firms. There has also been a reallocation of labor out of the agriculture and manufacturing sectors to services, which now account for more than half of the economy—typical for a post-industrial country. However, firm turnover and productivity improvements from the entry of new firms are still low, suggesting weak pressure from market competition.[13] Besides removing barriers for market competition, the most effective government contribution to productivity growth would be through building lacking infrastructure and improving the quality of existing infrastructure, especially roads. According to a World Bank study, the impact on productivity from bringing the level of infrastructure to the OECD average would be higher than the combined impact of closing the gap in terms of financial development, quality of institutions, and education (in that order of magnitude).[14]

Public Sector Reforms and Implications

However, the availability of fiscal resources alone is not enough for the necessary improvements in economic infrastructure. The testament to that is the abandoned foundation pit in the center of St. Petersburg as the only outcome of the ambitious project to create a high-speed passenger rail link to Moscow, which cost Russian taxpayers US$500 million. In order for the available fiscal resources to be channeled towards achieving the desired policy outcomes, Russia needs efficient state machinery. Under Putin, the federal government has been pursuing an ambitious agenda to reform Russia's public sector on various fronts. This section of the paper attempts to take stock of these reform initiatives and to draw implications for the ability of the Russian government to tackle its long-term challenges.

Tax reforms were aimed at creating a favorable economic environment for the development of the manufacturing and service sectors of the economy. Overall, these reforms have tended to reduce the complexity of the tax system and lower the marginal tax rates, including imposition of a flat rate individual income tax and a regressive rate scale for the payroll tax. These changes were expected to reduce incentives for tax avoidance and evasion. By and large, the slated tax system was successfully implemented by 2005, when the government announced not to expect major tax changes any time soon. As a result, the tax effort in Russia is in line with that of many

[13] *Russian Economic Report #15*, The World Bank Group (November 2007).
[14] Ibid.

countries, and the elasticity of the major taxes is reasonable, even after accounting for tax policy changes.[15] Notwithstanding the progress in the area of tax policy, tax administration is still far from the ultimate goal of reorienting itself to taxpayer services in order to make voluntary compliance the basis of revenue collection. Not surprisingly, the Doing Business Report ranks Russia at the bottom of the list, mainly due to the low ranking on dealing with licenses and paying taxes (both administered by the Federal Tax Service).

The budget reform is set out to introduce medium-term planning and performance-based budgeting. The year 2007 saw considerable progress in this area: introduction of the medium-term fiscal framework (including creation of the registry of expenditure liabilities), ring-fencing of oil and gas revenue and explicit allocation of these resources into the Reserve Fund, a National Welfare Fund, and an explicit transfer to the general budget. While these improvements have been instrumental in instituting overall fiscal discipline, there have been limited visible results in terms of service delivery and overall efficiency of public expenditures. Performance-based budgeting has not moved beyond establishing a legislative framework and piloting implementation in selected government agencies.[16] The pilot results show that agencies made progress in the definition of their goals and objectives but less progress in linking their activities and performance indicators to those established goals.

The intergovernmental relations reform streamlines the structure and functions of regional and local governments.[17] The two main elements of these reforms—initially planned to be completed by 2006 but eventually extended to 2009—include: 1) uniform two-tier structure of local government, with distinction between urban and rural types; 2) separate packages of functions assigned to each tier and type of sub-national government. At the same time, while the tax reforms eliminated a number of important (revenue-wise) tax instruments that had been available to sub-national governments before (e.g. turnover taxes), they offered no new tax instruments to sub-national governments. Overall, the federal government seems inclined to underestimate the importance of sub-national governments' revenue autonomy for the well-being of the nation.

The administrative reform has aimed at enhancing efficiency and transparency of public administration by eliminating overlapping and unnecessary government structures and functions, especially those interfering with private business activities. An inventory of functions of the federal executive found that one third of the reviewed 5,000 functions had to be revised or abandoned. The new executive structure launched by the President in early March 2004 introduced a clear division of authority among: 1) federal ministries, responsible for policy development; 2) federal services, responsible for exercising control and supervision; and 3) federal agencies in charge of public service delivery. However, the reorganization mostly affected the federal headquarters in Moscow, which account for less than 6 percent of total federal public administration staff.

---

[15] Jorge Martinez-Vazquez, Mark Rider, and Sally Wallace, *Tax Reform in Russia* (Edward Elgar Pub, 2008).
[16] World Bank, *Institutional Reform in Russia: From Design to Implementation in a Multi-level Governance Context* (Washington, DC: World Bank, 2006).
[17] Jorge Martinez-Vazquez, Andrey Timofeev, Jameson Boex, *Reforming Regional-Local Finance in Russia*, WBI Learning Resources (World Bank Publications, 2006).

The civil service reform has been expected to address the complicated pay structure and link pay to performance. Remuneration of civil servants in Russia suffers from a low level of pay and a compressed pay scale. In 2002, the gap between public and private sectors in paying for comparable skills was estimated to range from 2.4–8.6 times for cash compensation and from 1.7–4.3 times when in-kind benefits were included.[18] The highest net gap was found in mid-range positions (chief and lead specialists). The civil service reform designed in the early 2000s was supposed to raise the base pay, decompress wage structure, and introduce merit-based incentives. The affordability of the reform hinged on the downward adjustment of public employment, at least in line with the trend in declining population and labor force. During 2000-2006, the real growth in public administration pay was 2.4 times, while in the rest of the economy it was 2.3. Thus, the reduction in the pay gap has been very small. At the same time, public administration staff (civil servants plus support staff) grew 16 percent from 1.1 million in 1999 to 1.3 million in 2004. Moreover, the number of civil servants increased from 486,000 persons in 1999 to 684,000 persons in 2004 to 792,000 persons in 2006. Thus, fiscal costs of the pay reform have essentially doubled because now the gap of roughly the same magnitude has to be closed for twice as many civil servants.

In addition to the failure to adjust the total size of the public administration, the latter also remains overwhelmingly disproportionate, with 60 percent of workforce located in sub-regional offices. The federal headquarters in Moscow account for less than six percent of the total federal personnel. One potential consequence is that the small core at the federal and regional centers is likely to preclude the realization of economies of scale in centralizing back-office functions, such as form processing, data warehousing, and specialized services (auditing, litigation, etc). Moreover, the lack of coordination and logistic support from the Moscow headquarters makes federal employees in the field dependent on the support of local authorities.

The pension reform has aimed at addressing both the disparity of treatment within the system inherited from the Soviet era and the looming problem of an aging population. Russia inherited a system that had a high degree of fragmentation, with marked differences between farm and industrial workers, military personnel, and public employees. In 1991, the separate structure in charge of pensions for collective farm workers was abolished in favor of a unified system of pension provision, and the pension fund was established as an independent state authority. In order to address the poverty issue, the government established a minimum pension and a (discretionary) indexation mechanism to protect benefits from inflation. Under the 2002 tax reforms, pension contributions were combined with other social contributions under the Unified Social Tax, collected by the Federal Tax Service, which allocates the collected revenues among respective social funds (as opposed to being directly collected by these social funds previously). Another novelty was a regressive rate scale for the Unified Social Tax (see Table 1).

[18] World Bank, 2006. Idem.

Table 1: Unified Social Tax Rates (%)

Tax base	2002	2005	2008 proposal
First RUR 100,000 (US$ 3,798)	28/35.6	20/26	20/26
Next RUR 180,000 (US$ 6,836)	15.8/20	20/26	20/26
Next RUR 20,000 (US$ 760)	15.8/20	7.9/10	20/26
Next RUR 300,000 (US$ 11,395)	7.9/10	7.9/10	20/26
Over RUR 600,000 (US$ 22,790)	2/2	2/2	0/0

Note: In each pair of numbers, the first stands for the portion of the UST rate earmarked for pensions while the second reports the combined UST rate.

In January 2002, the pension system was transformed along a three-tiered structure, inclusive of a basic social pension, a mandatory labor pension and mandatory savings in private accounts. These reforms did not change the volume of pension contributions but only split the existing payroll tax revenues along the three pillars (for example, out of the 28 percentage points of the payroll tax, 14 percentage points are designated for funding the labor pension, 8 percentage points for funding the labor pension, 6 percentage points for funding private accounts). While this reform might have improved the fairness of treatment within the system, it has not changed the total funding and therefore did nothing to address the aging problem (except possibly luring hidden wages into the tax net through the regressive rate scale). The only (distinct) potential improvement might be promotion of private pension savings through the demonstration effects from the private accounts.

In general, financing pensions out of payroll taxes determines the ratio of average benefits paid to wages that supply the financing for the pension system (replacement ratio) as follows:

$$\textit{Replacement Ratio} = (Pw/Pb) * t$$

where *(Pw/Pb)* is the ratio of working population to pensioners and *t* is the payroll tax rate.

Because of an aging population, the ratio of working population to pensioners is projected to drop from 1.75 in 2006 to 1.27 in 2030 to 0.97 in 2050.[19] If the level of payroll taxes remains unchanged, these demographic trends will cause the replacement ratio to drop from 25.6 percent in 2006 to 18.5 percent in 2030 to 14.2 in 2050. This problem could be effectively solved by increasing the retirement age by five years, from the current 55 years for females and 60 years for males. Such a reform would bring the replacement ratio to 31.1 percent in 2030 to 25.6 percent in 2050. However, raising retirement age would be politically hard to implement as it would push the retirement age beyond the current life expectancy (60.7 years for males in 2006). A more feasible approach would be encouraging late retirement through monetary incentives.

Another policy proposal currently discussed by the Russian government is removing the regressivity of the payroll tax for the portion of income below US$22,790 (see Table 1). This follows the 2004 reduction of regressivity, when the rate for the lowest income bracket (covering more than 70 percent of the population) was lowered by one-third, leading to a one-third decline in pension contributions (from six to four percent of GDP) despite the simultaneous rate increase

[19] World Bank, *Russia: Fiscal Costs of Structural Reforms. Report No. 30741-RU* (Washington, DC: World Bank, 2005).

in the middle of the scale. Given that the proposed rate increase essentially falls within the same income stratum—after adjusting for the overall income growth—as the 2005 increase, the magnitude of resulting revenue increase is likely to be the same, which was hardly noticeable.

Conclusion

In summary, while Putin's reforms have brought improvements in some areas of Russia's public finance, such as tax policy, there have been limited visible results in terms of service delivery and overall administrative efficiency. The main reason seems to be insufficient coordination and poor linkages between various reform initiatives. While the administrative reform and the budget reform have a common theme of performance orientation, the civil service reform continues to be separated. Although the budget reform and the administrative reform have seen some steps toward implementation, mainly through piloting, the civil service reform has not moved beyond creating the legislative framework. Performance-based budgeting is not likely to have a significant impact on government efficiency unless the civil service reform changes the incentive structure in a way allowing performance targets to trickle down to individual civil servants.

PANEL 5: IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S REGIONS

POTENTIAL IMPACTS OF CLIMATE CHANGE ON RUSSIA, CONNECTIONS TO THE RUSSIAN ENERGY SECTOR, AND RUSSIAN CLIMATE POLICY AND KYOTO

Craig ZumBrunnen

Craig ZumBrunnen is Professor of Geography at the University of Washington. Dr. ZumBrunnen's published research has focused on Soviet and post-Soviet natural resource management problems, including environmental quality problems, regional economic development, energy resource research and development, urban geography and urban ecology. He has a Ph.D. in geography from the University of California at Berkeley.

Executive Summary

Summary
Climate change trends imply significant challenges and some new opportunities for Russia. Increasing temperatures could benefit agriculture, urban development, and Arctic shipping in Russia's north; however, temperature increases due to climate change will break up and melt the permafrost in Russia's resource rich areas, consequently threatening to (i) rupture and damage the oil and gas pipelines and infrastructure that are critical to Russia's energy industry, and (ii) simultaneously increase Russia's greenhouse emissions. Russian priorities are becoming overwhelmingly energy and economic growth oriented with climate change and environmental regulation taking a back seat. As Russia continues to grow rapidly, greenhouse output is rising again to 1990 levels after a dip following the end of the USSR; though Russia has signed the Kyoto Protocol, economic development and policy threaten to conflict with Russian Kyoto compliance.

Key Findings

- Increasing temperatures will function as a self-reinforcing feedback mechanism, threatening to accelerate ice thawing and intensifying the risks to Russia's ecosystem, partly thorough the release of greenhouse gases stored in bogs; this would also impinge on Russia's ability to comply with the Kyoto agreement.
- The most disruptive outcome would occur if Russia's transition to less energy intensive economy is very slow, while simultaneously experiencing rapid growth: this would lead to greenhouse emissions rising faster than any expectations.
- Russian Kyoto ratification was at least partly based on political considerations rather than financial and scientific, most important of which was likely EU support for Russian WTO entry.
- Because the Kyoto Protocol is based on reduction of greenhouse gases to pre-1990 levels, the dramatic decline in Russian industrial output in the early 1990s became Russia's basis for being a major player in Kyoto-based Carbon offset trading.
- As Russian emissions have been rising since 1998 and approaching 1992 levels, the important question for Russia is to weigh the economic benefits of regulating industrial output and selling carbon credits versus not impinging on its own growth and saving compliance costs. However, deregulation risks aggravating the positive feedback mechanisms of climate change which threaten Russian growth in the long term.

Policy Implications

- Russia's ratification and the United States' failure to ratify has partly contributed to Russia's image as a multilateral player in tackling climate change, and reinforced the image of the United States as an uncooperative unilateralist. This plays into the Kremlin's staunch anti-Western stance and has helped fuel the trend. The Kyoto agreement is a microcosm of the larger political atmosphere.

Introduction

> "It's been a mild winter, lots of rivers are drying up. For us, it makes no difference—it'd be better if it were even warmer. But it bothers the reindeer."
> *Ivan Kane*, *a nomad reindeer herder NARYAN-MAR, Nenets Autonomous District*

> "Of course you can see the effects of global warming. Sheet ice that normally covers the waters of the Barents Sea is quickly starting to shift and disappear. In recent years, you can't really see this permanent sea ice. It comes and goes. If the wind blows this way, it brings the ice to the coast. If it blows the other way, it floats away."
> *Vera Letkova, meteorologist*[20]

This paper reports on a number of the real and potential impacts of climate change on Russia, their connections to the Russian energy sector and Russia's involvement with the Kyoto Convention. This brief discussion paper outlines the trends and sources of Russian GHGs (greenhouse gases) and the role the Russian North plays in them. It also places Russia's GHG trends within regional and global contexts. Concomitantly, the paper highlights the potential systemic positive feedback impacts of global warming on global warming itself, and the Russian oil and gas extraction and distribution infrastructure. Cursively, the recent history of Russian climate policy positions and Russia's ratification of the Kyoto Protocol are reviewed. In this regard, such questions as the importance of Russia's ratification of the Kyoto Protocol, the nature and roles of Russian's Kyoto stakeholder players, the Russian negotiating positions on the Kyoto mechanisms, the reasons behind Russia's ratification of the Kyoto Protocol, and the rationales for Russian compliance with Kyoto are considered. Focusing forward it is hypothesized that Russian energy issues will dominate over climate change issues and that as long as Russia is not well integrated into the global economy, Russian political considerations will dominate over economic ones.

Climate Change & GHG Emissions

The latest IPCC (Intergovernmental Panel on Climate Change) fourth assessment concludes emphatically with 90 percent certainty that anthropogenic forcing is the major cause of the empirically well-documented patterns of global warming. The thin red lines on each of the three graphs in Figure 1 (see Appendices for all figures and tables) from the most recent IPCC assessment report represent observed temperatures since 1860, and the gray regions represent the range of all the GCM (General Circulation Model) numerous models and scenario results. Clearly, neither natural forcing nor anthropogenic forcing alone can replicate the measured observations, but models including both natural and anthropogenic forcing replicate the observations with a high level of agreement. The two dominant anthropogenic forcing factors are the release of GHGs primarily from the combustion of fossil fuels and anthropogenic albedo changes generated by land use/land cover changes. The rather dramatic increases in global fossil-fuel-based carbon emissions, especially those from petroleum and natural gas burning since the 1950s, are displayed in Figure 2 and Figure 3. The powerful role of the oceans as a net CO_2 sink is evident in Figure 3, but this role will be increasingly weakened as global oceanic water temperatures rise.

[20] Source for Quotes: Miariam Elder, "Carbon Credits Get Cool Reception," *The Moscow Times (*March 25, 2008).

Trends in Russian GHG Emissions

More germane to this paper are the "climate positive" impacts of the former Soviet Union and East European economic collapse on CO_2 emissions trends, also shown in Figure 3. The dramatic decline in GHG emissions following the economic collapse are revealed in more detail in Figure 4. Because the Kyoto protocol agreement regarding CO_2 emission reduction targets are based on 1990 emission levels, the dramatic decline in Russian industrial output in the early post-Soviet transition years became Russia's basis for becoming a major potential player in the Kyoto-based global carbon-offset trading markets. In 2003 the world's energy-related CO_2 emissions totaled 25.2 $GtCO_2$, with the United States, China, and Russia accounting for 23 percent, 15 percent, and 6 percent, respectively. In just the last five years, recent estimates indicate that China is now essentially tied with the United States for being the largest source of CO_2 emissions.

Total Russian emissions reached a low in 1999 (see Table 1) following the August 1998 Russian financial crash. There were no significant changes in the economic sector shares of Russian Federation GHG emissions (see Figure 5), or much change in the share of different greenhouse gases in Russia's total discharge between 1990 and 2004 (see Figure 6). The energy sector dominates in both time periods, contributing about 81 percent in terms of the CO_2 equivalents. In both time periods CO_2 is the overwhelming major GHG gas emitted—approximately 77-78 percent, followed by CH_4—approximately 14 percent, and N_2O (7.9 percent in 1990 down to 5.7 percent in 2004). This modest share decline for N_2O is related to Russian agricultural decline. However, it is worth commenting on some of the different trends in the sources of GHG emissions from 1992 to 2004.

First, emissions from gas fuels slowly declined, reaching a low in 1998, and have been modestly increasing annually since then, being still slightly lower in 2004 than 1992. Thus overall, the emissions from gas fuels has been fairly flat, which, environmentally, is relatively positive, as the combustion of gas fuels produce *much less* CO_2 per unit of caloric energy than liquid or solid fossil fuels. Emissions from liquid fuels declined dramatically between 1992 and 1995, and then fluctuated up and down within a range of 5 percent annually, reaching a low in 2002. They are now on the increase with the booming Russian energy sector.

Emissions from coal burning were over 30 percent lower in the nadir year of 2004, compared to 1992, reflecting the decreasing competitiveness of coal in the Russian industrial sector and the continuing shift to less carbon intensive gas and liquid fuels. Several sources claim that the Russian data on releases of CO_2 from gas flaring in oil fields are poorly inventoried and data are completely absent for the years 2001-2004. As part of the requirements for being in compliance with Kyoto, Russia has again begun to report releases from gas flaring, which from a climate change perspective are troubling.

As Table 1 reveals, the gas flaring emissions for 2004 were approximately 235 percent higher than for those reported in 2000 and 148 percent higher than those reported in 1992. If anything, these data are all likely to under-report the actual releases, but the dramatic up-turn cannot be questioned, and it is related to the lack of gas-capturing infrastructure in many of Russia's currently oil producing fields. Overall, the global cement industry contributes about 5 percent to global anthropogenic CO_2 emissions. Carbon dioxide is emitted from the calcination process of limestone, the combustion of fuels in the kiln, and from power generation involved in cement

production.[21] In 2003 Russia's 2 percent and America's 4.6 percent contributions to global carbon emissions from the cement industry were trivial compared to China's 42.6 percent.[22] In 1998 emissions from the Russian cement industry had dropped to slightly under 40 percent of their 1992 levels, but with the rebound of the construction industry in Russia, carbon emissions from cement production in 2004 had returned to 75 percent of their 1992 level. Per capita emissions have modestly increased since their low in 1998, due to a combination of economic recovery and population decline.

Finally, discharges from the combustion of bunker fuels were added to the emissions inventory in 1995 and have shown a steady increase since their estimated low in 1998. In summary, all of the emission parameters are still lower today than in 1992, and more importantly, lower than the 1990 Kyoto base year for determining carbon allowances and carbon credits. However, all the emission parameters are now increasing. Thus, the question arises as to how much carbon credit can Russia "afford" to sell so as not to impinge on its own economic growth?

Climate Change in the Russian North

In this section, the objective is to convey the relevance of cryosphere processes and their role in climate change. Anthropogenic climate change is already having measurable impacts on the Russian Federation's physical and human environments, especially in the Russian North and Far East where the majority of Russia's fossil fuel deposits are located. The trends of many of these climate changes portend significant challenges and some new opportunities for Russian human and resource development during this century.

Thus, it is important to enumerate and briefly comment on the real and potential, major, largely human-induced, dynamic climate change and environmental change impacts, and their real and potential significance to Russia and beyond. Figure 7 illustrates for the Northern Hemisphere the major changing winds, temperatures and storm tracks already being detected as a result of anthropogenic forcing. In this regard, the major changes currently being experienced and likely to intensify in the future, are warmer and wetter winters across northern Europe, increased annual precipitation—especially rainfall across Siberia—increased temperatures throughout all or nearly all of the Russian Federation, likely complete melting of Arctic Sea ice during summer, permafrost melting, northward and higher elevation movement of tree lines, significant habitat destruction and northward and higher elevation migration of floral and fauna ranges, major disruption of human urban, transportation, agricultural and energy industry infrastructure, and potential major human-induced changes in climate-regulating feedback systems.

According to the fourth IPCC assessment[23] the mean projected global warming during the period from 1980-1999 to 2090-2099 according to the A1B "business as usual" assumptions will be 2.8°C and much of the land area will warm by approximately 3.5°C, while the cooling

[21] Ernst Worrell, Lynn Price, C. Hendricks, and L. Ozawa Meida, "Carbon Dioxide Emissions from the Global Cement Industry," *Annual Review of Energy and Environment* 26 (2001): 303-329.
[22] G. Marland, T.A. Boden, and R.J. Andres, "Global, Regional, and National Annual CO_2 Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2003," Carbon Dioxide Information Analysis Center, Environmental Sciences Division, Oak Ridge National Laboratory, U.S. Department of Energy (Oak Ridge, TN: CDIAC, 2006). Available online at http://cdiac.esd.ornl.gov/ftp/ndp030/.
[23] *Climate Change 2007: The Physical Science Basis: Summary for Policy Makers*, 21.

over some oceanic areas will be associated with the upwelling of cold deep ocean water. However, temperatures in many Arctic regions have already warmed as much as 4°C over the last century, mostly in the past couple of decades, and the "business as usual" scenario projects the Arctic to be warmer by ~7°C by 2100 (see Figures 7 & 8).

Additionally disquieting is the fact that GHG emissions so far this century are already outpacing the GHG emissions assumptions used in the A1B "business as usual" scenario. Statistical analyses of the various GCM (General Circulation Models) climate models strongly suggest how serious the pace and degree of climate change may well be. Namely, there is less than a 5 percent chance that global warming this century will be less than 2°C, but a 25 percent chance that it will be greater than 5°C. The realistic climatic impacts of temperature increases in the range of 5°C compared to pre-industrial temperature levels significantly increase the risk of dangerous self-reinforcing feedbacks and abrupt large-scale shifts in the climate system (see Figure 9).

The greatest risk of reaching such a tipping point is indeed in the high latitude circumpolar Arctic region where, as noted previously, the temperature increases have been greatest and the GCM models have a high degree of uncertainty with regard to cryosphere processes. First, the rapid retreat of Arctic Sea ice (see Figure 10) has been exceeding even the simulation model predictions that the Arctic Sea would reach near ice-free September conditions by 2040.[24] Greater warming in the Arctic has led to greater summer sea ice melting, which creates self-reinforcing positive feedbacks. Less surface ice cover means lower surface albedo and more radiation energy available to be absorbed to melt even more ice. The resulting increase in the ice-free water surface absorbs still more shortwave infrared radiation, which reinforces warming temperatures. It appears this feedback system is continuing to be ever more strongly felt.[25]

Second, the GCM models so far have not been able to adequately incorporate ice sheet and glacier dynamics and have consistently erred on the conservative side, namely, glaciers are retreating and surging faster than the models predict. A multitude of published scientific papers have reported on the hypothesis that warmer Arctic region temperatures could account for the observed increase in the volume of lubricating surface-melt water reaching the ice-bedrock interface, accelerating ice flow and increasing the loss of ice mass. For example, in the last decade alone, accelerated ice discharge not only in the west, but also particularly in the east, doubled the Greenland ice sheet mass deficit from 90 to 220 cubic kilometers per year.[26] Recent analysis of satellite and other observations reveal that the speedups in ice sheet flow (50-100 percent) are even higher than earlier observations, but the relative speedup of outlet glacier flow is far smaller (<15percent).[27] The critical unknown is whether or not an Arctic-warming tipping point has already been reached or not.

---

[24] Marika M. Holland, Cecilia M. Bitz, and Bruno Tremblay, "Future Abrupt Reductions in the Summer Arctic Sea Ice," *Geophysical Research Letters*, VOL. 33, L23503, doi: 10.1029/2006GL028024, December 12, 2006. Also, see: http://www.ucar.edu/news/releases/2006/arctic.shtml

[25] Randolph E. Schmid, "Major Arctic sea ice melt is expected this summer," From Associated Press, May 02, 2008.

[26] Eric Rignot and Pannir Kanagaratnam, "Changes in the Velocity Structure of the Greenland Ice Sheet," *Science* 311, no. 5763 (February 17, 2006): 986 - 990.

[27] Ian Joughin, Sarah B. Das, Matt A. King, Ben E. Smith, Ian M. Howat, Twila Moon, "Seasonal Speedup Along the Western Flank of the Greenland Ice Sheet," *Science DOI*: 10.1126/science.1153288 (April 17, 2008).

While a more ice-free Arctic Sea means that it will play a greater role as a carbon sink, the resulting acidification of polar waters is predicted to have deleterious effects on calcified organisms and hence consequences for the entire aquatic food chain. Then, too, CO_2 has the relatively unusual property of being inversely soluble in water with regard to temperature. Thus, as ocean water temperature rises, the ocean's ability to absorb CO_2 decreases, and its ability to serve as a CO_2 buffer for the atmosphere will weaken, and if temperatures rise too high the oceans could become a new net source of CO_2.

Longer periods of ice-free coastal waters will increase coastal erosion from wave action, which will threaten coastal settlements and infrastructures. Changes are already evident in coastal/biological productivity, as are adverse effects on ice-dependent marine wildlife. While some regional fisheries may experience beneficial effects in the short run, and others will experience adverse effects, acidification is a long-term threat to all marine biological productivity and harvesting. On the other hand, beneficial effects of a less severe climate in the North and Siberia, while dependent on local conditions, include such things as reduced energy expenditures for heating, increasing agricultural and forestry opportunities, more navigable river and sea routes and marine access to resources, most importantly off-shore oil, gas, and ocean-floor mineral deposits.[28] For Russia, all circumpolar nations, and global trade, it appears likely that the dream of many for an ice-free (Canadian) Northwest Passage, which happened for the first time in the late summer of 2007, or an ice-free Russian Arctic Sea route will likely become a reality for increasing longer periods of time annually.

Figures 11-13 geographically illustrate some of the most problematic climatic changes, and their potential impacts and threats to Russia, and indirectly to Western Europe and the United States as well. These impacts include shorter periods of snow-cover, longer frost-free periods, longer growing seasons, higher average precipitation levels—especially as rain (see Figure 11) —thawing and changes in the northern Asia ice-rich permafrost (мерзлота) (see Figure 12) with high potential for subsidence and damage to infrastructure, including urban buildings and utilities, oil and gas extraction and transportation facilities (see Figure 13). The highest discontinuous risk regions for these problems will be felt around the Arctic coast by 2050. The medium risk zone includes such large population centers as Yakutsk, Noril'sk, and Vorkuta and most of the Baikal-Amur and Trans-Siberian railways.[29]
The entire issue of permafrost thawing and the climatic role of the huge West Siberian lowland

[28] O. A. Anisimov, D. G. Vaughan, T.V. Callaghan, C. Furgal, H. Marchant, T. D. Prowse, H. Vilhjálmsson and J. E. Walsh, "Polar regions (Arctic and Antarctic)," in *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C. E. Hanson (eds.) (Cambridge: Cambridge University Press, 2007): 655-661, 668-669.
[29] For example, see: Ibid., 675; A. Instanes, O. Anisimov, L. Brigham, D. Goering, B. Ladanyi, J.O. Larsen and L.N. Khrustalev, "Infrastructure: Buildings, Support Systems, and Industrial Facilities," in *Arctic Climate Impact Assessment, ACIA*, C. Symon, L. Arris and B. Heal (eds.) (Cambridge: Cambridge University Press, 2005): 907-944; O. A. Anisimov and M.A. Belolutskaia, "Predictive Modelling of Climate Change Impacts on Permafrost: Effects of Vegetation," *Meteorol. Hydrol.* 11 (2004): 73-81; O. A. Anisimov and C. A. Lavrov, "Global Warming and Permafrost Degradation: Risk Assessment for the Infrastructure of the Oil and Gas Industry," *Technologies of Oil and Gas Industry* 3 (2004): 78-83; O. V. Tutubalina and W. G. Rees, "Vegetation Degradation in a Permafrost Region as Seen from Space: Noril'sk (1961–1999)," *Cold Reg. Sci. Technol.* 32 (2001):191-203; and L. N. Khrustalev, "On the Necessity of accounting for the Effect of Changing Climate in Permafrost Engineering," in *Geocryological Hazards*, L. S. Garagulia and E.D. Yershow (eds.) (Moscow: Kruk Publishers, 2000): 238-247.

bogs is one of the most relevant issues related to this discussion. Short periods of snow cover, longer frost-free periods and increased precipitation as rainfall all function as self-reinforcing positive feedbacks leading to rising temperatures and faster permafrost thawing. When water freezes it expands about 10 percent in volume and, conversely, when permafrost melts, land subsidence occurs. The greater the depth of melting, the greater the subsidence; with differential local melting, differential subsidence and disruption will damage infrastructure and buildings and rupture oil and gas pipelines. During the last decades of the Soviet Union there were numerous articles about thousands of such pipeline breaks in the North because of local permafrost melting combined with shoddy pipe welds done under pressure to fulfill overly ambitious pipe laying plans. Many physical geography researchers were concerned that the entire low-lying Yamal Peninsula could disappear due to subsidence from permafrost melting.[30] Thus, indirectly permafrost melting poses a huge potential strategic risk to the energy security of Western Europe and hence the U.S. as well.

Another major reason for very serious concern about permafrost melting is the fact that Siberia's bogs are a storehouse of enormous quantities of greenhouse gases, mainly in the form of methane hydrates. Their release could very well result in catastrophic warming of the earth because methane molecules are 26 times more potent than carbon dioxide molecules in their greenhouse warming effect.[31] The West Siberian bogs contain some 70 GtC (gigatons of carbon) of methane representing 25 percent of all the methane stored on the global land surfaces[32] and if released, could more than double the 762 GtC currently resident in the atmosphere.[33] While on the one hand, warm temperatures increase floral biological activity that functions as a carbon sink, on the other hand, warmer temperatures also stimulate the detritus chain releasing both CH_4 and CO_2 from the decay of un-decomposed plant matter.[34] The relative strength of these two feedback pathways is incredibly significant for the planet's climate future given the fact that approximately 900 GtC are frozen in permafrost zones globally of which 500 GtC have been flash frozen in the Siberian tundra regions alone.[35]

---

[30] Personal interviews in Moscow in 1989, 1994 and 2000.

[31] Volker Mrasek, "Melting Methane: A Storehouse of Greenhouse Gases Is Opening in Siberia," *SPIEGEL ON LINE* (April 17, 2008), see: http://www.spiegel.de/inernational/world/0,1518,547976,00.html; "Northern Bogs May Have Helped Kick-start Past Global Warming," *ScienceDaily* (October 13, 2006).

[32] Fred Pearce, "Climate Warning as Siberia Melts," *New Scientist Magazine*, issue 2512 (August 11, 2005): 12.

[33] *Climate Change 2007: The Physical Science Basis*; Christopher B. Field & Michael, Eds., *The Global Carbon Cycle, Island Press, 2003; Special Report: Changing Climate* (Washington, DC: NGS, April 2008): 32-33.

[34] For example, see: Megan Sever, "Carbon Leaching out of Siberian Peat" *GEOTIMES* (July 2005) www.geotimes.org/july05/NN_arcticpeatCO2.html; T. J. Bohn, D. P. Lettenmaier, K, Sathulur, L. C. Bowling, E. Podest, K. C. McDonald and T. Friborg, "Methane Emissions from Western Siberian Wetlands: Heterogeneity and Sensitivity to Climate Change," *Environmental Research Letters* 2 (October-December 2007); Ian Sample, "Melting Permafrost Poses Greenhouse Crisis," *The Guardian* (August 12, 2005); Ian Sample, "Warming Hits 'tipping point' Siberia Feels the Heat It's a Frozen Peat Bog the Size of France and Germany Combined, Contains Billions of Tonnes of Greenhouse Gas and, for the First Time Since the Ice Age, It Is Melting," *The Guardian* (August 11, 2005); Grigory Feifer, "Climate Change Cited in Siberian Landscape Shift," *NPR: All Things Considered* (September 18, 2006).

[35] K. M. Walter, S. A. Zimov, J. P. Chanton, D. Verbyla and F. S. Chapin, III, "Methane Bubbling from Siberian Thaw Lakes As a Positive Feedback to Climate Warming," *Nature* 443 (September 7, 2006): 71-75; Glen M. McDonald, David W. Beilman, Konstantine V. Kremenetski, Yongwei Sheng, Laurence C. Smith, and Andrei A. Velichko, "Rapid Early Development of Circumarctic Peatlands and Atmospheric CH_4 and CO_2 Variations," *Science* 314, no. 13 (October 2006): 285-288; L. C. Smith, G. M. MacDonald, A. A. Velichko, D. W. Beilman, O. K. Borisov, K. E. Frey, K. V. Kremenetski, and Y. Sheng, "Siberian Peatlands a Net Carbon Sink and Global

Irrefutable evidence of thawing Siberian permafrost lies in two phenomena, which may at first seem contradictory. First, over the past 30 years, the total lake surface area and number of lakes in the zone of Siberian permafrost have increased by +14 percent and +4 percent, respectively, while in the southern zones of discontinuous permafrost the declines in lake area and number have ranged from -11 percent to minus -13 percent and from -6 percent to minus -9 percent, respectively, resulting in net losses of both lake area and number. The increases in the lake area and number in the zones of continuous permafrost are clear evidence of melting and water ponding on top of the permafrost, whereas the latter lake drainage occurs as the permafrost degrades still further. Both processes have been leading to accelerated release of CO_2 and CH_4.[36]

Despite the overwhelming hard scientific evidence from empirical observation, measurement, and systems modeling, there are still so-called "climate skeptics" or "climate contrarians" publishing both in Russia and the West regarding the above enumerated climate changes and potential impacts in Russia and elsewhere, including Yuri Izrael, director of the Russian Academy of Sciences' Institute of Climatology and Ecology and Vladimir Melnikov, director of Russia's Institute of the Earth's Cryosphere.[37] Without having ever interviewed these people or met them in person, one is hard pressed to understand their position other than the fact that many people in Russia think the benefits of global warming for Russia exceed its potential costs, especially the direct and indirect costs of climate change adaptation and mitigation.

In general, however, internal disputes over Russian climate-related policies and ratification of the Kyoto Protocol seem very much to have been based on differing interdepartmental and intramural assessments regarding the financial and bureaucratic benefits and costs of addressing, honestly and scientifically, global warming and climate changes policies, rather than about the validity of the scientific evidence for global warming. On the other hand, the facts are quite clear that between 1998 and 2005 ExxonMobil funneled nearly $16 million to a network of 43 advocacy organizations in a deliberate effort to confuse the public about global warming science and sow seeds of doubt about global warming and the human role in climate change via fossil fuel consumption and land cove/land use changes.[38] In fact, the source of the previous citation, the Heartland Institute, has since 1998 received nearly 40 percent of its total funds ($561,500) from ExxonMobil specifically designated for climate change projects.[39]

Russia and the Kyoto Protocol

Finally, let us turn briefly to Russia's involvement with the Kyoto Protocol. Russia formally ratified the Kyoto Protocol on November 18, 2004, and the Kyoto agreement entered into force

---

Methane Source Since the Early Holocene," *Science* 303, no. 16 (January 2004): 353-356.

[36] L. C. Smith, G. M. MacDonald, A. A. Velichko, D. W. Beilman, O. K. Borisov, K. E. Frey, K. V. Kremenetski, and Y. Sheng, "Siberian Peatlands a Net Carbon Sink and Global Methane Source Since the Early Holocene," *Science* 303, no. 16 (January 2004): 353-356; and L. C. Smith, Y. Sheng, G. M. McDonald, and L. D. Hinzman, "Disappearing Arctic Lakes," *Science* 308, no. 3 (June 2005):1429.

[37] For example, see James M. Taylor, "Russian Debunk Permafrost Scam: Siberia Not Melting, Methane Gases Remain Stable," Heartland Institute (November 1, 2005). See: http://www.hearland.org/Article.cfm?artid=17978.

[38] "Smoke, Mirrors and Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to Manufacture Uncertainty on Climate Science," Union of Concerned Scientists (2007).

[39] Ibid., Appendix B, 31.

on February 16, 2005. During the lengthy and contentious Kyoto negotiation process, Russia held a number of negotiating positions. For example, Russia opposed quantitative restrictions on Kyoto mechanisms, taxes on the implementation of Kyoto mechanisms, special status for CDM (Clean Development Mechanism), the treating of Russia's emission surplus due to its economic meltdown in the 1990s as "hot air", and opposed "supplementarity" owing to its potential negative effects on the development of carbon markets. On the other hand, Russia supported an early start of JI (Joint Implementation projects) and carbon emissions trading, a flexible approach to compliance, the counting forests as carbon sinks, international support for capacity building in IETs (international emissions trading), a regulatory role for state and government involvement, the reinvestment of emission trading revenues into climate change mitigation projects, and the banking of carbon credits and forward contracts.[40]

During Russia's internal deliberations prior to ratification the arguments for and against Russian ratification of the Kyoto Protocol may simply be summarized as a series of bullet items:[41]

Arguments FOR ratification of Kyoto Protocol

- Climate change impacts: permafrost, sea level rise
- Enhanced FDI from JI
- Revenue from likely sales of Russia's emission surplus
- Investments via Kyoto mechanisms could support modernization & innovation in energy sector
- Improvements in energy efficiency crucial for future economic growth
- GHGs reductions could improve domestic physical-ecological environment
- Russian ratification of Kyoto could improve Russia's image as a supporter of global multilateralism
- Ratification and implementation may smooth the way for Russia's entry into the WTO

Arguments AGAINST ratification of Kyoto Protocol

- Climate change impacts may be positive for high Latitude Russia
- Extent of anthropogenic climate change is (very) uncertain
- Revenues from ratification and compliance are likely to be low
- Costs would be too high for domestic compliance
- Kyoto Protocol unfair because not all countries have taken on emission (reduction) commitments
- Second phase or post-2012 GHG limits could conflict with Russia's ambitious economic growth goals
- US withdrawal, makes Kyoto Protocol nearly pointless
- Kyoto Protocol is at best ineffective and more radical approaches are necessary

In the final analysis it appears that the following factors were most crucial in Putin's final decision in favor of ratification. At the Marrakech meetings in 2002 Russia was successful in

---

[40] Craig ZumBrunnen, "Russian Climate Policy, the Kyoto Protocol & Beyond," invited presentation at Norsk Utenrikspolitisk Institutt, Centre for Russian Studies' 2007 Annual Conference – "Russia and the North," "Oslo, Norway, November 28-29, 2007).

[41] For example, see: Anna Korppoo, "Russian Ratification Process: Why is the Rest of the World Waiting? Research Letter," *Climate Policy* 2 (2002): 387-393; Laura A. Henry & Lisa McIntosh Sundstrom, "Russia and the Kyoto Protocol: Seeking an Alignment of Interests and Image," *Global Environmental Politics* 7, no. 4 (November 2007): 47-69; *Anna Korppoo and Arild Moe*, "Russian Climate Politics: Light at the End of the Tunnel?," Briefing Paper, Climate Strategies (April 2007) and Anna Korppoo, Michael Grubb, and Jacqueline, Eds., *Russia and the Kyoto Protocol: Opportunities and Challenges* (Brookings Institute: Chatham House, 2005); Kristian Tangen, Anna Korppoo, Vladimir Berdin, Taishi Sugiyama, Christian Egenhofer, John Drexhage, Oleg Pluzhnikov, Michael Grubb, Thomas Legge, Arild Moe, Jonathan Stern, and Kenichiro Yamaguchi, *A Russian Green Investment Scheme: Securing Environmental Benefits from international Emissions Trading,* Climate Strategies (2002).

bargaining for a 30 percent reduction below the 1990 baseline levels for calculating "carbon credits" due to its steep economic decline. This created a potential $10 billion windfall for the sale of Russian "hot air" carbon credits. The adoption of such things as the CDM, JI, Green Investment Scheme and IET mechanisms were Kyoto Protocol features considered favorable for Russia.

Finally, the decision was probably based much more on political considerations than scientific or even financial ones, most important of which was likely EU support for Russian WTO membership. On the one hand, lack of U.S. ratification has weakened the prospects for Russian revenue in the carbon-offset markets. On the other hand, Russia's ratification and American failure to ratify elevated Russia's image as a multilateral power player and its position for influence in post-2012 climate negotiations and concomitantly reinforced the U.S.'s image as an obstructionist unilateralist.

Future Challenges and Russian Climate Change Policy

Ratification of the Kyoto Protocol was relatively easy, but implementation and compliance has not and will not be as easy and problem free for Russia. First, Russia has been slow to implement compliance processes and did not open its doors to domestic and foreign investors to start trading carbon credits until late March 2008. Bureaucratic and ministerial infighting over control of the program has already led to the cancellation of dozens of environmentally friendly projects and had jeopardized others. The IET mechanism was only set to run for 48 months and Russia has already missed the first three months or more. European carbon markets appear very unstable and the global economic downturn neither augurs well for the sale of Russian carbon markets nor for possibly continued growth in Russian oil and gas exports to Europe.[42]

There is a host of technological, institutional, legal, and organizational limitations and difficulties still to be resolved with Kyoto compliance. There is a serious need to marry and bring into alignment all climate change policy components with other Russian strategic development goals and tasks. The most serious potential conflict might occur if Russia's economic transition is slow in reducing its energy intensity and at the same time rapid economic expansion results in its GHG emissions rising much faster than many had projected creating a "Kyoto Cross," a sort of 21st Century perverse "Scissors Crisis." In the near term given Russia's flush oil and gas revenues, it seems likely that Russian political considerations will dominate over economic ones.

Finally, unless some of the worse potential climate change impacts are felt across Russia's landscape and by its peoples more rapidly and disruptively than anyone would hope, it seems Russian strategic energy issues will dominate over climate change issues. Accordingly, then it will be a very warm wind indeed that ushers in a sound and discernable Russian climate change policy, which nonetheless may be too little too late.

[42] Miariam Elder, "Carbon Credits Get Cool Reception," *The Moscow Times* (March 25, 2008).

Appendix

Table 1: Russian Federation Fossil Fuel CO2 Emissions (in 1000s metric tons C)

Year	Total CO_2	Gas Fuels	Liquid Fuels	Solid Fuels	Gas Flaring	Cement Production	Per Capita Emission Rate	Bunker *Fuel
1992	541511	226466	168274	134640	3740	8391	3.65	0
1993	494142	217281	143272	123856	2947	6786	3.34	0
1994	427246	195526	110672	113536	2453	5059	2.89	0
1995	410370	194628	99767	108308	2704	4964	2.78	7857
1996	407559	198815	90714	111693	2556	3781	2.76	7436
1997	402240	194597	100541	100982	2489	3631	2.73	7303
1998	396036	**194221**	101599	**94191**	2489	**3536**	**2.70**	**6859**
1999	**394887**	196469	94826	97308	2422	3862	2.71	7090
2000	401144	199245	95968	99170	**2354**	4406	2.73	7454
2001	400068	203194	97113	94960	0	4801	2.77	7666
2002	397964	203398	**94670**	**94770**	0	5127	2.76	7954
2003	415454	213981	100359	95539	0	5576	2.90	8082
2004	415951	216517	95241	**92427**	5551	6215	2.89	8201

*metric tons of C

Source: Gregg Marland, Tom Boden & Robert J. Andres, "National CO2 Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2004," Carbon Dioxide Information Analysis Center (CDIAC), Oak Ridge National Laboratory, Tennessee (August 17, 2007).

Figure 1: Observed and Modeled Temperature Rise since 1860

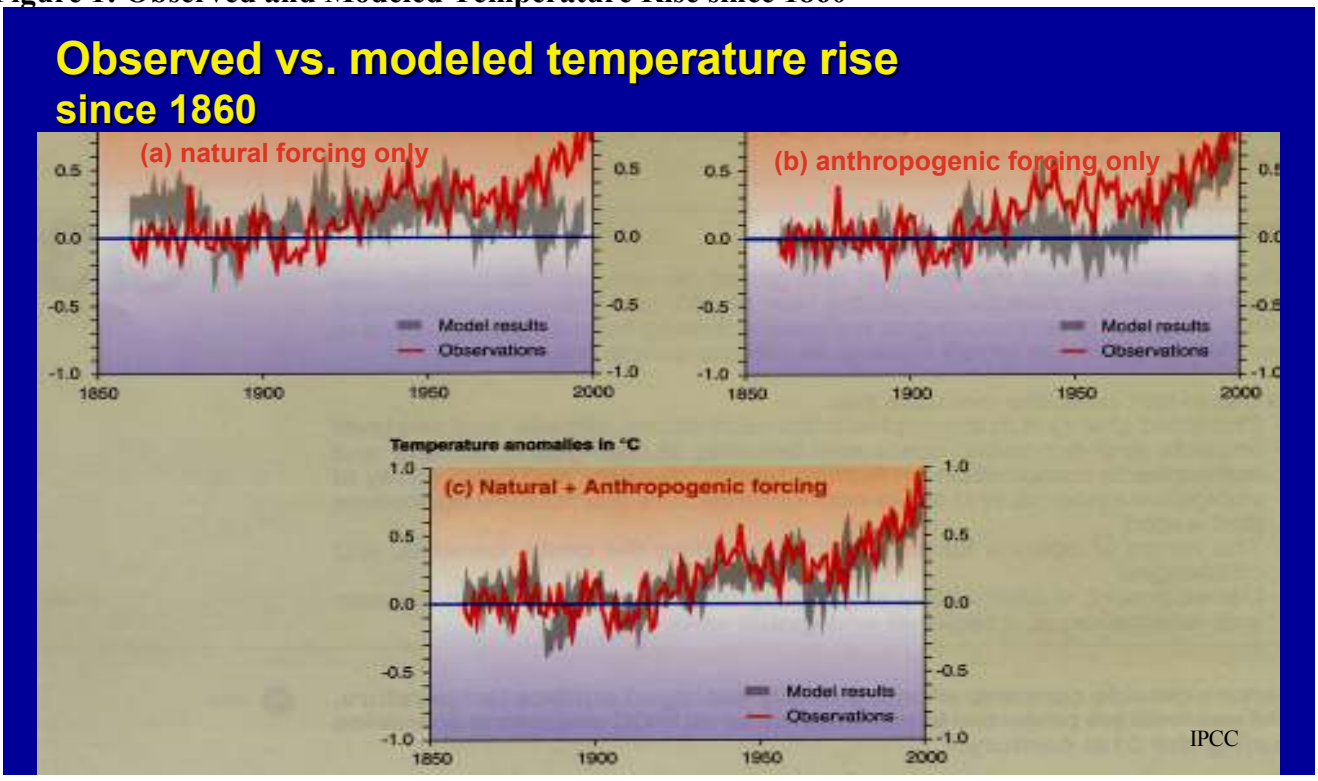
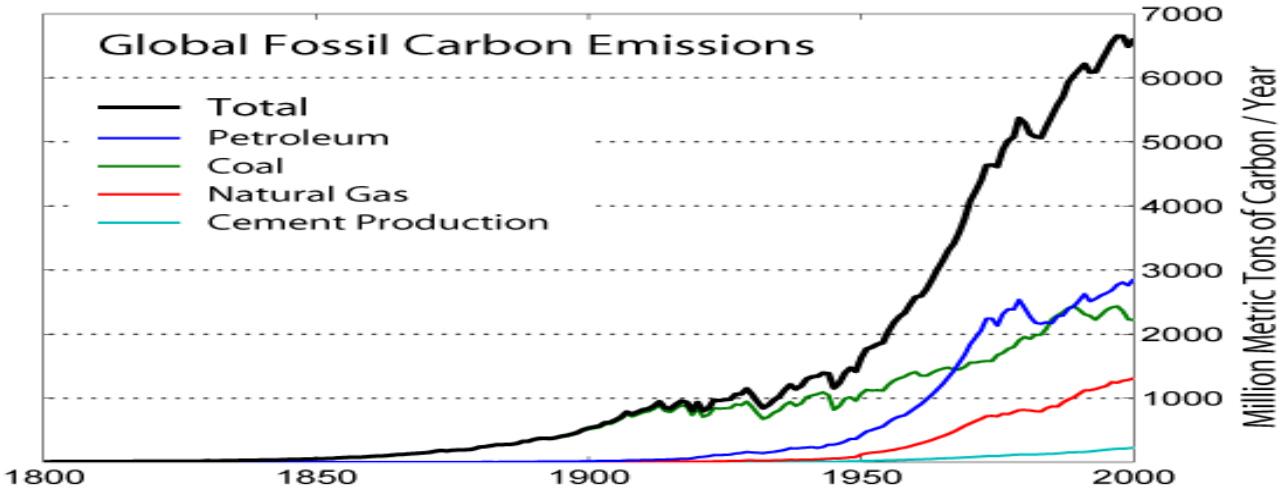


Figure 2 : Global Fossil Fuel Carbon Emissions



Data Source: Marland, G., T.A. Boden, and R. J. Andres. 2007. Global, Regional, and National CO_2 Emissions. In Trends: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Tennessee.

Figure 3: Trends in Atmospheric Concentrations & Anthropogenic Emissions of CO_2.

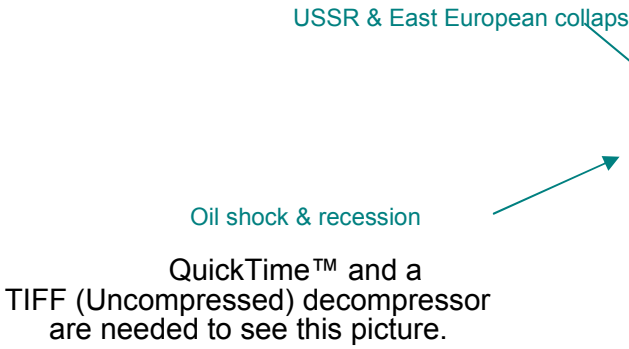
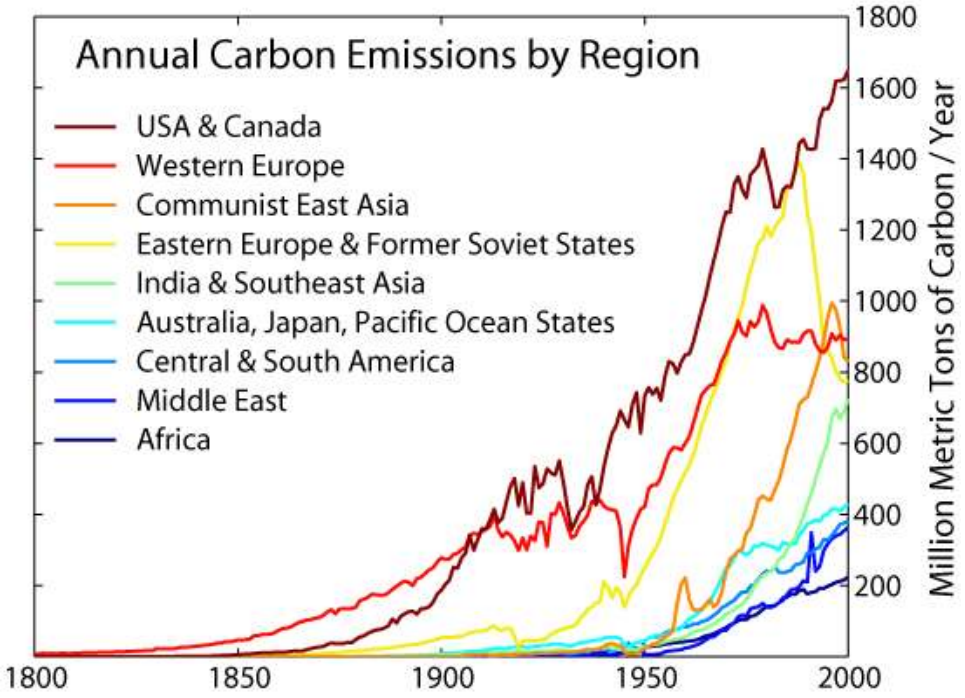
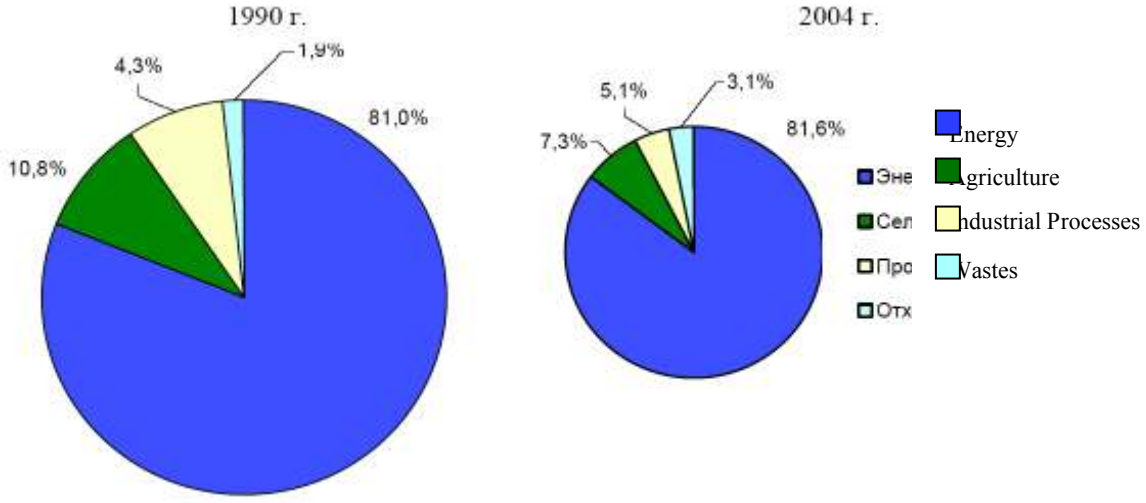


Figure 4: Regional Trends in Annual Carbon Emissions (mmt of C/year)



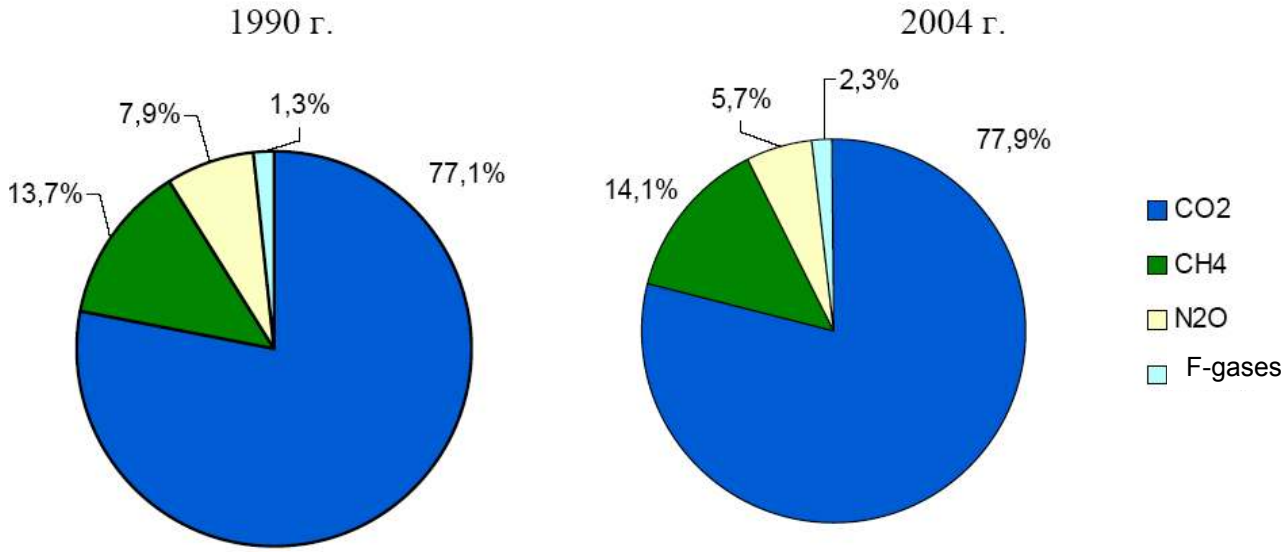
Data Source: Marland, G., T.A. Boden, and R. J. Andres. 2007. Global, Regional, and National CO_2 Emissions. In Trends: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Tennessee.

Figure 5: GHGs (in CO_2 equivalents) in Russian Federation by sectors, 1990 & 2004



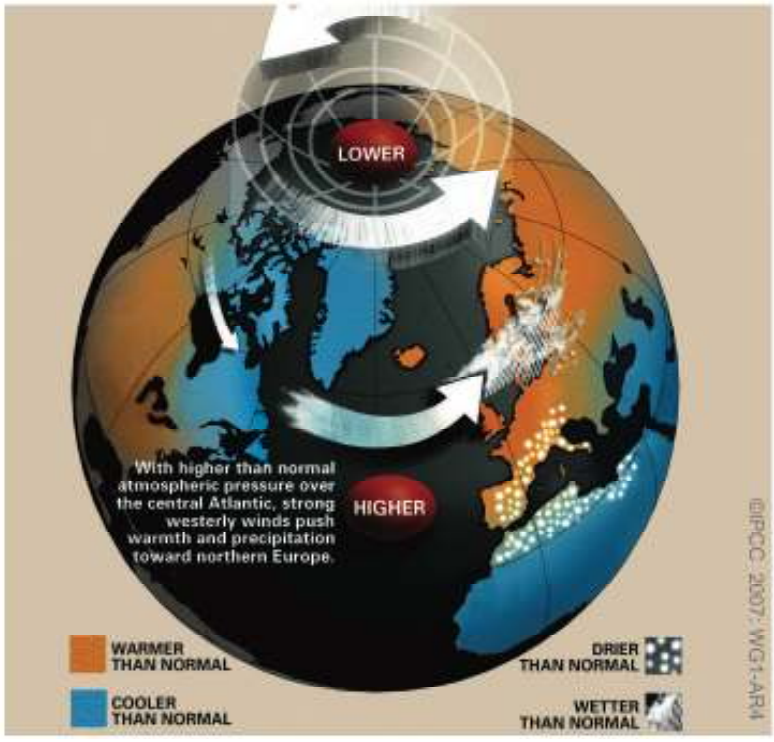
Source: *Russian Federation: Report on the Evidence of Progress in Fulfillment of the Obligations of the Russian Federation According to the Kyoto Protocol* (Moscow: MEDT, 2006): 10.

Figure 6: Share of different greenhouse gases in total discharge in Russia (in CO2 equivalents), 1990 & 2004



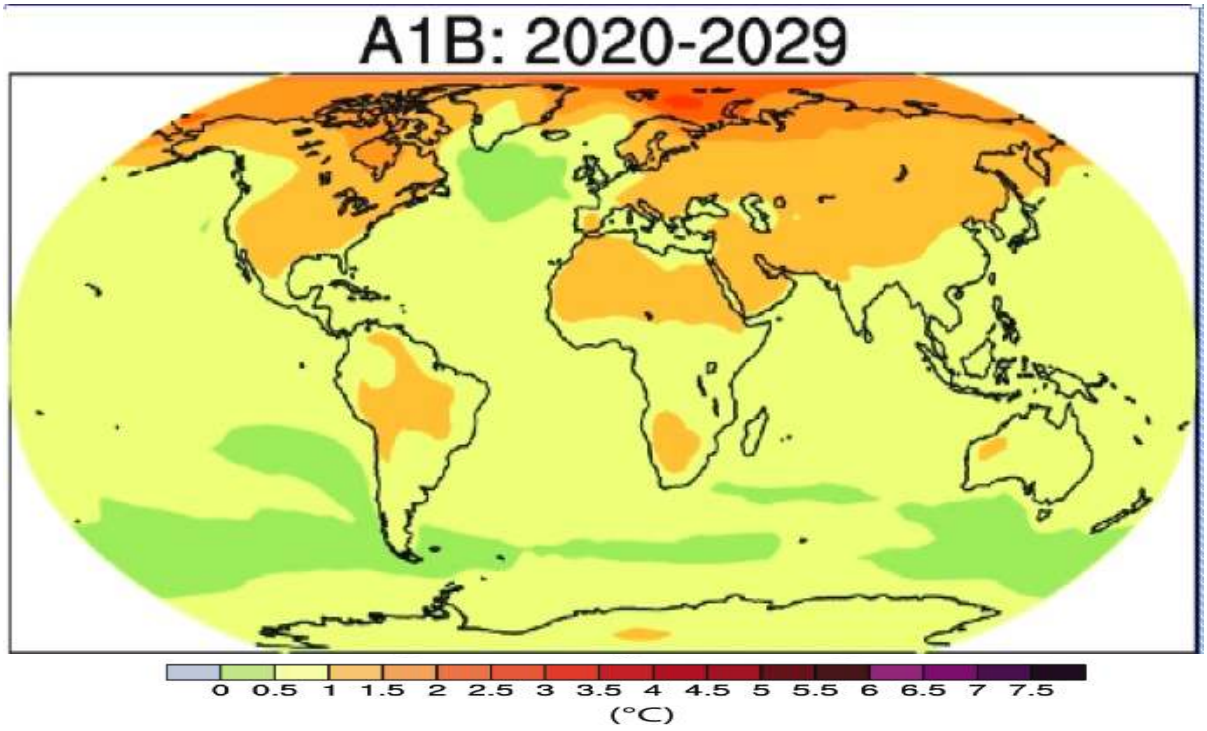
Source: *Russian Federation: Report on the Evidence of Progress in Fulfillment of the Obligations of the Russian Federation According to the Kyoto Protocol* (Moscow: MEDT, 2006): 10.

Figure 7: Changing Winds, Temperatures and Storm Tracks



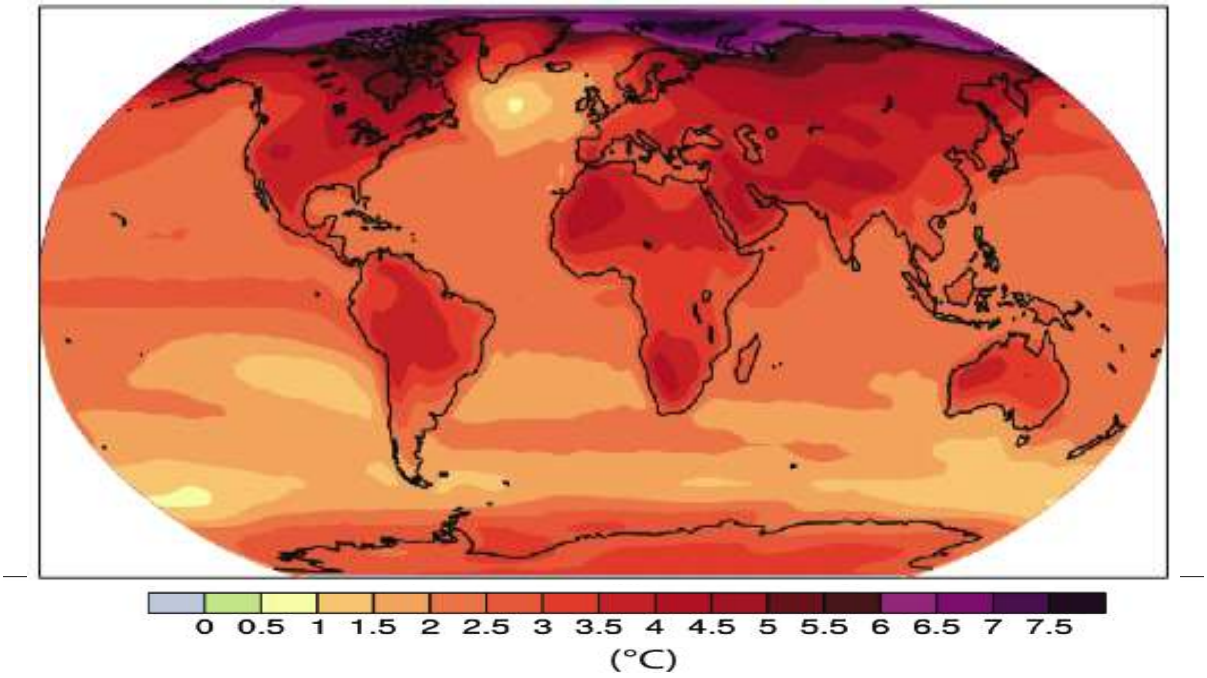
Source: IPCC 2007, Working Group 1, AR4 (assessment Report 4).

Figure 8: Temperature Changes in A1B—"business as usual" Scenario for 2020-2029



Source: *Climate Change 2007: The Physical Science Basis: Summary for Policy Makers*, p. 21

Figure 9: Temperature Changes in A1B—"business as usual" Scenario for 2090-2099



Source: *Climate Change 2007: The Physical Science Basis: Summary for Policy Makers*, p. 21.

Figure 10: Climate Change Impacts

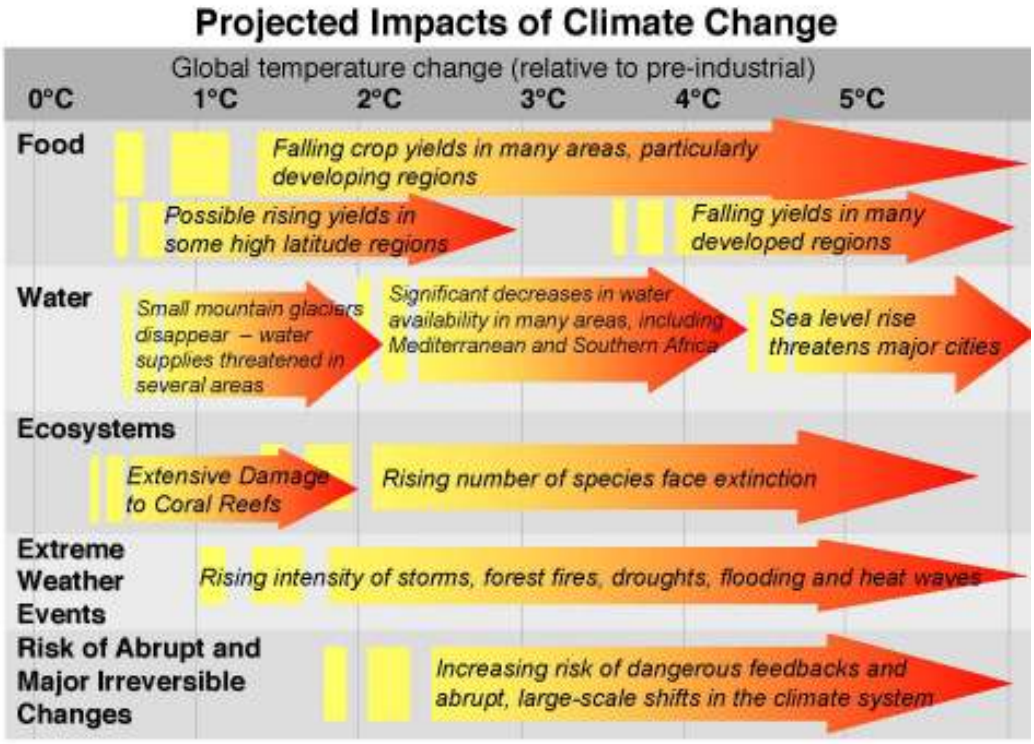


Figure 11: Arctic Sea ice minimums *(NASA satellite composite**, black circle – no data)***

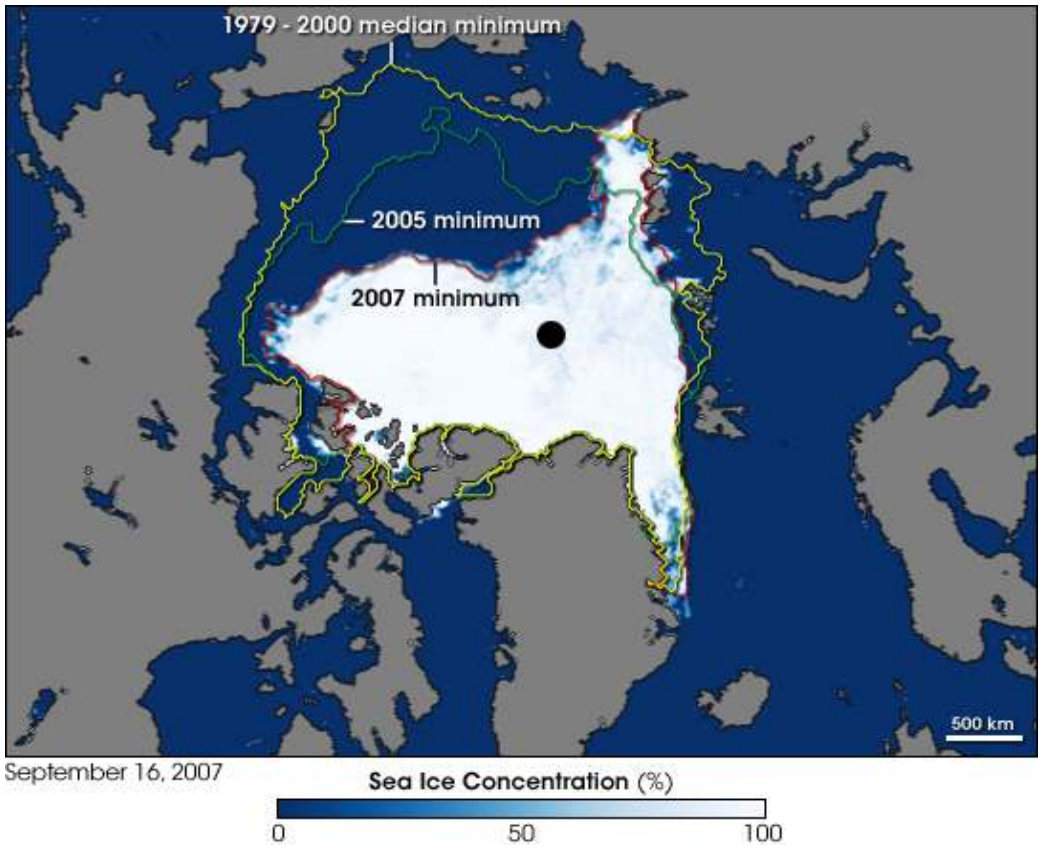
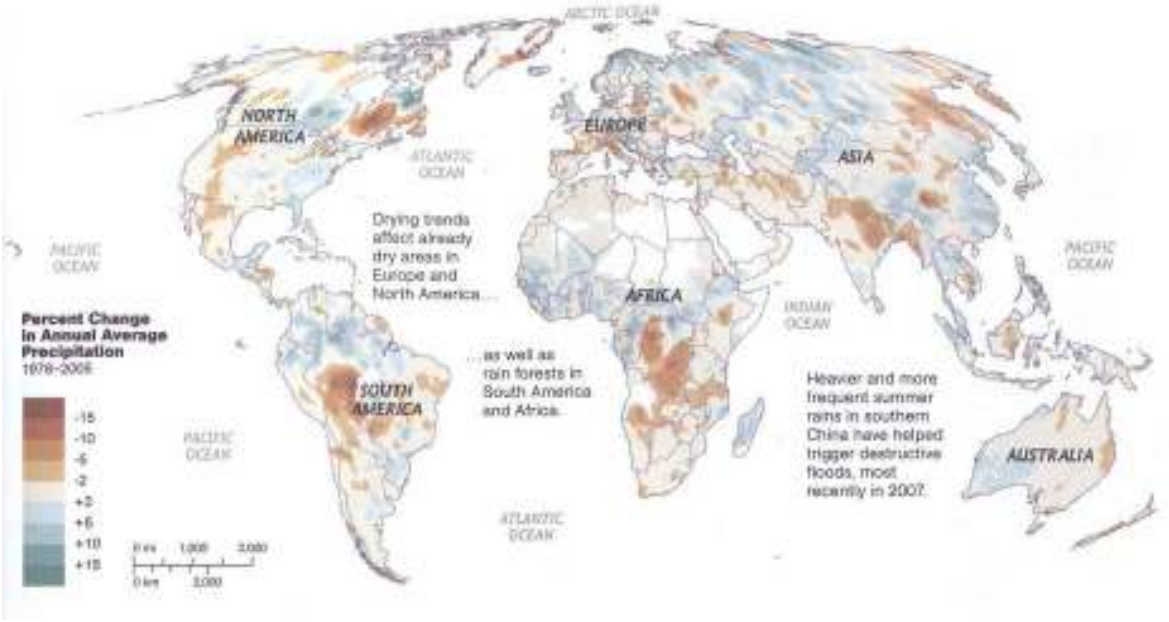


Figure 12: Changes in Annual Average Precipitation 1976-2005



Map source: Climatic Research Unit, University of East Anglia

Figure 13: Projected Future Changes in Northern Asia Permafrost Boundary under the SRES A2 scenario for 2100 *(source: IPCC)*

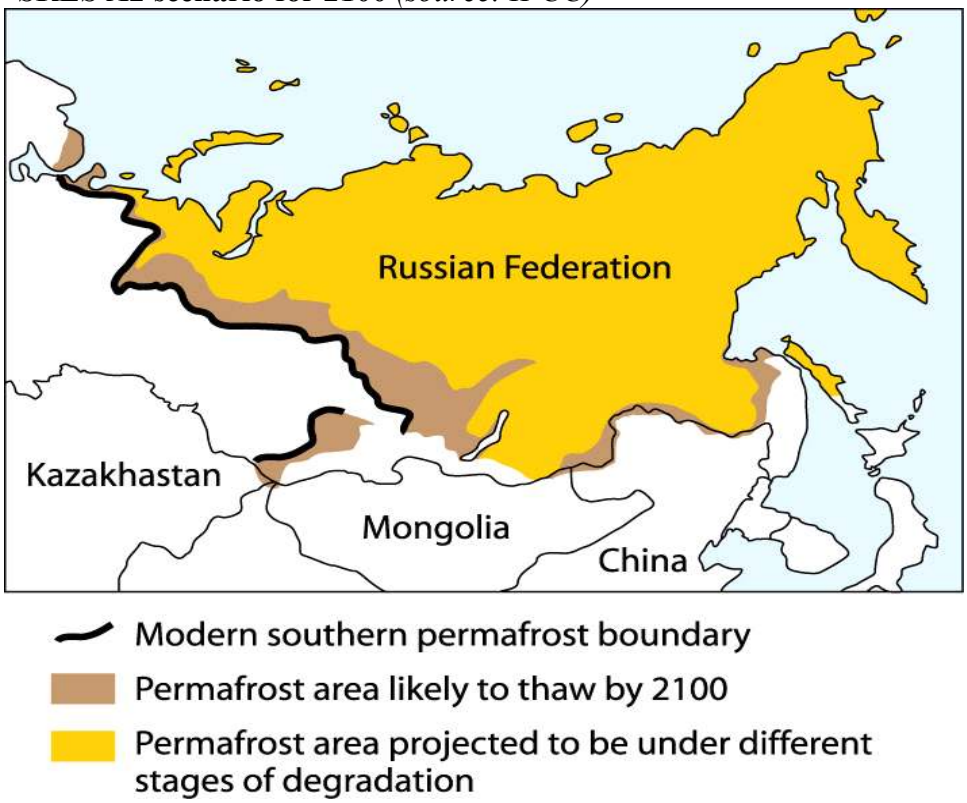


Figure 14: Selected Oil & Gas Pipeline Infrastructure in FSU

Source: http://www.eia.doe.gov/emeu/cabs/Russia/images/fsu_energymap.pdf

PANEL 5: IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S REGIONS

IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S REGIONS

Charles E. Ziegler

Charles E. Ziegler is Professor and University Scholar of Political Science at the University of Louisville. A specialist on Russia and Eurasia, Dr. Ziegler is co-editor (with Judith Thornton) of *The Russian Far East: A Region at Risk.* His current research focuses on politics, energy and security in Russia and East Asia. He has a Ph.D. from the University of Illinois, Urbana-Champaign.

Executive Summary

Summary
There is broad elite consensus in Russia that strategic natural resources are the key to Russia's re-emergence as a great power. There exists a huge inequity between Russia's resource-rich and resource poor regions. The Putin administration's zero-sum perspective on power sharing between the center and provinces has resulted in the centralization of power within the Kremlin rather than pursuing institutionalization of genuine federalism. In comparison with other "resource-cursed" states, the presence of systemic corruption and continuing power-centralization suggests that Russia's developmental pattern will resemble that of Nigeria rather than the Indonesian record.

Key Findings

- Siberia and the Russian Far East are the economic heartland of Russia and will continue to be critical to Russia's economic growth and foreign policy. At the same time, the isolation of these resource-rich regions will continue to be seen as a threat to Russia's national security.
- There is a dual inequity between Russia's resource rich and resource poor regions: while the resource rich regions tend to be wealthier overall, income inequality is much higher within wealthy regions than in poorer regions.
- The paternalistic practice of extracting revenues from resource regions and reallocating the income according to political priorities ensures less economic diversification and autonomy for Russia's provinces.
- The Kremlin believes that national security is enhanced by reasserting central government control over regions as regional autonomy would lead to collective action problems. It is unlikely that Russia will see any genuine power sharing under Medvedev.
- The bulk of revenue in Russia comes from natural resource rents, not taxes; hence, the Russian government can afford to be less responsive and accountable to its citizens, reinforcing the emasculation of Russia's regional governments.

Policy Implications

- Russia could see its Far East areas as being at risk from dynamic Asian neighbors such as China. The Russians will need to strike a balance between strategic friendship with China and being mindful of China's growing military might along their common border. Though the two countries have many common interests, the power politics of the two still preclude assumptions of a fully cohesive relationship between them.
- It is unlikely that regional politicians and NGOs will challenge the economic and political influence of state companies; Putin's alliance with loyal oligarchs has constrained regional politico-economic forces.
- Putin has promised to allocate more money on rebuilding the military both for security and as economic stimulus; the budget is set to increase 20% in 2008.

Introduction

There is broad elite consensus in Russia that strategic natural resources are the key to Russia's re-emergence as a great power—it is not just Putin. Siberia and the Russian Far East are the economic heartland of Russia—they have three-fourths or more of Russia's most important natural resources (oil, gas, other minerals, timber). These regions will continue to be critical to Russia's economic growth and its foreign policy. However, the bulk of Russia's population is concentrated west of the Urals. Despite the persuasive argument of Hill and Gaddy (2003) that Siberia is over-populated, the central importance of these regions suggests Moscow will continue to promote population settlement there (probably ineffectively), and will continue to view the region as at risk to its dynamic Asian neighbors, primarily China. Russian nationalism is fueling xenophobia, leading to suspicion of foreign investment or migration into Siberia and the Russian Far East from other countries. The isolation of these resource-rich regions will continue to be seen as a threat to Russia's national security.

Russia as a Resource-Curse Case: A Comparative Study

There is a great disparity among Russia's regions in terms of population, geographic size, natural resource base, developmental conditions, and tax revenues (Zubov 2005). The resource-rich regions (Tyumen, Tatarstan, Yamalo-Nenets AO, Sakha, Sakhalin) tend to be considerably wealthier overall than the resource poor regions, but income inequality is higher within the wealthier regions than in the poorer ones ((Beliaeva 2008). Resource wealth, then, would seem to generate "twin inequalities"—between rich and poor regions, and within wealthier ones. This sets up a tension that can lead to political conflict, and is likely to be addressed through transfer payments rather than by a process of sustained development.

As we know from the voluminous writings on the resource curse, not all cursed nations suffer equally. Those who have substantial natural resources but have avoided the curse include advanced industrial democracies like Norway and Canada. There are not many examples of large, resource rich federal states at developmental levels roughly comparable to Russia. However, there are two cases worth briefly considering—Nigeria and Indonesia.

Nigeria is an instructive example of how resource wealth can exacerbate centrifugal forces in a context of democratic transition. Nigeria's oil wealth has helped fuel civil war and regional insurgencies, has generated extraordinary corruption, and has contributed to the impoverishment of the people. Prior to the oil price shocks of the 1970s the regional governments retained a large proportion of revenues from local economic activity. As oil rents increased, revenues accrued to the central government, redistributing the wealth in the forms of transfers to the regions and encouraging waste and corruption. Federal transfer and loans to the regions undermined local economies, primarily in the agricultural sector, which declined as a share of GDP and exports.

Nigeria's oil wealth also stimulated the growth of predatory bureaucracy and resource nationalism. Resource rents encouraged a struggle for the redistribution of revenues, rather than encouraging diversification and the generation of new revenue, and this has been the primary cause of economic, political and social decay (Uche and Uche 2004). The struggle between center and states over revenue has led to a more centralized form of governance, in effect

emasculating Nigeria's federalism. Central authorities tend to treat revenue reallocation to the states as a form of largesse to be gratefully accepted; the states, by contrast, focus on inequalities.

Indonesia, by contrast, managed to avoid the worst excesses of the resource curse. Although the country does suffer from very high levels of corruption, the continuing influence of neoliberal technocrats in government moderated the more pernicious effects of oil wealth. Under the Sukarno and Suharto regimes the central government had collected 90 percent of revenue for redistribution among the provinces and, in this case, reallocated wealth to promote greater equality. With the 2001 devolution program, Indonesia's elites have decentralized governance, as part of the center's attempt to accommodate demands for autonomy. Indonesia's democratizing leaders have worked to bridge vast differences across the archipelago and have promoted a culture of fairness and reciprocity in center-regional relations. Rosser argues that it was not so much adoption of rational policies as it was the ascendance of propertied social classes, and the marginalization of radical and populist forces whose influence would have impaired development, that contributed to Indonesia's economic growth and diversification. Indonesia also benefited from a favorable external environment, in the form of Japanese dynamism (Rosser 2007).

Indonesia's technocrats, well aware of the consequences of Dutch disease, and concerned about the potential for radicalism and separatism in the outer islands, focused development spending on promoting agriculture and small-scale indigenous entrepreneurs, while trying to avoid penalizing the economically powerful Chinese minority. Agricultural and manufacturing exports expanded in the latter half of the 1980s, and by the early 1990s exports from these two sectors replaced oil and gas as the largest component of export income (Lewis 2007).

Russia seems to reflect the Nigerian more than the Indonesian model. Russian leaders have followed the centralizing model of extracting revenues from the regions, then reallocating revenues in line with national priorities. Post-Soviet Russia does not suffer from Nigeria's extreme ethnic fragmentation, but there is an ethnic dimension to Russia's resource wealth. Moscow's paternalistic approach to the regions echoes Abuja's. Unlike in Indonesia, the Russian social forces that most strongly advocated liberal market reforms have been largely discredited, and the resource nationalists who have flourished under Putin are likely to hold sway for the indefinite future. This will mean less diversification and a more paternalistic approach to the regions, rather than greater autonomy in a genuine federal system.

The inability of the Russian government to support agriculture adequately suggests that the poorer, rural areas of Russia will fall further behind the major cities and the resource-rich regions. Production of meats and grains has declined precipitously over the past 15 years (although the 2007 harvest was good), and food imports, which slowed after the 1998 crisis, have surged recently. United Russia's bureaucrats are trying to make inroads into the support for the CPRF, which is especially strong in the rural areas. And while Russian membership in the WTO may strengthen the economy overall, the treaty's provisions against agricultural subsidies are likely to further disadvantage the rural regions.

The Dangers of Russian Federalism

The central rationale behind strengthening the Russian state, from Putin's perspective, was to enhance national security by reasserting control over "chaos" in the regions and, once again, gather together Russia's lands. Beslan reinforced Putin's conviction that regional leaders could not deal effectively with terrorism; just as (in his opinion) they cannot effectively manage Russia's natural resource wealth. By creating the seven federal districts, reforming the Federation Council, creating the State Council, and appointing regional governors Putin sought to assure federal control over national security, and to undermine the political alliances of local politicians and regional businesses that had flourished under Yeltsin.

The federal-regional relationship tends to be conceptualized as a zero-sum game in Russia. Greater regional autonomy undermines central state authority, and whatever weakens the state threatens national security. The Kremlin seems to buy in to the argument of some analysts that in a period of reform regional autonomy leads to collective action problems, as states resist central initiatives that could impact a favorable status quo. But the dilemma cuts both ways. It is equally likely in a healthy federal system that sub-national units may experiment and advocate reform, while the center resists much-needed change (as with the Bush administration on global warming and energy conservation).

As the relationship between Moscow and the country's regions shifted from weak federalism under Yeltsin to a strongly centralizing "federalism" (in actuality, a unitary system) under Putin, the ratio of federal to regional tax revenues went from 50/50 in 2000 to 63/37 at the beginning of 2003 (Zubov 2005). We may not see further centralization under his successor, but it is unlikely that Russia will see the development of genuine power sharing between the center and regions.

In the 1990s the ability of the resource-rich regions to cut special deals with the Kremlin contributed to significant regional inequalities. Regionally-based clans, consisting of private entrepreneurs and local politicians, successfully evaded central control. Natural resources are relatively immobile assets, so rents are more easily captured by local elites (Desai et al 2003). At the same time, local institutions were being captured by powerful business interests. As a consequence in regions where state capture was high, small and medium businesses faced greater obstacles, revenue collection declined, and asset reallocation into more efficient and productive sectors suffered (Slinko et al 2003).

Putin succeeded in bringing these independent regional actors under centralized control through administrative reorganization (the creation of the seven federal districts); intimidation and political use of the judiciary (Khodorkovsky and Yukos); political reorganization (appointment of governors and revamping the electoral system to advantage United Russia, the main pro-presidential party); and informal blandishments and promises to individual oligarchs and regional politicians (Abramovich, Nazdratenko). The economic and political clout of state companies Gazprom, Rosneft and Transneft makes it unlikely they will be challenged by regional politicians or local NGOs; this constitutes an additional centralizing feature of current Russian politics.

Putin's centralizing project ensured that rents from these resources would accumulate to Moscow, which would then redistribute the wealth to reward loyalists and to punish opponents. Putin's alliance with loyal oligarchs and their subsequent penetration into formerly autarkic regions has constrained regional political and economic forces. In some cases power was pluralized, but in other cases the capture of regional institutions by national businesses attuned to the Kremlin substituted for state capture by regional businesses (Orttung 2004).

In general, leaders in resource based economies tend to be less accountable to citizens, since their revenue source is not taxes but rents from natural resources. The problem of accountability is compounded in Russia, with its enormous size, dispersed population, and tradition of being unresponsive to local or regional demands. Dmitry Medvedev was put in charge of developing socio-economic conditions (the national projects—education, health care, housing, and agriculture), but despite the president-elect's promise to enhance living standards throughout Russia, little of substance has been accomplished.

Petro-states often tend to spend heavily on the military, and Putin has promised that much of the central government's revenue will be allocated toward rebuilding Russia's armed forces. Increased military spending (the military's budget is set to increase 20% in 2008) may benefit specific locales (St. Petersburg or Vladivostok), but these expenditures are not likely to ameliorate regional inequalities. High military spending diverts resources from needed improvements in education, health, infrastructure, and other sectors of the civilian economy.

In a more centralized, authoritarian political environment where the president appoints loyal governors, strong provincial lobbying for a more equitable share of the resource wealth is not likely. In addition, the emasculation of Russia's incipient civil society during the Putin era disadvantages those social forces (indigenous peoples, environmentalists, organized labor) who seek to organize against powerful business and political interests.

Implications for Russian Economy

The focus on natural resources as a key to Russia's economic growth and great power status ensures that the centralization project will continue for the immediate future. We should not expect to see any real movement toward the institutionalization of genuine federalism.

Reliance on natural resources is likely to impede diversification of the Russian economy. Any broadening of Russia's economic base is likely to occur in the major cities, rather than in the provinces. As a consequence, inequalities between and within Russia's regions are not likely to decrease. Transfer payments may alleviate conditions in poorer areas, but are unlikely to lead to regional self-sufficiency, with the result that regions will become more dependent on the center.

A zero-sum perspective among Russian elites, the discrediting of liberal reformers, and systemic corruption suggest that Russia's developmental pattern will resemble that of Nigeria rather than the Indonesian record. The bulk of foreign investment (FDI) will continue to be directed toward the major cities and resource-rich regions, which will reinforce existing inequalities.

References

Beliaeva, L.A., "Social Stratification and Poverty in the Regions of Russia." *Sociological Research* 47, no. 1 (January-February 2008): 19-40.

Desai, Raj M., Lev M. Freinkman, and Itzakh Goldberg, *Fiscal Federalism and Regional Growth: Evidence from the Russian Federation in the 1990s*. World Bank Policy Research Working Paper 3138 (September 2003).

Hill, Fiona and Clifford Gaddy, *The Siberian Curse: How Communist Planners Left Russia Out in the Cold* (Washington, D.C.: Brookings, 2003).

Lewis, Peter M., *Growing Apart: Oil, Politics, and Economic Change in Indonesia and Nigeria* (Ann Arbor: University of Michigan Press, 2007).

Orttung, Robert, "Business and Politics in the Russian Regions." *Problems of Post-Communism* 51, no. 2, 48-60.

Rosser, Andrew, "Escaping the Resource Curse: The Case of Indonesia." *Journal of Contemporary Asia* 37, no.1 (February 2007):38-58.

Slinko, Irina, Evgeny Yakovlev, and Ekaterina Zhuravskaya, *Institutional Subversion: Evidence from Russian Regions* (William Davidson Institute Working Paper Number 604, August 2003).

Uche, Chibuike U. and Ogbonnaya C. Uche, *Oil and the Politics of Revenue Allocation in Nigeria*. African Studies Centre Working Paper 54/2004 (Leiden, 2004).

Zubov, Konstantin I., "Russian Federalism Today: 'Strong Federation' of 'Twilight of the Federalist Choice'?" *Perspectives on European Politics and Society* 6, no. 2 (2005):283-303.

PANEL 6: IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S DOMESTIC POLITICS AND FOREIGN POLICY OUTLOOK

THE THIRD ROAD TO SERFDOM AND ITS FOREIGN POLICY IMPLICATIONS

Andrei Piontkovsky

Andrei Piontkovsky is a Visiting Fellow at the Hudson Institute in Washington D.C. He is Executive Director of the Strategic Studies Center (Moscow) and is a well-known political analyst in Russia, where he contributes regularly to such publications as *Novaya Gazeta* and the *Moscow Times*. An applied mathematician by training, Dr. Piontkovsky is the author of several best-selling books on the Putin presidency in Russia.

Executive Summary

Summary
As post-Soviet Russia has become wealthier, the Putin administration has tended towards a more authoritarian structure, increasingly merging with powerful corporate elites. Russian politico-economic rhetoric is increasingly built on the West as an enemy and has become the largest justification for Putinism. The argument that the development of such a form of capitalism in Russia is more important than full democracy (in hopes that increased wealth will itself spread across the economy and lead to democratic tendencies) is unfounded, for it ignores the actual nature of Russian capitalism, which has not achieved a dynamic and transparent market economy, but has exacerbated the merging of government and corporate power and the institutionalization of corruption. The combination of authoritarian bureaucracy, and an abundance of resources (and over reliance on them) will hamper the development of Russia into a successful post-industrial society, and the system will likely not survive due to its inherent vulnerabilities.

Key Findings

- The Russian corporate and political elite have emerged as the most powerful and influential members of society and control most of the wealth; the Russian oligarchs are mostly Kremlin loyalists, awarded with state-backed companies.
- The Putin administration cannot hope to follow a Pinochet-like model of introducing liberal reforms under an iron fist as in Chile or certain South-East Asian countries, for these latter countries were transitioning from agrarian to industrial societies; Russia, however, is going from an industrial to post-industrial society.
- Russia's "golden million" (the oligarchs and wealthy) are more prosperous than ever before. In return for their support for Putin, they have received control over Russia's critical natural resource sectors.
- As long as the Kremlin monopolizes the large corporations and rents are diverted from other sectors in Russia towards the central government, no reform can be expected to take place even following the recent change in regime.

Policy Implications

- The merging of Russian energy corporations with the government gives Russia tremendous leverage in foreign relations with European and Asian powers (including China), especially as existing oil and gas reserves become more scarce. The former combined with steady anti-Western rhetoric seriously challenges what U.S. influence is present in the adjoining Asian regions.
- Kremlin advisers make no secret of Russia's intention to keep oil prices as high as possible by prolonging tensions in the Middle East, especially Iran; a best case scenario for the Russians would be preemptive Israeli action to hurt Iranian nuclear facilities: this would disarm Iranian nuclear ambitions and would inflate oil prices due to the political fallout, both very much in Russian interests.

Introduction

The corporatist kleptocracy being erected by Russian President Vladimir Putin is profoundly misunderstood. The defenders and apologists of the Putin regime, from Dmitry Trenin in Russia to U.S. President George W. Bush (who recently looked deeply this time not into Putin's soul but into the soul of the Russian people and discovered there is "a kind of basic Russian DNA which is a centralized authority"), trot out a pet argument which migrates from one publication to another. It goes something like this: What is most important for Russia right now is not abstract "democracy" but the development of capitalism. A growing middle class of property owners with a vested interest in security for their property will ultimately demand the establishment of liberal institutions. There is nothing fundamentally new or specific about this. Any freedom, as the history of the world testifies, begins with freedom for the barons and gradually extends down, to finally include the ordinary Joe in the street.

So, a middle class of property owners in Russia will come with time, we are to believe, and they will recognize the importance of property rights and introduce liberal institutions in Russia. This extremely popular theory totally ignores the actual nature of Russian capitalism. The right to property in Russia is entirely conditional on the property owner's loyalty to the Russian government. The system is tending to evolve not in the direction of freedom and a post-industrial society, but rather back toward feudalism, when the sovereign distributed privileges and land to his vassals and could take them away at any moment. The only difference is that, in today's Russia, what Putin is distributing and taking away is not land but gas and oil companies.

The Russian Model of Capitalism

Over the last ten to fifteen years, a mutant has evolved which is neither socialism nor capitalism but some hitherto unknown creature. Its defining characteristics are a merging of money and power, the institutionalization of corruption, and domination of the economy by major corporations, chiefly trading in commodities, which flourish at the expense of the administrative resources they have privatized.

Eight years of Putin's presidency have finally dispelled the illusion that this mutant would somehow wither away of its own accord, yielding to a dynamic, transparent market economy. It has not withered away, and continues to obstruct the country's modernization and its leap forward into the post-industrial age.

This is gendarme-bureaucratic capitalism with the Father of the Nation at its head. Putin did replace some of the Yeltsin generation oligarchs with new, "patriotically oriented" scions of the intelligence services and, in a major way, by that great collective oligarch, the bureaucracy and its armed units, the security agencies. Putinism and the politico-economic model that it has engendered amazed us with its sheer aesthetic and intellectual squalor; but we can live with that. The real problem is that it is totally inefficient and only exacerbates the innate vices of Russian capitalism: the criminal merging of wealth and government power, and the institutionalization of corruption.

Such a petro-state model can deliver neither consistent economic growth, nor overcome the

enormous gulf between the rich and poor, nor ensure a breakthrough to a post-industrial society. This model of provincial capitalism dooms Russia to economic degradation, marginalization and, in the final analysis, to implosion. It will not survive for decades, as the Stalin and Brezhnev models did, and indeed it may be that in this Putin backwater, Russia is destined finally to run out of historical time.

Our remarkable compatriot, Peter Chaadaev, expressed the thought almost two hundred years ago that Russia's historical role seemed only to be to serve as a warning to other peoples of what they should not, under any circumstances, do themselves. We seem to have been providing this service with masochistic zeal for the past two hundred years. Another great thinker, the Austrian economist Friedrich von Hayek, could never have imagined when he wrote his famous "The Road to Serfdom" that, in addition to the two roads to serfdom that he described—fascism and communism—there could be a third, along which people would be led under the banner of von Hayek himself.

In one of Vladimir Putin's studies there is a small bust of von Hayek. This is not solely for the recruitment of foreign investors, who sometimes visit the office. Vladimir Vladimirovich sincerely believes he is quite the liberal reformer, as his advisers keep assuring him he is.

But the end result of his eight years in power is what the Soviet-KGB bureaucracy dreamed of when it invented perestroika in the mid-1980s. Twenty years down the road, what has been achieved? A total monopoly of political power, just as before; enormous personal fortunes, which were off limits to it before; and a completely different lifestyle (some of them bask in Courchevel, some in Sardinia). Lastly, and most agreeably of all, they are no longer burdened with any kind of social responsibility. They no longer need to parrot that "the goal of our life is the happiness of ordinary people," a piece of hypocrisy they found nauseating even then.

The Putin Project is also the long-standing aspiration of "liberal" economists to find a Russian Pinochet who will introduce liberal reforms with an iron fist. Their faith in the Pinochet approach was constantly strengthened by the example of a whole succession of countries where it was supposedly successfully implemented: Chile, and certain of the states of East and South-East Asia. Unfortunately for them, however, what these countries were implementing by authoritarian methods was the transition from an agrarian to an industrial society. This is a task which was very effectively accomplished by Joseph Vissarionovich Stalin sixty or seventy years ago.

The problem Russia faces today, of breaking through to a post-industrial society, simply cannot be resolved by these methods. This became evident from the experience of the very Asian tigers and dragons to which our authoritarian liberals refer us. In South Korea, the model ran out of steam by the late 1990s. (Incidentally, many leaders of the local industrial conglomerates, the Chaebols, and indeed two former presidents of the country, spent protracted periods in prison.) The model is wholly unsuited to the post-industrial development of a society.

Russia faces an additional, very serious drawback: it is rich in raw materials and energy resources. The combination of authoritarian bureaucratic power with an abundance of resources is totally disastrous for Russia's development, because it deprives the bureaucracy of any feedback from reality. This results in Russia's complete corruption and decay—which we see

happening day by day.

The 15 to 20 people who run Russia today do not only run it, they also own it, its oil and gas resources in particular. The disgraceful Putin-Abramovich $13 billion deal, the IPO of Rosneft, or the activities of the company Gunvor, make further debate on the corrupt nature of the regime futile. The reality is now blatantly obvious. Russia's golden million live as no Russian elite has ever lived before. More than that, in terms of conspicuous consumption they far excel the golden million of any developed state. The Russian golden million are true supporters of the Putin regime that requires, in return for making a fairy tale come true, only the purely nominal membership fee of total political loyalty. In this milieu, no new perestroika is ever going to happen; or if it does, then, as in the case of the U.S.S.R, it will happen only when it is far too late.

The Kremlin's "assertiveness" is not assertiveness in furtherance of the national interests of Russia. It is an assertive exhibiting of Putin's anti-Western neuroses and an aggressive prosecution of selfish business interests.

Energy and the Russian Geopolitical Agenda

Meanwhile, the image of the West as an enemy has become the sole ideological justification of Putinism, that threadbare philosophy of the former lower ranks of the FSB and the St. Petersburg city government who have gone crazy with the advent of sky-high oil prices. The "minister-capitalists" who remember the oil price collapses of the 1980s and 1990s cannot afford to be passive observers of the vicissitudes of the oil markets. This is a new important factor, added to its traditional anti-Western neuroses and phobias, influencing the Kremlin's behavior in the international arena.

It is quite clear (in private conversation, Kremlin advisers make no attempt to conceal the fact) that Russia's entire policy towards Iran is aimed at prolonging the crisis surrounding Iran's nuclear program for as long as possible, and thereby keeping oil prices high. The best case scenario for an end to the Iranian nuclear crisis from Moscow's perspective would be an Israeli preventive strike against Iran's nuclear sites.

This is, firstly, because an Iranian nuclear bomb is something Russian leaders do not need. Iran is, after all, the only state in the world with official territorial claims against Russia (part of the Caspian seabed is disputed). Moreover, all the indignation of the Islamic world in this case would be directed against Israel and the United States, which would also suit Moscow quite well. Finally, Iran would doubtless retaliate by destroying the Saudi oil platforms and blocking the Straits of Ormuz, interrupting the export of oil from the Middle East for a while.

The *chekist* oil barons who form the core of Vladimir Putin's entourage are already rubbing their hands in anticipation of this course of events. How high might the price of a barrel of oil go? Two hundred dollars, perhaps three hundred dollars? Too many aspects of their lives—the regime's stability, their role on the world stage and, finally, their personal wealth—depend on the number of dollars for a barrel of oil. They will not be repeating the Soviet leaders' mistake of passively watching the price of oil fall. They have, after all, plenty of scope for influencing the

situation in the Middle East.

Every step of Moscow's Iranian policy in recent years has been aimed at moving events in this direction. By blocking or completely watering down U.N. Security Council resolutions on Iran, Moscow has facilitated Iran's nuclear program. By supplying Iran with TOP M-2 missile installations and negotiating over possible delivery of the more cutting-edge S-300 complex, Russia is effectively pushing Israel towards having to undertake a military solution of the problem. After the Russian anti-aircraft installations to protect Iran's nuclear sites are fully commissioned, a military strike by Israel will no longer be feasible; but the alternative to a preventive strike is to see nuclear weapons and their means of delivery placed in the hands of someone who believes in the need for a Final Solution of the Jewish Problem as profoundly and passionately as the late chancellor of Germany, Adolf Hitler. This is totally unacceptable to the Jewish state and, if Iran does not halt its nuclear program, a preventive strike is highly probable.

There are moderates in the Iranian leadership prepared to negotiate on the discontinuation of industrial enrichment of uranium in return for a guarantee of international deliveries of nuclear fuel. But, Moscow has made no demand that enrichment be halted before deliveries of fuel for the Bushehr nuclear plant were resumed; that would have been constructive and would have strengthened the hand of the moderates.

The nuances of how the Russian capitalist-ministers behave may change, but their strategic aim remains unchanged: Moscow has consistently been the political, and now also the military, umbrella for the mullahs who are rushing to get their hands on nuclear weapons. The Kremlin fully understands that this will inevitably lead to military conflict. The war in Iraq has brought the Putin regime handsome political and economic dividends. The Kremlin is hoping that the feast will continue.

PANEL 6: IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S DOMESTIC POLITICS AND FOREIGN POLICY OUTLOOK

IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S DOMESTIC POLITICS AND FOREIGN POLICY OUTLOOK

Nikolay Petrov

Nikolay Petrov is Scholar-in-Residence and Program Chair for Russian Domestic Politics and Political Institutions, and Society and Regions, at the Carnegie Moscow Center. He is also a senior research associate with the Institute of Geography at the Russian Academy of Sciences. Dr. Petrov is an expert on Russian foreign policy and internal politics and on elections in Russia. He has a Ph.D. from Moscow State University.

Executive Summary

Summary
Russian politics changed considerably between Putin's first and second terms; the first term was marked by economic liberalization, while the second saw stagnation in reform and consolidation of power by the Kremlin. The current Russian political system is a product of the latter, and is an "over-managed democracy" (OMD), whose chief characteristics include insufficient management, increasing authoritarianism, controlled elections, emasculated institutions and an inability to handle large scale systemic crises and modernization. The oversimplified OMD system is unsustainable in its present form and lies precariously between a completely authoritarian state and a working democracy; it cannot be both, and will drift toward one or the other. In order for Russia to ensure a stable and viable political system, Russia needs to increase democratization by modernizing and reforming itself.

Key Findings

- Because the OMD system lacks self adjustment capability, it is rigid and is in constant need of micro-management, letting tactical and short term considerations prevail over strategic and long term considerations.
- The OMD system is deeply linked with oil and gas prices. In fact, the over-centralization of the Russian government was made possible by the wealth and financial security generated by natural resource revenue.
- Incoming President Medvedev's speeches may hint at attempts to achieve economic liberalization and return to reforms; however, regardless of his intentions, real changes are unlikely as he is largely devoid of true leverage in many policy areas.
- The practice of appointing regional governors by the President (begun in 2005) rather than through elections effectively put an end to federalism in Russia.
- The rigged election system in Russia is geared towards preventing negative results as opposed to ensuring positive results; this system is more damaging because it eliminates competition altogether and erodes trust in elections and democratic procedures.

Policy Implications

- It is a mistake to assume that the Russian inefficiencies and inertia to reform are merely due to Putin's authoritarianism; there is an underlying belief among the Russian political elite that Russia's economic growth and achievements are evidence of the efficacy of the government's approach, so much so that the government has grown complacent, leading to an apathetic "Russian disease" of sorts.
- Dmitry Medvedev's administration will be different than Putin's, but not significantly so. Reversal of Putin's course is unlikely; in addition to Putin being Prime Minister and still retaining considerable influence on Medvedev, Medvedev pursued the very same courses under Putin. Further, the level of inertia in the current political system signifies a lack of coalition necessary for reform.

Introduction

In conditions of rapid price and profit growth a resource-based economy, such as Russia, tends to be characterized by a pervasiveness of socio-economic problems rather than promotion of reforms; economic populism exercised by the government; paternalism and growing expectations from particular sectors of society. Such economies are at risk not only from a future inevitable decline in prices, but also from the potential dead-end situation that can arise when a government increasingly becomes unable to meet its citizens' growing expectations.

The Russian government initiated a number of different socio-economic reforms immediately after Putin's reelection in 2004. However, the failed implementation of these reforms in the initial stage[43] resulted in mass social unrest in early 2005, and the plans were thereafter either cancelled or postponed. The whole of Putin's second presidential term, with its ***neo-stagnation,*** thereby saw no modernization in the Russian economy and social sphere.

Instead of pushing forward with modernization, Russian authorities, under political pressure related to the anticipated transfer of power from Putin to his successor, took a long vacation. They avoided any essential moves in the socio-economic sphere, offering instead populist politics and undertaking political reforms aimed at tougher control over major actors and society. Examples of such actions included electoral reform, the so-called Beslan package of political reforms, and reforms connected with restricting the autonomy of NGOs and political parties.

Such political reforms resulted in the further weakening of political parties and channels of communication between society and the state in general, and in the weakening of almost all institutions except for the presidency itself.

Russia's 'Over-Managed Democracy'

Russia's political system today can be described as an ***over-managed democracy (OMD).***[44] The basic features of the system include: 1) a strong presidential system of management at the expense of all other institutions and actors, including both houses of parliament, the judiciary, as well as businesses, and regional elites; 2) state control of the media, which is used to shape public opinion through dosed and filtered messages; 3) controlled elections that no longer function as a mechanism of public participation, but rather serve to legitimize decisions made by elites.

Emasculated institutions can no longer fulfill their functions within the system. They are gradually replaced by substitutions that are fully controlled by the president, and do not have an independent source of legitimacy. The Kremlin, driven by considerations of easier, more practical management, destroyed the system of checks and balances that had previously existed and was still functioning, albeit not perfectly. The resulting system today has been reduced to a

[43] Among major reasons of these reforms failure one can mention not only their bad design and implementation but the fact that all of them have been started at once.

[44] 'Democracy' here doesn't mean that the system is democratic by essence; it means first, that it evolved from a chaotic democracy under Yeltsin and second, that it's transitional by nature from proto-democracy to hopefully real democracy in future.

purely mechanical configuration[45] that lacks flexibility with regard to the changing environment; and is incapable of self-adjustment and self-development.

The configuration of power in the Russian political system is highly rigid and mechanical. With no effective system of checks and balances to help accommodate changes in the external environment, and no leeway at the main "joints", Russia's political system is constantly in need of manual management and retuning. As a result, the system's macro-managers, who are very few, are compelled to deal with different emergency problems; specific interests dominate over general ones, and tactical considerations prevail over the strategic. The resulting low-quality performance is further aggravated by a lack of transparency and numerous administrative conflicts that hinder free and fast circulation of information.

Not only is Russia's OMD system inefficient due to these aforementioned reasons, and thus very resource-consuming, but its inefficiency is also growing over time. Whether in Russia or Venezuela, this inefficiency makes such a system strongly dependent on an ever increasing influx of money to compensate for declining efficiency. Thus, the system is not self-sufficient and depends upon external factors such as the price of oil and gas.

Considering the complexities, and potential immediate- and long-term implications, of instituting a democratic political system, the management mechanism of Russia's OMD is rather primitive. Democracy management controlled from a center that disregards regional diversity yields dissimilar results and can lead to conflicting, and at times undesirable, outcomes. Thence another serious contradiction in of the OMD, whereby undivided authority and rigid centralism in management inevitably conflicts with societal responses to that management, as these tend to differ significantly along regional, "urban-rural", status, ethnic, and other lines.

The oversimplified OMD system based on vertical chains of command lacks not only proper checks and balances but also foolproof mechanisms, which prevent it from handling large-scale systemic crises resulting from ill-planned, unbalanced or simply inadequate decisions. OMD has progressively ruined or weakened foolproof mechanisms that might include such features as: 1) a free and independent media; 2) a representative parliament that addresses the interests of major socio-political and regional groups, and entails serious public discussions of major reform plans; 3) opportunities for society to express its preferences through free and fair elections in which various national agendas are presented, and through referenda on important issues; 4) governors elected by popular vote and ensured fixed terms in office, thereby ensuring accountability to their voters; 5) and a critical mass of NGOs, including think-tanks and watch-dogs, to provide independent reviews of governmental plans and decisions and serve as a warning system, for both state and society, against bad decisions.

OMD is most technologically refined when applied to elections. The system relies on the following elements: 1) forbiddingly high thresholds for participation, which include financial and direct administrative entrance fees and numerous obstacles; 2) manipulated selection of candidates; 3) strongly regulated access to media resources; 4) the same agent who establishes

[45] When replacing institutes by substitutes Putin didn't leave them any space for maneuver, any freedom of action; thus nodes of this system are connected in a very rigid way.

the rules of participation in elections also has the authority to oversee the observance of those rules.

Once a violation has been tracked, repressive measures promptly follow. All of the above are conducted by election commissions that are controlled by the center, by law enforcement agencies, and by courts working in collusion. In the absence of transparency and public control, the rule-setting agent is free to change any rule at any time, if the existing rules fail to produce the desired result. The end result is a network of 'mines' produced in the electoral system[46].

Where the OMD-styled elections fail to deliver the desired result, post-election OMD-management provides opportunities for additional corrective measures. Hence, the main purpose of an OMD election is to prevent negative results rather than to deliver positive ones, thereby ruling out unacceptable outcomes. This point is illustrated by the gubernatorial elections held in early 2005, whereby a victory for the Kremlin was not necessarily confined to one particular Kremlin-backed candidate. The government does not pursue a "win-lose" strategy; rather, its strategy can be non-linear and more flexible, with a number of different options available, not just one or two particular ones.

Negative selection by the Kremlin, generally speaking, is cheaper than a positive one (cheaper for those who govern, not for the society). At the same time, it is also more damaging: while it does not grant unfair advantages, it eliminates real competition altogether. Not only does it lead to greater corruption and decrease the efficiency of the system's performance, but it also erodes trust in elections and democratic procedures in general, as well as the authorities' legitimacy.

The increasing gap between the procedural aspect of elections and their role with regard to the significance of elective offices, and the influence of elections over subsequent development, makes elections far more responsive to the general political development than to procedural improvements.

Under more or less free voting conditions, which do exist in a lot of regions, elections look like a balanced system with all elements in place. In a way, a sort of "law of conservation of force" (perhaps similar to Newton's second law?) can aptly be applied to the institutions and democratic procedures that were relatively well developed during the last decade, whereby managing democracy results in negative side effects for the state. In the context of elections, these negative side effects entail growing protest sentiment and actions in the form of absenteeism, negativism, and voting for opposition forces.

[46] They are: gathering of signatures and checking them; candidates' reporting on their profits and property; the volume and technicalities of a campaign financing; rules of agitation. There is a side-show in Petrodvorets in Saint Petersburg outskirts, where children are running at a paved place. A stream of water/fountain can appear anytime under any of bricks and nobody knows when and where. There is unnoticeable old man who knows, sitting aside and switching on this or that fountain time to time. Something similar is going on with mines mentioned: the rules are established in such a way, that each candidate violates them here and there. Authorities turn a blind eye toward these violations until certain moment, but anytime they are ready to punish disagreeable candidate absolutely legally. It's about selective use of law, thus.

The basic OMD contradiction is that one cannot ensure predetermined election results and simultaneously maintain democratic decorum. This makes the OMD model unstable, with an inevitable shift toward either stronger central authority or greater democratization. In other words, to improve the OMD model, which fails to yield the desired result, the government needs either to increase manageability or to allow for more democracy.

A functional contradiction in an electoral OMD model results from the fact that the "manager", i.e., the decision-making, is split along federal and regional lines, as well along departmental lines. There are pronounced conflicts of interest among different factions of the elite, with each faction anxious to demonstrate its loyalty and efficiency, rather than to work for a common purpose. Despite the fact that the federal elite is much stronger now and can rely on regional 'siloviki' (the 'men of force') incorporated in the power hierarchy to represent its interests, regional elites often act contrary to interests of the OMD system as a whole.

The 2003-2004 Russian elections—the first federal elections to be held post- the creation of the OMD model—offered a glimpse into the potential workings and mechanisms of the new system. However, the full potential of the OMD system were not exploited, as that particular election was, generally, favorable toward the party of power and, hence, did not require employing the use of all levers and technological tricks built into the OMD construction.[47] The general result of the 2003-2004 test-case can be summarized as follows: although it did not look pretty, the OMD model worked well.

The OMD has been continuously tested and tried in different elections and demonstrated a capacity for certain self-adjustments and self-perfections; however, this is not an automatic process. The feedback mechanism works in a way that makes it possible to get real-time information about the course of the campaign and, if needed, to "correct" it in an operative mode. While the OMD model itself can be adjusted and modified during a campaign, such adjustments more often take place after the election process (as exemplified in two recent large-scale electoral reforms).

By excluding political forces and their representative citizens from participating in (a) elections, and (b) the decision-making that follows, the OMD system not only undermines itself in terms of efficiency and legitimacy, but also turns potential systemic political opposition into an anti-systemic opposition. The price of eliminating citizen participation, and the resultant lack of a legitimate space for popular political expression, lends itself to a potentially explosive situation—whereby a build up in social pressure can lead to the destruction of the entire system.

The OMD system's top-heavy operational dependence on personality-based power, rather than on a balance of institutions, renders it inherently volatile. This presents huge political risk, especially when the system loses momentum as a transfer of power in the major political office draws closer.

The OMD cannot reproduce itself. It therefore requires manual management and constant intervention from outside. The combination of the flaws of a strong centralized-command system

[47] They include first of all the legal possibility to exclude anybody from the race, to cut off financial support, to put huge administrative pressure etc.

with those of a democratic one calls for a huge and complicated overseeing bloc. Otherwise there is a strong temptation for medium-level elite to over-manage elections and to misuse existing opportunities in its own favor. It is this growing 'oversight bloc', which should compensate for the declining publicity and transparency, that places an additional burden on the system and makes it even less flexible.

The OMD system is transitional and is unlikely to last long given its growing managerial inefficiency, dependence on high and/or increasing oil prices, and its proclivity for self-generating crises.

Not only is the political 'superstructure' potentially very unstable, but its economic basis is on the brink of facing serious ordeals as well. The fact is that Russia's recovery economic growth potential is over, and in order to continue growth, the Russian economy needs to overcome serious troubles and undergo essential modernization. Otherwise, it will set limits on its own growth. Russia's economic risk is aggravated by the government's lack of appreciation for the seriousness of new challenges. Russia's economic growth has been touted as evidence of the efficacy of the government's approach for so long that the Kremlin has itself come to believe in this—an affliction that can be described as a sort of 'dizziness from imagined successes.'

The "Russian Disease"

The Russian state believes it can protect itself from the Dutch disease through the use of stabilization funds, etc. While Russia's ability to avoid Dutch disease remains questionable it is apparent that the "Russian disease" is already here, as exemplified in the remodeling of Russia's political system in conditions of stagnation against the background of a very favorable financial situation.

Democracy became a victim of political de-modernization during Putin's second term in office—a side effect of efforts to strengthen the state as understood by Putin and his team. It should be noted that the democracy that existed under Yeltsin resulted from a weak state rather than from the impetus of a strong society; hence, under Putin, as the state became stronger, democracy got weaker.

Federalism was another victim of political de-modernization. Once again, the so called emerging Russian federalism under Yeltsin was the result of a weak center rather than of strong regional governments. When the center became stronger, federalism became weaker. The practice of appointing regional governors by the President (begun in 2005) rather than through direct elections effectively put an end to federalism in Russia.

The over-centralization which is peculiar to present day Russia, along with over-unitarization, was made possible, first, by the fortuitous financial returns gained from the conjuncture of abundant raw materials and high prices and, second, the fact that almost all of Russia's wealth is generated from a few oil, gas and metals producing regions. However, the government's heavy reliance on its gold reserves to fix all problems is impractical and unsustainable in the long term.

Along with the rent-seeking behavior of the government there is an ***absence of taxpayers' psychology among citizens,*** hence accounting for public passivity on issues related to money misspending and wrongdoings by the government at all levels of administration.

There has been a government practice of negotiating individual agreements with the biggest economic players in order to develop regions in Russia. Russian companies now spend up to 8.2-30.6 percent of their pre-tax profits toward the social needs of their respective regions. Demonetization is limited to just a commodities' exchange; the population does not participate.

The Kremlin's politics has changed considerably between Putin's first and second terms in office. At first, there was a kind of economic liberalism combined with authoritarianism. Then, in the fall of 2003, economic liberalization stopped and the Kremlin switched instead to a system that led to stagnation in the socio-economic sphere, while pursuing further authoritarianism.

Presidential terms in Russia do not start with an inauguration, or even with elections. They really start much earlier, when a decision is made by political elites about the new presidency. Thus, Putin's first term started in January 2000 when he became an active president, or likely even earlier, at the end of 1999, when he became a powerful prime-minister. Putin's second term really started in October 2003, with Khodorkovsky's arrest, which marked a revision in the political course. The Russian Presidency's latest term really began in early 2007, when the decision was made regarding Medvedev as Putin's successor.

Thus, Russia was already at the beginning of a new presidency rather than on the eve of it by the time the official inauguration took place in May 2008. At this stage, Putin has already started his ***new modernization project***, which is perhaps the new edition of Stalin and Beria's nuclear and later space programs. The idea is to concentrate huge state resources in areas that are likely to produce the highest prospective yield for an economic breakthrough.

Several giant state corporations were established, with huge budgetary financing. The biggest of these are Russian Technologies, led by Sergey Chemezov; Russian Corporation of Nanotechnologies, led by Leonid Melamed; and Rosatom, led by Sergey Kiriyenko. Along with them are a few other state companies—monopolies led by Putin's closest associates—that have also received substantial state financing over the years. These include Russian Railroads, led by Vladimir Yakunin; and Transneft, led by Nikolay Tokarev. One can only hope that the current focused investment in state corporations will achieve better results than the investment in socio-economic reforms initiated at the beginning of Putin's second term.

The new Russian president-elect Dmitry Medvedev, speaking recently at Krasnoyarsk economic forum, gave a speech that reflected an economic liberalist position, strengthening expectations of a coming thaw in Russia's economic policies, and raising speculations about a potential forthcoming return to the 2000-2002 reformist positions. However, these hopes may be unrealistic given that: 1) Medvedev is Putin's project and any expectations regarding his willingness to revise Putin's course—a course that Medvedev himself helped implement—do not look well grounded; 2) regardless of his intentions, Medvedev is not in a position to provide real changes in the foreseeable future due to a lack of effective leverage vis-à-vis institutions, team,

etc.; 3) the current political system has a huge inertia and there is a lack of public coalition interested in starting real modernization.

However, the Institute of Contemporary Development (INSOR), a think tank working out proposals for Medvedev, stands on positions supporting economic liberalism. Led by Igor' Yurgens, the deputy-chair of the Russian Union of Industrialists and Entrepreneurs, INSOR has attracted a number of progressive economists to work on its proposals. The institute is often compared to the Gref's Center for Strategic Proceedings, an institution which worked out liberal economic strategy during the initial stage of Putin's reign. This development further contributes to expectations of economic liberalization under Medvedev.

The problem is that, first, INSOR, which inherited the RIO-Center (Center for Development of Information Society), was established by Leonid Reinman, former minister of information and communications and one of Putin's closest allies. INSOR is, thus, more Putin's project than Medvedev's. Furthermore, for a while, the institute was also used by Sergey Ivanov, another probable Putin successor, and hence can hardly be attributed to Medvedev personally. In addition, it is likely that INSOR's strategic proposals will not take effect until the next presidency, i.e., post-Medvedev's current term.

It looks more likely that Putin now plans a breakthrough of sorts by means of state corporations, which could be capitalized into an innovative economy sometime in future, when a new stage of liberal economic reforms could potentially be started.

It is important to note that one of the first reports by INSOR's team of economists offered four possible economic scenarios: 1) *Mobilization:* wherein the state by itself allocates resources and distributes them in favor of areas that have been designated a high priority; 2) *'Rentier':* based on rent maximization from natural resources and its redistribution in the form of social payments; 3) *Inertial:* wherein there is tactical maneuvering between interest groups competing for access to resources, instead of jointly undertaking strategic decisions; and 4) *Modernization:* wherein basic conditions are provided for sustainable economic growth, increasing citizens' well-being, and essential strengthening of the country's role in world politics.

The problem is, however, that the realization of the first three scenarios, either exclusively or in some combination, looks much more probable than a switch to the fourth scenario. The major problem with modernization as viewed by the report's authors is a lack of public coalition as well as separate influential forces that could support the modernization scenario.

Russian society is an important element of the puzzle. It is atomized, paternalistic and passive. However, paradoxically, the Kremlin, after doing a lot in order to transform society into its present shape, no longer needs this kind of society. While social passivism is good at times of stagnation, inevitable reforms require social mobilization.

In the nearest future, Russia and its political system will experience essential changes. The so-called political stability at present is akin to the stability of a drunken person staying near a wall in order to keep straight. Movement in any direction will end this fragile stability. The condition for survival of the former lies in large-scale modernization, along with restoration of certain

features of democracy and federalism. The political system will survive only if it is capable of modernizing itself. Otherwise, it will be replaced by a different system.

NBR DISCUSSION WORKSHOP

RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS

Hudson Institute
1015 15th Street, NW, Suite 600, Washington, D.C. 20005

THURSDAY, APRIL 24, 2008
8:00AM-5:00PM

BACKGROUND

The *Global Trends 2020* report on Russia identifies the "tension between resource dependence and economic diversification"[48] as the key economic challenge facing Russia today. Russia's increasing dependence on resource extraction for economic wealth at the expense of investment in human resources and capital not only bears inherent risks for Russia's ability to sustain domestic economic prosperity and stability in the long run, but also has significant implications for Russia's future political outlook and foreign policy framework. The disturbing characteristics of Russia's emerging political economy, compounded by its rent-seeking tendencies and indicators of a looming demographic and health crisis, posit cause for concern both within Russia as well as in the international community.

PURPOSE

Building on its past and current initiatives assessing trends and developments in Russia's infrastructure, demography, political and economic culture, and foreign policy, The National Bureau of Asian Research (NBR), in partnership with The Hudson Institute, is hosting a one-day discussion workshop on "Russia's Political Economy: Trends and Implications." Workshop panelists will investigate the complex and dynamic forces shaping Russia's emerging political economy, and the implications thereof for Russia's domestic and foreign policy outlooks. This workshop is particularly timely in the context of Russia's recent presidential elections and the implications of current trends and policies for the post-Putin era.

FRAMEWORK

Workshop panelists will discuss and assess the complex interplay among social, economic, and political pressures impacting Russia's political economy today, their influence on Russia's emerging domestic and foreign policy environments, and the attendant implications for current and future U.S. policy toward Russia. Panelists will address trends and challenges in Russia's demographic pressures; human resource sectors, particularly in the areas of health and education; domestic natural resource development; public finance infrastructure; and domestic and foreign policy outlooks, and assess the confluent influences of these forces on shaping Russia's emerging political economy.

[48] National Intelligence Council, *25 April 2004: Global Trends 2020 Workshop Summary: Russia* (Discussion paper – does not represent the views of the U.S. Government), http://www.dni.gov/nic/NIC_2020_2004_04_25_intro.html

FOR FURTHER INFORMATION ABOUT NBR EURASIA INITIATIVES, PLEASE CONTACT:
MAHIN KARIM, SENIOR PROJECT DIRECTOR
THE NATIONAL BUREAU OF ASIAN RESEARCH
PHONE: 206-632-7370; FAX: 206-632-7487; E-MAIL: MKARIM@NBR.ORG

THE NATIONAL BUREAU *of* ASIAN RESEARCH
Informing and Strengthening Policy in the Asia-Pacific

NBR DISCUSSION WORKSHOP

RUSSIA'S POLITICAL ECONOMY: TRENDS AND IMPLICATIONS

Hudson Institute, 1015 15th Street, NW, Suite 600, Washington, D.C. 20005

THURSDAY, APRIL 24, 2008, 8:00AM-5:00PM

8:00AM-8:20AM	REGISTRATION AND CONTINENTAL BREAKFAST
8:20AM-8:30AM	WELCOME AND INTRODUCTION *Roy Kamphausen, The National Bureau of Asian Research*
8:30AM-9:30AM	RUSSIA'S DEMOGRAPHIC CHALLENGES *Nicholas Eberstadt, American Enterprise Institute* *Sergei V. Zakharov, Institute of Demography*
9:30AM-10:30AM	TRENDS AND POLICY PRIORITIES IN RUSSIA'S HEALTH AND EDUCATION SECTORS *Harley Balzer, Georgetown University* *Judyth Twigg, Virginia Commonwealth University*
10:30AM-10:45AM	BREAK
10:45AM-11:45AM	TRENDS AND POLICY PRIORITIES IN RUSSIA'S NATURAL RESOURCE DEVELOPMENT *Peter Rutland, Wesleyan University*
11:45AM-12:45PM	TRENDS AND POLICY PRIORITIES IN RUSSIA'S PUBLIC FINANCE INFRASTRUCTURE *Augusto Lopez Claros, World Economic Forum* *Andrey Timofeev, Georgia State University*
12:45PM-1:45PM	LUNCH
1:45PM-2:45PM	IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S REGIONS *Craig ZumBrunnen, University of Washington* *Charles E. Ziegler, University of Louisville*
2:45PM-3:45PM	IMPACT OF RUSSIA'S RESOURCE-BASED ECONOMY ON RUSSIA'S DOMESTIC POLITICS AND FOREIGN POLICY OUTLOOK *Andrei Piontkovsky, Hudson Institute* *Nikolay Petrov, Carnegie Moscow Center*
3:45PM-4:00PM	BREAK
4:00PM-5:00PM	ROUNDTABLE DISCUSSION: PROSPECTS FOR DEVELOPMENT OF RUSSIA'S HUMAN RESOURCES—WOULD A SHIFT FROM A RESOURCE-BASED ECONOMY INCULCATE A SHIFT IN THE COUNTRY'S POLITICAL AND FOREIGN POLICY BEHAVIOR? *Nicholas Eberstadt, American Enterprise Institute*
5:00PM-5:10PM	WRAP-UP