RUSSIA’S ECONOMIC MODERNIZATION: MYTH OR REALITY?

by

Christopher B. Carson

March 2011

Thesis Co-Advisors: Robert Looney
Mikhail Tsypkin

Approved for public release; distribution is unlimited
Russia’s Economic Modernization: Myth or Reality?

Carson, Christopher B.

Naval Postgraduate School
Monterey, CA 93943-5000

A successful outcome of Russian President Medvedev’s recent economic modernization plan, also known as “Smart Russia,” could result in a more democratic and prosperous Russia. However, corruption and an energy dependent economy in Russia continue to exist as the main barriers in preventing substantial economic liberalization and a transition to a higher level of economic development. Failure by the Russian leadership to address these issues could result in future economic and political turmoil, potentially leading to a more fragile Russian state. The understanding of corruption within an energy dependent economy, and the international tools available in Russia’s economic modernization process, are critical to establishing effective U.S. foreign policy and economic partnerships. To better understand the difficult steps that lie ahead for Russia, an economic statistical analysis, using global economic indexes, was conducted in a three scenario framework to determine which criteria Russia needs to improve in to ensure a transition to the next stage of economic development. The results of the analysis present crucial evidence for a successful economic transition. Failure by the U.S. and the West to adequately understand Russia’s modernization challenges could result in a missed opportunity for future Russian political and economic liberalization.
ABSTRACT

A successful outcome of Russian President Medvedev’s recent economic modernization plan, also known as “Smart Russia,” could result in a more democratic and prosperous Russia. However, corruption and an energy dependent economy in Russia continue to exist as the main barriers in preventing substantial economic liberalization and a transition to a higher level of economic development. Failure by the Russian leadership to address these issues could result in future economic and political turmoil, potentially leading to a more fragile Russian state. The understanding of corruption within an energy dependent economy, and the international tools available in Russia’s economic modernization process, are critical to establishing effective U.S. foreign policy and economic partnerships. To better understand the difficult steps that lie ahead for Russia, an economic statistical analysis, using global economic indexes, was conducted in a three scenario framework to determine which criteria Russia needs to improve in to ensure a transition to the next stage of economic development. The results of the analysis present crucial evidence for a successful economic transition. Failure by the U.S. and the West to adequately understand Russia’s modernization challenges could result in a missed opportunity for future Russian political and economic liberalization.
# TABLE OF CONTENTS

I. **INTRODUCTION** ................................................................. 1  
   A. MODERNIZATION IN RUSSIA .............................................. 1  
   B. MEDVEDEV’S “SMART RUSSIA” ........................................... 4  

II. **IMPLICATIONS FOR U.S. AND EUROPE INTERESTS** .......... 9  
    A. EUROPEAN UNION AND U.S. ASSISTANCE TO  
       MODERNIZATION ...................................................................... 12  

III. **CORRUPTION IN RUSSIA** ................................................ 15  
     A. RUSSIA’S BARRIERS FOR MODERNIZATION ..................... 15  
        1. Differing Views on Modernization ................................. 16  
        2. Medvedev Takes Steps Toward Modernization .............. 17  
     B. FOREIGN DIRECT INVESTMENT (FDI) AND CORRUPTION ...... 19  
     C. EXTERNAL REFORMS WITH INTERNATIONAL  
        INTEGRATION ........................................................................ 21  
     D. INTERNAL REFORMS TOWARD MODERNIZATION ............. 22  
     E. A NEW RUSSIA? ..................................................................... 23  

IV. **RUSSIA’S “OIL CURSE?”** ................................................... 27  
    A. ENERGY DEPENDENCE AND RUSSIA’S MODERNIZATION ...... 27  
    B. THE OIL CURSE DILEMMA ...................................................... 28  
    C. EUROPE AND U.S. INTERESTS, EXTERNAL FACTORS IN  
       MODERNIZATION .................................................................... 29  
    D. MEDVEDEV AND PUTIN, INTERNAL POLITICAL  
       DEPENDENCE ........................................................................... 32  
    E. IMPLICATIONS FOR RUSSIA’S DOMESTIC ISSUES ............. 34  
    F. NATURAL RESOURCE CURSE AND DUTCH DISEASE? .......... 35  
    G. MODERNIZATION SUCCESSES ............................................. 37  
    H. CONSEQUENCES OF INACTION ............................................. 38  

V. **RUSSIA’S ECONOMIC SCENARIOS** .................................... 41  
   A. RUSSIA’S ECONOMIC SCENARIOS ...................................... 41  
   B. ECONOMIC STAGES OF DEVELOPMENT .............................. 45  
   C. ECONOMIC INDEXES ............................................................. 49  
      1. World Economic Forum’s Global Competitiveness Index  
         (GCI) .................................................................................. 49  
      2. World Bank Governance Indicator (WBGI) ...................... 50  
      3. Heritage’s Foundation, Economic Freedom Index (EF) ...... 53  
   D. ECONOMIC FACTOR ANALYSIS ........................................... 56  
   E. DISCRIMINATE ANALYSIS .................................................... 59  

VI. **CONCLUSION** ................................................................. 63  
    A. THE WEST’S ROLE, ASSISTANCE OR ISOLATION? .............. 63  
    B. A NEW DAY FOR RUSSIA? .................................................. 65
### LIST OF FIGURES

<p>| Figure 1. | From World Economic Forum “Russia and the World: Scenarios to 2025”...43 |
| Figure 2. | From World Economic Forum’s Twelve pillars of competitiveness.........46 |
| Figure 3. | From World Economic Forum’s Global Competitiveness Report, Income thresholds for establishing stages of development...........................................47 |
| Figure 4. | From World Economic Forum’s GCI, Russia’s Key Indicators.................48 |
| Figure 5. | From World Economic Forum’s Global Competitiveness Report, List of countries/economies at each stage of development.........................................................48 |
| Figure 6. | From World Bank’s Governance Indicator 2010........................................51 |
| Figure 7. | Russia Scores from Heritage Foundation Economic Freedom Index ..........54 |</p>
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>From World Bank Governance Indicators, Russia</td>
<td>52</td>
</tr>
<tr>
<td>Table 2</td>
<td>Group Means on Governance Dimensions, World Economic Forum Development Stages, 2010–2011</td>
<td>53</td>
</tr>
<tr>
<td>Table 3</td>
<td>Group Means on Economic Freedom Dimension I, World Economic Forum Development</td>
<td>55</td>
</tr>
<tr>
<td>Table 4</td>
<td>Group Means on Economic Freedom Dimensions II, World Economic Forum Development Stages</td>
<td>56</td>
</tr>
<tr>
<td>Table 5</td>
<td>Factor Analysis, Five Relevant Trends</td>
<td>57</td>
</tr>
<tr>
<td>Table 6</td>
<td>Factor Analysis, Competitiveness, Governance, and Economic Freedom Components</td>
<td>58</td>
</tr>
<tr>
<td>Table 7</td>
<td>Country Factor Scores</td>
<td>59</td>
</tr>
<tr>
<td>Table 8</td>
<td>Discriminate Analysis Results</td>
<td>60</td>
</tr>
<tr>
<td>Table 9</td>
<td>Discriminate Analysis, Probability of Group Placement</td>
<td>60</td>
</tr>
<tr>
<td>Table 10</td>
<td>Discriminate Analysis Group Placement</td>
<td>67</td>
</tr>
<tr>
<td>Table 11</td>
<td>Discriminate Analysis Grouping: Group Means</td>
<td>68</td>
</tr>
</tbody>
</table>
# LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIC</td>
<td>Emerging Economies, Brazil, Russia, India, China</td>
</tr>
<tr>
<td>EF</td>
<td>Heritage Foundation’s Economic Freedom Scores</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GCI</td>
<td>World Economic Forum’s Global Competitiveness Index</td>
</tr>
<tr>
<td>GRECO</td>
<td>Council of Europe’s Group of Countries against Corruption</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IO</td>
<td>International Organizations</td>
</tr>
<tr>
<td>LM</td>
<td>Long March Economic Scenario</td>
</tr>
<tr>
<td>OC</td>
<td>Oil Curse Economic Scenario</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>P4M</td>
<td>European Union’s Partnership for Modernization</td>
</tr>
<tr>
<td>REN</td>
<td>Renaissance Economic Scenario</td>
</tr>
<tr>
<td>SOE</td>
<td>State Owned Enterprises</td>
</tr>
<tr>
<td>USRBC</td>
<td>U.S. Russia Business Council</td>
</tr>
<tr>
<td>WBGI</td>
<td>World Bank’s Governance Indicators</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

I would like to thank my two advisors, Dr. Robert Looney and Dr. Mikhail Tsypkin, for their steadfast support throughout the process. Without the economic analysis assistance and historical Russian insights they provided, this thesis would not have been possible. Finally, I would like to thank my fiancée, Sara Weller, for her understanding during the late nights writing this paper and her continuous support throughout.
I. INTRODUCTION

A. MODERNIZATION IN RUSSIA

Throughout the past centuries, Russian leaders have undertaken multiple steps toward modernization in a quest to transform Russia economically and remain competitive with the Western world. In past modernization efforts, unique barriers presented themselves, which prevented dynamic changes in the economic structure of Russia. In the seventeenth-early eighteenth centuries, Peter the Great modernized Russia by adopting Western forms of government structures. Even though progress was made, the state apparatus was weak, unable to overcome an agrarian society based on serfdom.  

Alexander II also faced unique challenges in his quest for modernization; the emancipation of the serfs would later act as a liberal catalyst in the country. However, the weak economic and social structures prevented him from completely transforming the Russian culture towards modernization. Gorbachev faced barriers for his perestroika; the “restructuring” faced its largest hurdle in the Soviet economy, which inhibited any real change without fundamentally altering the very design of the state.

Russian leaders today are faced with new challenges, but some historic Russian traits continue to manifest themselves. Today, President Medvedev faces multiple challenges for his plan for economic modernization, coined “Smart Russia,” largely due to the remnants of the communist legacy in the economic system and Russian culture. Medvedev hopes to revive the greatness of Russia, to build its economy into one that competes globally in a new technological market built from a strong foundation of his plan for a “knowledge economy.” One goal he is pursuing is to build the proper business and science environment to stop the “brain-drain” that has occurred over the past decades, as potential innovators have been leaving for the free West to pursue friendly environments for business and innovation.

The modernization plan has grasped the attention of the world, leaving both Europe and the United States wondering if there is any substance to the modernization rhetoric from the Kremlin. U.S. and European actors will undoubtedly be affected by the success or failure of Medvedev’s plan, which is why they must take proactive measures to understand the nature of the current modernization effort in Russia. Russian modernization efforts have historically provided an opportunity for domestic economic and political reforms, but have also provided international actors an opportunity to assist and promote new long sought European integration into the Russian state. International actors must use this opportunity to first understand the nature of the challenge of Russian modernization, and second, use their understanding to provide substantial assistance through economic measures, which could eventually lead to pro-democracy political reforms in the Russian government.

One of the main barriers that Russian leaders have faced in the past is “resistance to change.”2 The state-managed structure of the Russian economy created an elite class that does not necessarily want reform or modernization. For this class, their own survival and economic standing are at stake, since their power is directly tied to the ability of the state to control vast portions of the economy. As stated by Lilia Shevtsova from the Carnegie Endowment for International Peace in Moscow, “A state based on merger of power, ownership, and suppression of competition destroys all reforming impulses. Such a state obstructs modernization by its very nature.”3 The historic nature of the political and economic relationship continues to provide an economic reliance on political actors for formal and informal transactions. The Russian leadership has reached a crossroads in formulating a strategy to modernize its economy. The arrival at the crossroads occurred due to the recent decline of the Russian state from the financial crisis of 2008. This has given concern to the political actors that steps must be taken to enable Russia to compete in the global economy and move beyond its energy dependent economy.


3 Ibid.
The “resistance to change” is further ingrained into Russian society by the corruptive nature of the Soviet and post-Soviet economic and political systems. As President Medvedev stated in his “Go Russia!” speech, “Centuries of corruption have debilitated Russia from time immemorial. Until today this corrosion has been due to the excessive government presence in many significant aspects of economic and other social activities.”

How can economic modernization defeat “centuries of corruption?” In the past, the Russian economy did not have the tools available in today’s globalized market that are defined by international integration with economic institutions. These new tools represent a growing allotment of international organizations and non-governmental organizations, such as the World Trade Organization (WTO) and the European Union (EU), which can help facilitate the process of modernization.

Obviously, eliminating all corruption in any country is not a realistic outcome in any modernization plan, but decreasing corruption to a level that will promote economic development, which could allow for future political reform, is vital for Russia. Through empirical economic data this analysis aims to show what areas need to be addressed so that sound economic reform can successfully lead to Russia’s modernization. While political reform might prove difficult for Russia in the short term, U.S. and European assistance in its economic modernization could help the West seize a rare opportunity to promote long sought Russian political reform and reach consensuses on a variety of national security issues. The thesis states that through effective international integration, reinforced by improvements in the investment climate through domestic reforms, Russia can lower its primary barrier of corruption, and diversify away from an energy dependent economy to a level that is consistent with that of Western developed nations. The U.S. and EU can assist in its effort by fostering economic cooperation which can solidify free market principles and transition Russia to a higher stage of economic prosperity, and in turn create a stronger, more democratic Russia, closer aligned with U.S. national interests in the twenty-first century.

---

B. MEDVEDEV’S “SMART RUSSIA”

Modernization is nothing new in Russia. Peter the Great, Alexander II, Stalin, and Gorbachev all took their own unique and costly steps in transforming Russia into a more modernized empire.⁵ Often external events brought about their realization that in order to compete with global actors Russia needed to implement economic reforms. These past modernization reforms have lead to harsh criticism within the state, waging differing ideas on which course to pursue in modernization. “They have led to great transformations as well as major debates on Russia’s future trajectory, pitting, for example, Westernisers (zapadniki) against Slavophiles (slavianofily).”⁶ Today, the same ideological modernization struggle is occurring between Moscow and the West.

During the 2000s, Russia experienced great economic growth due to a spike in the commodities market. As before, an external event, the global financial crisis, has led Russian leadership to the belief that modernization is necessary. With the accession of Medvedev in 2008, there has been almost continuous talk about the importance of modernization in Russia. The 2008 economic crisis further showed the flawed economic and political structure that was present in Russia. Starting in 2009, President Medvedev began a campaign for modernization with his article titled, “Go Russia!” and State of the Nation speech.⁷ In his speech, Medvedev recounts that “persistent ills” that have forced Russia into becoming a state reliant on raw exports. “And for the sake of our future it is necessary to liberate our country from persistent social ills that inhibit its creative energy and restrict our common progress.”⁸ Two of the main components to achieve modernization, according to Medvedev, were overcoming “centuries of corruption…and habit of relying on export materials.”⁹

---

⁵ Gerschenkron, Economic Backwardness in Historical Perspective, a Book of Essays, 135.
⁷ Medvedev, “Go Russia!,” 1.
⁸ Ibid.
⁹ Ibid.
“The success of the ‘Smart Russia’ movement is a question of life and death for Russia,” stated Zhores Alferov, President Medvedev’s top scientific advisor for the Skolkovo Park. In the past year, Medvedev has taken great steps to initiate the modernization program. First, Moscow has invested in a state-funded research and innovation park. The park, formerly known as the Skolkovo Project, is based in the suburbs of Moscow and encompasses the components of other innovation parks. These efforts have been combined with a global marketing campaign by Medvedev. He recently toured Silicon Valley in California in an effort to increase support for Skolkovo through monetary ventures. He has been somewhat successful; in the past year many U.S. companies have invested in the Skolkovo Project in an effort to reach an underdeveloped area of the world with vast potential. Cisco and Boeing are just a few of the major U.S. global corporations that have invested in the project. Massachusetts Institute of Technology (MIT) has initiated a joint venture in research and education with the Skolkovo University. The Kremlin has taken other unique steps to ensure information about the modernization process is available to the public and foreign investors. The Kremlin has opened a Twitter account to advertise into new areas previously not popularly traveled. The Kremlin public relations firm, Ketchum, has recently started a website, Modern Russia, which maintains an open forum to discuss challenges for economic modernization and informs the reader of the recent successes of the new economic programs. While these might not seem significant they represent a new direction for the Kremlin and could be a signal that some new innovative public

10 Matthews, *Russia, Home of the Next Silicon Valley?*, 5–5.


relation measures not previously achieved in past reforms. These efforts are just some of
the modernization efforts underway in Russia, however, the question remains if
Medvedev will undertake the complete modernization of the economic and political
sphere of influence or just settle for partial reform. U.S. and European states have taken
great interests in trying to understand the true nature of the reforms and how they can
assist Russia in becoming more economically liberal in hopes that economic reform will
eventually lead to political reform.

This paper will first analyze the main barriers for modernization, corruption
(Chapter III) and energy dependence (Chapter IV), to better grasp the direction the
Russian economy is heading and what potential scenarios lie ahead. Finally, an empirical
analysis within three potential scenarios for the Russian economy (Chapter V) will be
completed of other countries that succeeded in their economic modernization, by
transitioning to higher stages of economic development. This will be accomplished by
analyzing global economic indexes over time in hopes to identify the variables needed for
Russian modernization. One of the primary indexes that will be used, the World
Economic Forum’s Global Competitiveness Index, details country stage development.
The Forum separates country stage development into three stages, “factor-driven,”
“efficiency-driven,” and “innovation driven.” The lowest level of development is Stage
1, “factor-driven” and the highest level of development is Stage 3, “innovation-driven,”
and consists of most of the developed world. To determine the stage, multiple factors are
considered including GDP per capita and pillars of economic and social progress
(detailed in Chapter V). Russia is trying to transform their country from a Stage 2
“efficiency driven” country, into the final stage, a Stage 3 “innovation driven”
economy.14 Russia has improved over the past 20 years, but is still classified as a Stage 2
country. This is largely due to the inheritance of a corrupt political system and
socioeconomic structure that resulted after the fall of communism, which made it difficult
to swiftly build sound institutions. History shows that modernization is difficult in state-
run capitalistic countries where state institutions are weak and survive through corruptive

14 World Economic Fourm, Members of the Global Competitiveness Report Advisory Board, "The
means. “Economic backwardness” is still very much alive in Russia, and these remnants from the Soviet economic system continue to contribute to the failure to fully modernize their economy. Finally, Chapter VI will reflect on the results of the empirical data and offer recommendations for a successful outcome of Russian modernization plans.
II. IMPLICATIONS FOR U.S. AND EUROPE INTERESTS

Economically, Russia plays a vital role in the global market. As one of the members of the emerging market community, BRIC (Brazil, Russia, India, and China), Russia has experienced enormous growth in the past decade due to the rising demand for natural resources and large inflows of foreign direct investment (FDI).\textsuperscript{15} Russia’s growth of per capita income in the 2000s has caused wage inequality to decline, allowing the Russian middle class population to grow to historical highs.\textsuperscript{16} However, the 2008 global recession, along with the crash in the commodities market that followed, highlighted how fragile the Russian economy is, built primarily on a corrupt, state-managed commodities market.\textsuperscript{17} The global recession has forced the leadership of Russia to realize that they have arrived at a crossroads in determining Russia’s economic future.

Even though it has declined in industrial and military power since the height of the Soviet Union, Russia still holds enormous global political and military influence. As the largest country on Earth, and the only one with more natural resources than the United States,\textsuperscript{18} Russia’s political and military policies affect not only their neighbors, but the fragile “balance of power” in the world.

In Russia’s “National Security Strategy 2020,” the Kremlin outlines a commitment to renew economic strength as one of its primary goals for the next decade. Russia’s current leadership wants to use its “resource potential to expand the possibilities of the Russian Federation to strengthen its influence on the world arena.”\textsuperscript{19} By analyzing the context of Russia’s economic modernization, one can understand the strategic vision

\textsuperscript{15} Xueli Wan, "FDI in BRICs," Vol. 5Canadian Center of Science & Education, 2010), 168., \url{http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=52159681&site=ehost-live&scope=site}.
\textsuperscript{16} Ibid., 171.
\textsuperscript{17} Dmitri Trenin, "Russia's Conservative Modernization: A Mission Impossible?" \textit{SAIS Review} 30, no. 1 (Winter–Spring, 2010), 32.
\textsuperscript{19} Ibid., 18.
of the Kremlin, and its domestic and international goals for the future. The United States has enormous national interests in the Eurasia region, and ensuring democratic stability and economic prosperity in Russia is a fundamental goal of U.S. foreign policy. Recent rhetoric by President Medvedev could provide the U.S. with a valuable opportunity to assist in their economic modernization, which could result in future political liberalization. Will Russia be able to overcome its historic culture of corruption, and set upon a radical economic liberalization that will create a more democratic Russia?

The modernization program implemented by Medvedev requires economic and political support from outside resources, specifically Europe, U.S., and Asia. Foreign direct investments from these countries remain a critical part of the process for technological improvement in Russia. The West realizes the opportunity that faces them in regards to contributing and influencing economic and potentially political reforms in Russia. There have been numerous ideas on the nature of the modernization effort and the steps that need to be completed for true reform. One of the main beliefs, which stems from Putin and the old elitists, is that a strong state is vital to oversee economic reform. The other side, including Medvedev, views political reform as a part of the modernization process. Medvedev and Putin are believed to hold differing views on the degree to which modernization should occur; Putin limits it at technological and innovative steps, while Medvedev wishes to extend it to a political and social sphere.20

The European Union (EU) has been eagerly observing the modernization efforts since their inception in 2008, in hopes that true economic reform could allow for a shift from past interactions to a fresh renewal in their economic and political relationships. In the recent summit in Rostov-on-Don, the EU and Russia formulated a “Joint Statement on the Partnership for Modernization” (P4M), which reflects the EU’s desire to have an influence in the direction of Moscow’s plans, while Russia is reaching out to garner increase in financial and political support. The P4M is an economic forum between the EU and Russia that sets a common agenda for modernization, and established the start of cooperation on economic and social issues. An EU press release from the summit stated,

20 Felix Krawatzek, The Same Old Modernisation Game? Russian Interpretations of Modernisation, 5.
“The agenda is ambitious and broad in scope, encompassing economic, social, environmental, and legal dimensions, which in itself will be a challenge.”21 While the P4M is primarily an economic forum to address concerns over business relations, it has the potential to become a more relevant tool in Russia’s economic modernization. With the agreement, the EU has reached a consensus of the importance of Medvedev’s plan forward with economic modernization. However, there remains deep skepticism within the EU on the exact magnitude of the reforms that will be implemented. The EU favors a bottom-up approach that includes social and political reforms simultaneously, while the exact Russian goals remain unknown.

The United States has already invested financial and political resources into the modernization efforts. Many of the country’s most successful companies have contributed to the development of the state-run technology park outside of Moscow. While this is important for U.S. interests, the majority of its interests lay in the political ramifications for the current administrations’ policies with Russia and the Eurasia region. The U.S. holds an important opportunity in assisting Russia with its modernization efforts, as expressed by Obama’s recent remarks during Medvedev’s visit in June 2010.22 The degree of the modernization assistance will impact the relationship with Russia and could heavily influence the alliance of NATO. The U.S.-NATO position with Russia has been under strain since the Georgia conflict of 2008. U.S. and Russian relations could improve as more open economic policies and financial and political support are received from the West. The current stalemate regarding NATO membership could move toward the U.S. favor as the U.S. could use newly forged economic partnerships with Russia as collateral for the reopening of NATO talks with potential membership states.

The EU and U.S. both face a difficult balancing act in their policies toward Russia’s economic modernization. If they demand a bottom-up approach through political and social reforms they could potentially ruin the unique opportunity in assisting radical economic reform. If they take a mutually exclusive approach, separating political and economic reforms, it could strengthen the elite resistance within the Kremlin for reform. This paper will analyze Russia’s reluctance for reform, based upon its two hurdles that continually present the biggest challenge for modernization, corruption and energy dependence. Understanding of the nature of their challenge can better provide evidence of what effective political and economic policies from the EU and U.S. will contribute to a more democratic and prosperous Russia.

A. EUROPEAN UNION AND U.S. ASSISTANCE TO MODERNIZATION

The United States has been waiting for an opportunity to assist Russia in liberalizing its economic and political structures. Some in the U.S. believe the time has finally come with President Medvedev’s modernization plan. Multiple U.S. corporations have already begun to invest financial resources into the ongoing modernization efforts through the U.S.-Russia Business Council (USRBC). The USRBC held its 18th annual meeting titled “From Silicon Valley to Skolkovo: Forging Innovation Partnerships” in October 2010 in San Francisco, where Russian leaders met with representatives from Silicon Valley corporations to discuss long term partnerships in economic development. While this is important for U.S. and Russian economic interests, the majority of U.S. interests lay in promoting political liberalization at the same time.

The U.S. holds an important opportunity in assisting Russia with its modernization efforts through international integration, as expressed by Obama’s remarks during Medvedev’s visit to Washington D.C. in June 2010.\textsuperscript{23} “Russia belongs in the WTO that's good for Russia, it's good for America and it's good for the world economy.”\textsuperscript{24} The impact of the modernization assistance from the U.S. could allow

\textsuperscript{23} The White House, \textit{Statement by the Press Secretary on the Visit by President Medvedev of the Russian Federation to the White House.}

Russia to become more aligned with the interests of the West, and create a chance for the U.S. to use its economic support to persuade Russia to promote U.S. foreign policy goals. Additionally, while the U.S. realizes its inability to directly affect political reform in Russia, economic assistance can provide the West with a valuable tool to spur Russian economic growth and potentially lead to future political reform in Russia.

The U.S.-NATO relationship with Russia has been under strain since the Georgia conflict of 2008. But in November 2010, Russia attended the NATO Lisbon summit, the second NATO-Russian meeting since the Georgia war ended. Some see an unprecedented shift in alignment to the West, with President Medvedev’s agreement to participate in the NATO-led European missile defense system. However, others interpret these actions as an indication that Moscow will undertake an “arms race” with NATO unless NATO agrees to Russia’s terms on missile defense. The U.S. and EU could use this new partnership to facilitate additional integration of Russia into the West. This softening of Russian foreign policy internationally could hopefully be a sign of a shift in domestic issues as well. The U.S.-Russian partnership in modernization could assist other areas of their relations, such as with ongoing regional issues involving European missile defense, Georgia, and NATO expansion. Internationally, Russia’s support is vital in passing UN Security Council resolutions against countries participating in weapon proliferation, such as Iran and North Korea.

The EU and the U.S. both face a difficult balancing act in their policies toward Russia’s economic modernization. One thing is clear, recent actions from Moscow indicate a unique opportunity for the West to help facilitate Russian modernization, and also help cultivate an unprecedented relationship between Russian and U.S. national security interests. To better understand the correct balance of assistance and reform from the West, the challenges facing Russia must be addressed.

---

III. CORRUPTION IN RUSSIA

A. RUSSIA’S BARRIERS FOR MODERNIZATION

To fully understand the nature of the present day challenge of modernization in Russia, the analysis must reflect back on the studies about the origins of “administrative weakness,” or corruption, in economic development. Corruption, as defined by the World Bank, is “the abuse of public power for private benefit.”26 Russia was initially faced with weak political and economic structures in the early 1990s, so the government took a more active role in the economy. Political scientist Kiren Chaudhry identifies the origins of state-managed economies as follows, “Government ownership is more often a response to the administrative weakness of the state in developing countries rather than a reaction to the private sector’s inability to provide the skills and capital necessary for bulky investments.”27 Throughout the 1990s, the Russian state filled in the economic voids from the transition to democracy, which brought about “rent-seeking” or corruptive transactions that facilitated the weakness of economic institutions.

This “rent-seeking” corruption is just one of the variables to eliminate in the modernization process in Russia. Even though corruption cannot be eliminated completely in any state, it still must be reduced to a level that does not hinder economic development. Most developed nations had to confront their respective corrupt economic systems early on in their modernization process. Many of the ex-communist countries in Eastern Europe, such as Poland and the Czech Republic, have made great progress in this area by implementing Western reforms in their markets through membership in the EU or


WTO. Economic progress will not happen in Russia without substantial commitment from the government to improve other areas that are lacking such as the rule of law, property rights, and the business environment. There are many beliefs on the exact role the government should play in the modernization efforts, and to what extent they should reform other areas of socioeconomic system.

1. Differing Views on Modernization

Russia’s degree of corruption has remained higher than the rest of the ex-communist countries due to the inheritance of the Soviet state-run economy. The size and scope of the Soviet economy made the transition to a completely free market more difficult than in other ex-communist states. Russia’s energy dependent economy also contributed to the ability of the state to control the market and stifle any innovation or creativity that remained. Putin’s centralization of the economic and political structures in the early 2000s created additional dependence on these informal networks. Putin consolidated multiple areas of the political system in order to foster his one-party rule with United Russia. He amended laws allowing the majority of government postings to be appointed by the President or his staff, acquired control of almost all media by state ownership, and weakened the independence of the courts and the rule of law. During his presidency, Putin seems to have solidified some of the same corrupt structures that Medvedev is ostensibly trying to overcome. As Dmitri Trenin states, “Of course, corruption was not born in Russia on Putin’s watch; neither was strong state dependency on energy and raw materials, but the rent-seeking bureaucracy that has virtually overtaken the state is a phenomenon of the last decade.”

There have been numerous ideas on the nature of the modernization effort and the steps that need to be completed for true reform in Russia. In Moscow, there are competing parties in defining the direction of the modernization effort. Most of them agree that Russia is too dependent on energy resources and that it is losing its competitiveness in the global economy.

The first group of reformers is made up of the “liberal modernizers,” who wish to see not only economic reforms, but political reforms as well. Medvedev and his economic advisors, along with some Russian intellectuals, are largely in this group. They seek to integrate the Russian economy into the global market by reaching out to the West through economic and political policies. They “want to do three things: upgrade Russia's dilapidated infrastructure and rusting industrial base; diversify Russia's economy away from over-reliance on oil and gas exports via state-funded development of various high tech industries; and, crucially, to undertake political reforms at some medium-term point.”

This group is faced with an enormous challenge from an elite class, “hard-line reformers,” that make up the primary structure of Putin’s centralized power base. This group consists of Putin and the old elites, who believe that a strong state is vital to oversee economic reform. Contrastly to the hard liners, the liberal reformers view political reform as a part of the process. A few laws passed by Medvedev indicate modest progress in political reform, but the level required for the radical modernization that Russia needs is not complete.

2. Medvedev Takes Steps Toward Modernization

Recent actions by Medvedev have given some optimism to the ongoing debate on the seriousness of the modernization effort. For example, Skolkovo Park, as previously mentioned. Skolkovo or “Innovation City” is planned to be a center for business and engineering innovation. While able to attract businesses and universities to the Skolkovo Park, Russia is still deficient in many other areas of its economy, preventing it from transitioning to the next level of economic development. Critics of the innovation park point out that Russia is not developing the vital bottom-up approach to modernization. Vladimir Babkin, an expert at the State Duma's committee for science and technology, noted, "Silicon Valley in California was created on the basis of universities. It was a

bottom-up growth. In Russia, it is top down, and the goals are unclear." The deficient areas that need to be addressed in Russia will continue to plague the modernization efforts unless action is taken. Russia continues to remain in the bottom of the category for European nations in the World Economic Forum’s Global Competitiveness Report, a dismal 63rd place. In the Transparency International Corruption Index, Russia ranked at 146th in 2009. These rankings remain dominant areas of concern for foreign investors and Western leaders who desire a more democratic Russia.

Medvedev has taken some steps to combat corruption in Russia, but the impact of these laws is not yet realized, and these laws have not resulted in any recent drop in corruption rankings. In July 2008, Medvedev signed the National Anti Corruption Plan, and in April 2010 the corresponding National Strategy for Combating Corruption. These plans outline compliance to the Council of Europe’s Group of Countries against Corruption (GRECO), which will align international standards to Russian practices. It is hoped that external support through this international organization can assist Russia in battling corruption. It is premature to realize the exact benefits of the anti-corruption laws, but these efforts are a signal that Russia is trying to further integrate by complying with international corruption standards. Analysts estimate that Russia loses 300 billion (U.S. dollars) a year in corrupt practices. Embarrassingly, Russia is the most corrupt G-20 nation, and Medvedev hopes that a renewal in economic investment in the country, through properly allocated foreign direct investment (FDI), will assist in the process of defeating rampant corruption.

32 Ibid.
33 Will Englund, "In Russia, Corruption has Taken on a Life of its Own," The Washington Post, sec. A-SECTION, October 27, 2010.
34 Will Englund, "In Russia, Corruption has Taken on a Life of its Own," The Washington Post, sec. A-SECTION, October 27, 2010.
B. FOREIGN DIRECT INVESTMENT (FDI) AND CORRUPTION

The modernization program implemented by Medvedev requires economic and political support from outside resources, specifically Europe, U.S., and Asia. Foreign direct investments from these countries remain a critical part of the process for technological improvement in Russia. However, studies have shown that high levels of corruption prevent foreign direct investment.35 This is because corruption increases the uncertainty of investors and acts as a hidden cost in business transactions. Alvaro Cuervo-Cazurra in “Who Cares about Corruption?” states, “It acts as an irregular tax on business, increasing costs, and distorting incentives to invest.”36 Other studies report, however, that low levels of corruption act as a catalyst in business transactions by speeding up the regular slow movement of foreign investments into internal markets.37

However, Russia’s FDI inflows throughout the 2000s contradict the thesis that high levels of corruption prevent FDI. Russia experienced high levels of FDI inflows even though it ranked in the highest levels of corruption in the region and the world throughout the 2000s.38 Alvaro Cuervo-Cazurra also states, “Investors are not created equal.”39 In fact, investors from countries with high levels of corruption are more likely to invest in countries with high levels of corruption. In contrast, countries that have laws against investing in corrupt states show lower levels of investment.40 Despite these high levels of investment, FDI in Russia was not authorized in many controlled sectors, thus degrading chances for economic growth in these areas.

37 Ibid., 808.
38 Russia: Investors to Remain Wary, 16-16.
Even though levels of FDI in Russia in the past decade have been impressive, Russia has missed out on vast investments in deteriorating sectors. One of the criteria for the modernization effort is to allow access into new sectors for foreign investors. Therefore, Russia needs to lower the restrictions on foreign direct investment into all its economic sectors. Eastern European countries were able to attract more FDI than Russia during the time period of 1997–2005, due to their integration into the West through membership in the EU and acceptance of liberal democratic standards, which promoted foreign investment. Russia placed eleventh out of eighteen countries in this time period.41 During the 1990s, the U.S. was the largest contributor of FDI to Russia, reaching a peak of 30.6 percent in 1999.42 However, during the 2000s, other states, most notably western European states, began to make larger investments in Russia, decreasing the U.S. amount to less than five percent.43 One reason why Russia lags behind other Eastern European states in economic development is that it still controls many portions of the economy through state-managed companies. Russia continues to control which sectors are open to investors, notably: natural resources, infrastructure, defense, media, and monopolies.44 The passing of the 2008 Strategic Enterprise Law further tightened the sectors to which investors could direct their capital inflows. This lost capital could have been used to innovate or invest in improvements in Russian companies, leading to higher consumption and GDP per capita. Russia could experience even more FDI inflows once corruption is controlled, leading to further economic and political integration.

Recently, the Russian leadership has taken steps to begin to privatize many areas of the economy. Between 2011 and 2013, Russia is set to privatize up to 50 billion in sales of assets in multiple Russian state-run corporations.45 These actions will increase

---


42 Ibid., 84.

43 Ibid., 84.

44 Ibid., 85.

the role of private investors in state corporations and could lead to diminishing corrupt practices in informal networks. International investors play a crucial role in defining the strength of the future Russian economy. International institutions can also assist with these measures to facilitate a complete and fair transition.

C. EXTERNAL REFORMS WITH INTERNATIONAL INTEGRATION

The beginning of international integration for Russia could be accomplished through the completion of its membership in the WTO. The WTO requires multiple levels of adherence to anti-corruption and property protection laws, which could foster external support to invest in Russia’s corrupt economy. Studies have shown international integration as critical in determining the level of corruption. Sandholtz and Gray, in their study of 153 countries, found that international organizations (IOs) act against corruption via two forces, economic and norms.46 These external forces contribute to a state’s ability to fight corruptive practices in political and economic systems. “The more a country is tied into international networks of exchange, communication, and organization, the lower its level of corruption is likely to be.”47 In addition to the WTO, other IOs, such as the International Monetary Fund (IMF) and the World Bank, provide rules and regulations that contribute to the economic forces that fight corruption. The second force that international organizations provide to work against corruption is “norms,” or standards to combat the corruptive nature of the state’s society. Russia has resisted some of the international integration that has occurred in the recent decades, due to the independent political and economic nature of the Russian culture. Recently, however, these external forces appear to be gaining traction in Russia as some realize the importance of international integration in its economic modernization. The EU’s P4M, the USRBC, and Russia’s pending WTO membership represent the beginning of a new era for international economic cooperation with Russia. With international integration, Russia may find itself more willing to accept Western norms in its economic sphere.

---


47 Ibid.
These norms could contribute to strengthening the relatively poor structure of the institutions inside the socioeconomic system within Russia. When a country is integrated into the international market multiple instruments begin to increase their presence in the domestic sphere. However, external forces are insufficient if domestic actions are not taken in the same manner. Corruption in Russia should be addressed simultaneously in both international and domestic arenas.

D. INTERNAL REFORMS TOWARD MODERNIZATION

There are two approaches in Russia’s modernization efforts, and they revolve around either a bottom-up approach or a top-down approach. Many Western leaders realize that demanding initial political reforms inside Russia within the current environment is not realistic. These demands could backfire and harden the political regime’s resistance to undertaking future potential reforms. Instead, the hopes of the Western contributors in assisting Russia are that economic assistance will lead to prosperity in new areas, causing economic prosperity for a new middle class. Economic prosperity is shown to lower levels of corruption.48 “The logic is that discount rates of potential bribe takers and bribe givers are lower in wealthier nations, making them less eager to engage in corrupt practices.”49 The prosperity of a new middle class in Russia could slowly erode the power base away from the elite class, and the new middle class could demand political liberalization over the long term.

Some believe that Medvedev’s modernization effort is an idealistic venture that might not result in any substantial political reforms. However, one must acknowledge the impact that economic growth has upon democracy. It is unclear whether democracy can be successfully developed before economic prosperity. Sun and Johnston indicate that the promotion of economic development through reform and international integration result in a better foundation for governance reform in the future. “For corruption control and for governance more broadly, success is more likely if an economic base is built first,

49 Ibid., 300.
with democracy following more gradually."50 Economic prosperity through international integration is the first step needed in modernizing Russia, which could lead to political reforms in the future.

E. A NEW RUSSIA?

The U.S. and the EU each have contributions to make in the modernization effort; both private and public institutions can integrate Russia’s economy, which will indirectly assist Russia in making much needed political reforms. To reach this goal of political reform, a Russian democracy rich with institutions to facilitate the proper balance of political and economic power is crucial in the modernization process. As Sun and Johnston state, two areas are central in creating imbalances in corrupt economies. “Balance between the accessibility and autonomy of political elites…and balance of political and economic opportunities” are the fundamental causes of corruption.51

An explanation of the imbalance seen in Russian society stems from the failure to create the necessary institutions for Russian citizens. As ex-communist states sought integration into Europe and became part of the New Europe, Russian elites resisted in following along the same path. In the early 1990s, there was a window available to the West to contribute to the complete transformation of Russia’s economic and political structure. The new Russia was dependent upon financial and political support from the U.S. in the early years of Yelstin’s rule in Moscow, hypothetically allowing Washington great influence in the design of early Russia. However, this influence was short lived. As Lilia Shevtsova points out, “In truth, all Western leaders made two grave errors: First, they relied on Yeltsin and believed that he would guarantee Russia’s transition; second, they emphasized the economy while neglecting to push for political reform.”52 The West


hesitated in including Russia in this process due to remnants of Cold War attitudes, and the inherent nature of the design of the new Russian Federation.

The resistance to modernization in Russia is composed of a population that receives its authority through the vertical power structure of the government. The key for Russian liberal reformers and the West is to give the Russian elites that are so opposed to political reform virtually no other option than to follow the forces of international and domestic economic re-alignment. This can be done by the government raising the incentives for economic cooperation and taking measures to lowering the incentives and raising the costs for past illegal practices. The West needs to give economic assistance to the modernization efforts in order to increase the growth of the Russian economy. Evidence shows that economic growth leads to lower levels of corruption.\textsuperscript{53} While financial constraints are present in most developed nations, there are measures available to assist Russia without great monetary investment, including economic forums and supporting Russian entrance into the WTO.

Much debate has been given to the degree to which the West should assist in Russian economic modernization. Medvedev and Russia’s liberal reformers should actively pursue economic integration with its Western peers, and begin to isolate the opposing hard-line reformers. Medvedev’s liberal reformers could distance themselves from the old elite and, through economic prosperity, legitimize their policies, leading to a bottom-up reform in the political and social spheres. There is resistance to the reforms from within Russia and the Western world. Western analysts will continue to state that the long term goals of Medvedev and Putin remain unknown, and that Russia will continue to remain Russia. However, this is not sufficient evidence for the West to abandon assisting the liberal reformers in this crucial window of opportunity.

Private corporations are beginning to realize the importance of the Russian market, and have contributed millions of dollars to the innovation park in Skolkovo.\textsuperscript{54} But, private industry support alone will not achieve the outcome of radical modernization

\textsuperscript{53} Billger and Goel, \textit{Do Existing Corruption Levels Matter in Controlling Corruption?}, 300.
\textsuperscript{54} Matthews, \textit{Russia, Home of the Next Silicon Valley?}, 5–5.
so desired in the West. Radical modernization will require a multi-facet approach from international actors, specifically the European Union and the United States. The European Union is in a historic position to assist Russia in its efforts to become more of a part of “New Europe.” Further economic integration into the European and global markets could act as a catalyst for economic reforms that one day could initiate political reforms. The P4M is a vital vehicle to allow for active participation in this process, and must be strengthened further for greater results.

U.S. participation through the USRBC should adopt a similar agreement as the EU, and develop a “U.S.-Russian Partnership for Modernization.” This agreement could act as a supplement to the EU’s P4M and offer the “liberal modernizers” the much needed financial and political support from abroad. Increases in FDI into new Russian sectors through these partnerships can only reduce the resistance from the Russian elite and allow for further political liberalization. U.S. support for Russian membership in the WTO should become a top priority of the Obama administration, since economic integration with the West is the first step in promoting political reform in the future. The WTO is currently under a seventeen year review of Russian membership, but recent events signal that complete membership could be granted in the near future. U.S. support for Russia’s modernization will further align Russian interests with those of the U.S., and build upon the “reset” of foreign policy relations between the two countries. The U.S. could use the new partnership to garner Russian support for critical foreign policy objectives through United Nations Security Council resolutions. The U.S. and Europe missed the window of opportunity to assist in Russia’s modernization in the early 1990s. Today, both have unique roles in completing the integration of Russia into New Europe, but if hesitation occurs, owing to Cold War attitudes, and prevents action from the West, the next chance for modernizing Russia, both economically and politically, could be far away.
IV. RUSSIA’S “OIL CURSE?”

A. ENERGY DEPENDENCE AND RUSSIA’S MODERNIZATION

Since the formation of the Russian Federation nearly twenty years ago, Russia’s economy has depended mostly on natural resources within a “rent-seeking” environment that is burdened with illegal practices, including “bribery, corruption, smuggling, and black markets.” Russian economic dependence on natural resources became ever more apparent in the decade of the 2000s. In this decade, political and economic success was directly related to the high price of energy commodities, often solidifying the corrupt economic system. The “oil curse” continually contributes to the failure of the economy to innovate and to become competitive with the global economy. The Russian government hopes that new economic reforms and projects will erode these barriers to innovation and shift Russia’s dependence away from natural resources towards a future Russia driven by technological development.

The Skolkovo Project, a state-sponsored science park emulating California’s Silicon Valley, is just one of the many initiatives the Kremlin is undertaking to revitalize the Russian economy. This chapter will focus on one of the priorities of President Medvedev in pursuing economic modernization: overcoming a “primitive economy based on raw materials.” There are many internal and external obstacles to economic diversification. Internally, Russia’s economic and political system reinforces the energy-based economy, where energy rents are used as means to achieve greater economic and


56 “Oil curse” or natural resource curse is when a country with an abundance of natural resources achieves lower rates of economic growth than developed countries, also referred to as “Dutch disease.”

57 Medvedev, "Go Russia!," 1.


59 Medvedev, "Go Russia!," 1.
political power. Externally, Russia relies strongly on its ability to use energy exports as a tool for promoting certain foreign policy goals. Russian relationships with European and Central Asian countries are tense at best, since many of them rely solely on Russia for energy imports. Russia recently announced interest in overcoming its historic dependence on energy and starting out on a path for an innovation economy. The modernization plan could alter the relationships dominated by these states’ dependencies on Russian energy resources, and become an opportunity to partner in future economic and energy agreements. Often these European countries have more advanced manufacturing and technology based sectors that could offer Russia an ideal incentive for cooperation, where both countries could largely benefit. Europe and Russia, through economic modernization partnerships, can help foster a stronger mutual relationship that can decrease the Kremlin’s use of oil as a foreign diplomatic tool, and can establish more open and secure energy and economic policies. To achieve these benefits, these countries will have to increase their investments in Russia, allowing capital-inflows/energy-outflows to become the uniting bond in their relationship. Russia can start to break down its historic dependence on energy by pursuing a multi-faceted approach that includes fostering business partnerships in non-energy sectors through investment by implementing a massive privatization program, and agreeing to an EU-Russia energy policy which will benefit both actors, lowering the chance of future energy crises in Europe, and create a more prosperous and secure Eurasia region.

B. THE OIL CURSE DILEMMA

Russia’s economic and political strength is achieved through its control of vast energy resources. Throughout the past twenty years, efforts by the government to consolidate control over the energy sectors were hostile, causing the West to reach the consensus that Russia was heading in the wrong direction with respect to democracy. However, during the past two years some Russian officials have begun to take steps to change the dynamics of the Russian economy away from energy, by focusing on building Russia’s capacity for a new innovative and technology-based economy. The main dilemma that Russia faces is: should it pursue a complete liberalization of its economic policies, which in turn would cause short term volatility in the market and possible
political crises? The liberalization path would probably increase foreign investment into all sectors through privatization efforts. It would also lessen the government’s control of the energy-based economy, which would force the Russian elites to lose their leverage over domestic issues as well as energy dependent countries’ foreign policies. The second path, which is regarded as highly probable by the majority of Western analysts, is that Russia will maintain the status-quo by failing to adopt substantial reforms, thus missing the economic transformation that could possibly come with integration into the global economy and still remain subject to the “oil curse.” According to Celeste Wallander,

In the modern world, no country can aspire to prosperity or greatness by isolating itself from globalization, especially if, like Russia, its economic base requires exports. If Russia wishes to be a wealthy great power, it is going to have to participate in the globalized international system.60

There are benefits for both Russia and Europe in economic modernization. To fully grasp the benefits, the factors that influence economic modernization must be analyzed within the realm of the international system. The external and internal factors that contribute to the energy-based economy remained locked in a cyclical dependence, but in the long term effective policy reforms can erode the energy dependence inside Russia. There remain many unknowns, such as, how would Russia respond to adjusting its dependency on energy through economic modernization, a dependency which dictates its economic and political power in the world?

C. EUROPE AND U.S. INTERESTS, EXTERNAL FACTORS IN MODERNIZATION

Both Russia and Europe have a great interest in their energy and economic relations, and through a new approach of mutual economic assistance, both can achieve mutual economic and energy prosperity. The European Union and the U.S. have immense interests in assisting Russia in overcoming its dependence on energy. European relations with Russia over energy have remained fragile and tense, and have been held hostage by their dependence on Russian supplied energy.

Russia holds an enormous amount of leverage over the European countries with its vast energy exports into the continent. The EU depends on Russia for 30 percent of its oil imports and 50 percent of its natural gas imports. Not only does Russia dictate the energy prices, but Russia uses this leverage to promote political goals in the region. Throughout the 2000s, Moscow used energy tactics to punish or reward states in its periphery and exert influence on political and regional issues. These states often have no option other than to accept Russian political demands and high prices of commodities. If they resist, the commodity prices are either adjusted upward or supplies are immediately cut off, which results in their population literally freezing.

Russian energy policies have been instrumental in building resistance for some states’ participation in NATO’s Membership Action Plan, notably Georgia and Ukraine. The Ukraine natural gas crises of 2006 and 2009 are perfect examples of the type of energy politics Moscow plays in the region. Gazprom, the powerful state-controlled energy company, usually acts as the main culprit in carrying out Moscow’s political agenda. The EU has voiced great concern over the recent activities of the “energy war.” Its concern is likely to grow since its demand for natural gas is projected to only rise in the future. According to the International Energy Agency (IEA) Reference Scenario (2008), the demand for gas imports within the European Organization for Economic Cooperation and Development (OECD) bloc will increase from 46 percent in 2006 to 69 percent by 2030. Additionally, a long reliable natural gas field in the North Sea has begun to dry up, leaving Europe looking east for other suppliers. Also, European energy production peaked in 2008, and a continual decline will see European energy

---


production meeting a quarter of its demand by 2025.\textsuperscript{64} Due to the growing demand in Europe, past energy crises with Russia, and the recent agreement to assist Russia through the Partnership for Modernization Plan (P4M), it is vital for the EU to use this opportunity to develop an energy policy with Russia to reach an optimal solution for its future energy needs.

A recent study revealed that both Europe and Russia lose out when Russia cuts energy supplies, and that it is in the interests of both to cooperate on energy agreements.\textsuperscript{65} When Russia seems to become unreliable, Europe seeks other import contracts, leading Russia to lose out on potential profits, and thus having to lower its price to recoup lost contracts. Therefore, when Russia defaults on energy supplies to Europe, it loses out on market share and faces price decreases.\textsuperscript{66} Conversely, European states pay enormous surpluses to Russia and are at constant risk of potential stoppage. It follows that both Europe and Russia seek to gain from future economic partnerships that will undoubtedly lower the likelihood of future energy crises.

While energy policy is a sensitive topic among EU states, the majority of these states realize that they are hostage to Russia’s energy exports. They see Russia acting out a “divide and conquer strategy” in the region by purchasing foreign energy companies with the intent to control the price and deliverability. There is no denying that the EU is currently trying to construct a common energy policy to deal with energy security issues in the East, but the task is complex. The farther east in Europe one goes, the more countries become dependent on Russia. “No fewer than seven eastern European countries receive at least 90 percent of their crude oil imports from Russia, and six EU nations are entirely dependent on Russia for their natural gas imports.”\textsuperscript{67} Some see the current situation as an indirect threat to European security and proof of the need for the EU to adopt a comprehensive energy policy. Energy policy reforms outlined in the 2007

\begin{itemize}
\item \textsuperscript{64} C. Paillard, "Russia and Europe's Mutual Energy Dependence," \textit{Journal of International Affairs} 63, no. 2 (Spring 2010), 69.
\item \textsuperscript{65} Morbee and Proost, \textit{Russian Gas Imports in Europe: How does Gazprom Reliability Change the Game?}, 81.
\item \textsuperscript{66} Ibid., 99.
\item \textsuperscript{67} Baran, \textit{EU Energy Security: Time to End Russian Leverage}, 132.
\end{itemize}
European Parliament report were overwhelmingly approved, but these recommendations were largely ignored by the European Council and Commission. This was mostly due to the fact that European Union nations are divided over adopting a common energy policy, which could potentially diminish their ability to control domestic energy decisions. Solutions have been proposed: the EU needs to develop a strategic energy storage system, build pipelines to other regional suppliers, and invest in energy alternatives.

The EU, with U.S. support, has pursued multiple projects to lessen the dependence of Europe on Russia’s energy imports. These projects include building pipelines into Central Asia that give these countries direct political and economic connections to Europe, while at the same time allowing Europe to lessen its dependence on Russia. Some completed projects consist of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline, the South Caucasus Pipeline (SCP), and ongoing projects include, the Turkey-Greece-Italy pipeline (TGI), and a major project from Turkey across Bulgaria, Romania, and Hungary and into Austria, known as Nabucco. All these efforts will only slightly diminish Europe’s dependence on Russian energy, therefore additional actions are needed. The EU needs to utilize the P4M, and use it to propose a bilateral agreement with the EU and Russia for a clear energy policy, in exchange for the EU’s ongoing support for Russia’s modernization efforts.

The U.S., while not as dependent on Russian energy commodities as Europe, still holds important national security interests with many of the energy dependent countries, and continues to support their political and economic independence from Russia. The U.S. has tried to lower these states’ dependence on Russian energy supplies through the support of multiple pipelines that divert Europe’s dependence to Central Asia around Russia. The U.S. should assist the EU in developing an EU-Russia energy policy that will contribute to the stability and prosperity in the region.

D. MEDVEDEV AND PUTIN, INTERNAL POLITICAL DEPENDENCE

President Medvedev realizes the importance energy plays in Russia’s economy. Without energy and mineral exports Russia would not be able to project its political will on its neighbors or hold one of the dominating positions in the region. Even though the
importance of natural resources is acknowledged by Medvedev, he still sees his country as desperately backward, relying on a decades old industrial-energy based economy. In his 2009 article titled “Go Russia!” Medvedev stated that “Twenty years of tumultuous change has not spared our country from its humiliating dependence on raw materials.”  

Just as Russia depends on energy to exert its influence abroad, internally it also uses energy power (revenue) to eliminate and consolidate political actors. So, what does Medvedev’s speech and his current modernization plan mean for the future of Russia’s energy dependent economy?

The beginning of Russian intervention in the private energy market started with the Yukos affair in 2003. Putin sought to stifle a long time rival and to regain control of the energy market by nationalizing the Yukos Corporation. As Scott Barnes points out on the Yukos affair, “In addition, it revealed the state’s intent to concentrate much of its attention on the energy sector both as an engine of economic growth and as a potential tool for foreign policy.” In the next few years, Putin used the state-managed energy sector to bring about some economic development. Large revenues from the high prices of commodities allowed Putin some degree of flexibility in pursuing his goal of state-led modernization.

However, after the financial crises of 2008, Putin and the oil elites began to see the need for further economic development in additional sectors. Medvedev and Putin both treasure the state-managed companies that use natural gas and oil as a political and economic weapon in the region. Medvedev with recent actions may be slowly shifting away from Russia’s peak involvement in the private sector in 2004. Medvedev believes that external investments are crucial for innovation and creativity to return to Russia. In his economic liberalization effort some believe that Medvedev hopes that external support will force the political elite, whom he cannot control, into a cost-benefit analysis allowing him a chance at reform. As Wallander states, “As the stakes for Russia rise in foreign investment and trade, the cost-benefit ratio of hegemonic or imperialistic

---

68 Medvedev, "Go Russia!," 1.
strategies in the definition of Russian national interests and the developments of its foreign and security policies will change in favor of liberalization.” This outcome is still far away for Russia, as the efforts to transition its economy forward into new sectors are crucial for the cost-benefit ratio to become relevant to liberalization.

E. IMPLICATIONS FOR RUSSIA’S DOMESTIC ISSUES

Russia has used its enormous revenues from the commodity boom to fund many domestic social programs. These programs are beneficial to the citizens and maintain the state’s legitimacy in their eyes. Recent reports indicate that over 40 percent of Russia’s government budget revenues are from the oil and gas sectors. Using the revenues for Russia’s transformation in other competitive sectors is consistent with the “mobilization” strategy, which states that these strengths are “the most obvious way to move from an extractive economy to the production of high-tech products that are competitive in the international market.” The “mobilization” strategy is preferred by Putin, and is the one with least risks to the Russian political structure.

The West and liberal intellectuals in Russia hope for a radical “modernization” strategy that calls for the creation of sound institutions that can support the process of transformation. The main risk for the modernization plan is that it comes with many short term costs. In the short term, the modernization process severely depletes the socioeconomic system and therefore causes resistance at multiple levels. This is why support from all levels of a state is crucial for modernization. During the short term (2-3 years), there is large volatility in the degree of support for the plan, such as overcoming political forces that have become entrenched during years of “rent-seeking.” To accomplish this plan, a total shift in relations between the government and private sectors is needed. As Shastitko, Afontsev, and Plaksin states, “In fact, the whole style of the authorities’ interrelations with civil society must be changed; government agencies will

---


have to become more accountable to citizens; and officials, more responsible for their actions (or inactions).”

Some pessimistic critics claim that Russia is doomed by the symptoms and characteristic features of the “natural resource curse” or “Dutch disease.” Some of these traits are present in the Russian economy, but evidence from other states that have overcome similar conditions of dependence offers hope and model solutions for Russia to escape its curse.

F. NATURAL RESOURCE CURSE AND DUTCH DISEASE?

The literature on state energy dependence and its effects on the economy has been evolving from the first studies on the “natural resource curse.” The Sachs and Warner study in 1995 was instrumental in promoting the belief that countries with large energy resources experienced low levels of economic growth. In recent years, Russia has experienced high levels of economic growth which would appear to refute Sachs and Warner’s theory of the “natural resource curse.” During the period from 1999 to the 2008 financial crises, the Russian economy grew at an impressive annual rate of 7-8 percent GDP in real terms. This economic growth was due to the rise in global energy prices, most notably the increase in the price of crude oil, from 10 USD per barrel in 1999 to 140 USD in 2008.

Many of the findings in the “natural resource curse” literature conclude that energy dependence causes a “crowding-out logic: an abundance of or heavy dependence on natural resources crowds out some activity ‘x’ which is thought to be growth-

---

73 A. Shastitko, S. Afontsev and S. Plaksin, "Structural Alternatives for Russia's Socioeconomic Development," Russian Social Science Review 50, no. 4 (July–August 2009), 16.


enhancing.”

This is also known as the “Dutch disease,” a term which was invented by economists Corden and Neary in reaction to the Netherlands’ economic crisis in 1957 after the Dutch discovered large natural gas deposits and experienced a decrease in economic development. They argued that a “resource movement effect and spending effect” take place in a resource-driven economy that experiences a boom in growth. This reality gives rise to macroeconomic forces that shift capital to the energy sector, diminishing the manufacturing and service sectors in conjunction with the rise of a single “monoexport” of energy.

Some believe that Russia is exhibiting the traits of “Dutch disease,” such as high inflation of the ruble, a decrease in the manufacturing sector from the crowding-out effect, and sub-optimal development of the service sector. Recent studies of the Russian economy in the period from 1999 to 2007 showed that the manufacturing sector actually grew in this time, a development that apparently refutes the “Dutch disease” theory.

However, Corden and Neary concluded that sometimes the manufacturing sector will not decline in periods of resource booms. In their words, “The manufacturing sector of a country may include some non-traded as well as traded goods sectors, so that the decline of the sector as a whole, because of a resource boom, is by no means inevitable.” These conflicting results, and the successes of other countries’ efforts to overcome their energy dependence, suggest that Russia may be able to overcome its constraints if certain actions are taken.


80 Dobrynskaya and Turkisch, *Economic Diversification and Dutch Disease in Russia*, 284.

81 Corden and Neary, *Booming Sector and De-Industrialisation in a Small Open Economy*, 842.
G. MODERNIZATION SUCCESSES

In the past, countries that have managed to beat the resource curse have done so with effective government participation. South Africa and the United Arab Emirates (UAE) both managed to pursue different paths after decades of dependence on natural resources. South Africa invested in its industrial sector while the UAE focused on building a Middle East financial center in Dubai. Other studies show that several Middle East countries have managed to establish highly productive and innovative companies through state-owned enterprises (SOEs). The most notable examples of state-led diversification are Saudi Arabia’s SABI Corporation and the UAE’s DP World. By setting up new companies through state-owned enterprises, these states were able to force their economies into new sectors.

One might argue that Russia needs to adopt similar measures and invest in non-energy SOEs. The elite reformers in Russia see the state as the primary vehicle for economic modernization through projects like Skolkovo Park. Even though these states and Russia are similar in their energy dependent economic structures, Russia does not exhibit the two criteria of successful rentier states in managing SOEs. According to Hertog, there are two main factors critical for successful SOEs, “The absence of a populist-mobilizational history and substantive regime autonomy in economic policy-making.” Russia’s regime does not have the luxury to operate independently of the economic policy sphere and the Russians have a rich history of “economic populism,” which is tied to the communist legacy.

---

84 “Economic populism explains the pervasive manipulation of prices, over-employment, and welfare tasks imposed on SOEs, all of which make a clear focus on profit almost impossible to maintain and usually necessitate the relaxation of budget constraints.”
Another view of modernization success, and one that is crucial for Russia, is direct privatization of state-run companies. The difficulties of modernization in resource rich countries stem from the lack of institutions that are needed to carry out radical reform, and result in weaker socio-economic structures. As Erin Weinthal points out,

Scholars and policy makers alike have become increasingly convinced that it is possible to combat the resource curse through a broad array of policies that include natural resource funds, economic diversification, transparency and accountability, and direct distribution. These solutions, however, rely on a degree of institutional capacity that is widely absent in mineral-rich countries, and thus they are prone to suffer from the aforementioned negative economic, political, and social outcomes.85

Russia plans to start another wave of privatization in the next few years, but it is going to be limited to non-strategic sectors and does not go far enough. Russia should realize that SOEs like the Skolkovo Project are not going to be able to bring Russia into the realm of global innovation. Therefore, Russia needs to adopt a comprehensive plan to sell the majority of ownership of most of its assets in both energy and non-energy sectors.

H. CONSEQUENCES OF INACTION

There are many opinions on what approach should be adopted in dealing with Russia’s energy dependence, both externally through coercion, and internally through state-control. Some in the West see maintaining the status quo as the best option since it will not interrupt their current energy supplies from Russia. The failure to adopt a comprehensive energy policy has left the EU and NATO split on their ability to foster better energy relations with Russia. Inaction and failure to engage Russia will only result in a Russia more reliant on energy as a foreign policy tool. As Keith Smith of the Center for Strategic and International Studies points out, inaction by the West “only reinforced the view in the Kremlin that energy coercion is a risk-free policy.”86 After the Great

---


Recession in 2008, Russia now realizes the need for integration into the international economy. The political power of its energy exports has begun to decrease from the recent past, due to Europe’s decreased demand of gas imports, new contracts with suppliers in Central Asia and China, and new investments in alternative energy in Europe.87

The question must be asked, by assisting Russia in its modernization efforts, what does the U.S. and EU have to lose? The benefits of an energy agreement are win-win for both sides. By establishing a renewal for a future energy agreement between the EU and Russia, it could lessen the current fragile and tense energy relations that continue to act as a barrier for Russian integration into the West. The EU states could become less at risk for future energy crises, the U.S. and NATO could continue to strengthen their partnership with Russia in multiple areas, and Russia could in turn use the agreement to build upon the support of the European Union through the P4M. Without both economic and political participation from the West and Russia, energy dependence will remain one of the primary barriers for Eurasian integration and Russian economic prosperity.

The European Union and the U.S. need to encourage privatization in Russia, as this will lead to new opportunities in other sectors. An increase in additional foreign investments can alter the cost-benefit ratio of hegemonic and imperialistic strategies in turn for liberalization and could corrode the will of the political elites by diminishing their power in the energy sector. New entrepreneurs will begin to effectively manage the companies and become more productive over time. Russia might display some characteristics of the “oil curse,” but recent evidence gives hope and defines solutions for it to achieve economic prosperity. Establishing SOEs might be preferable to the hard-line reformers since they still are able to reap the benefits of rent-seeking, but SOE projects, like the Skolkovo Park alone, will not modernize Russia. The liberal reformers should aggressively pursue privatization along with establishing higher standards in the rule of law, which will allow Russia to improve the investment climate, further stimulating FDI

in non-energy sectors. It will take a multi-faceted approach inside Russia, as well as external support from Europe and the U.S. to erode decades of dependence on energy in Russia.

Increased European Union investment in new Russian economic sectors in the next privatization plan through the P4M forum, may contribute to the mutual integration of European and Russian economies. This integration can develop into more modest energy policies and help establish a future EU-Russia energy agreement. As the Russian economy becomes more integrated with the West, the cost-benefit ratio for hegemonic tendencies through energy coercion may fall, and begin to give birth to radical reform in both political and economic spheres, and welcome a long overdue new Russia into the international economy.
A. RUSSIA’S ECONOMIC SCENARIOS

Much debate has been waged over potential future scenarios of the authoritarian capitalist economy of Russia, and the impact Medvedev’s current modernization efforts will have on its economic and political structure. The scenarios for the future of Russia’s economy are based on static past factors that do not take into account future economic, political, or social crises that could fundamentally shift the direction of economic development for a country in a short time span. The unknowns are great in economic analysis, but certain economic data can provide vital insights into the crucial criteria necessary for economic development. These variables can help determine the underlying direction of any economy, as long as economic data is available.

As of the recent financial crises in 2008, critics and economists have begun to question the West’s free market model and some even venture to ponder if authoritarian capitalist regimes like China and Russia are the future economic models to pursue. As we shall analyze, these regimes are built upon a false sense of stability and will eventually proceed towards full democracy once certain socioeconomic areas are developed. As Azar Gat states of authoritarian capitalist regimes, “Authoritarian capitalist regimes are at least successful-if not more so-in the early stages of development, but they tend to democratize after crossing a threshold of economic and social development.”88 In order to study the direction of the Russian economy and how it might be able to “cross the threshold of economic and social development,” it helps to analyze potential economic scenarios for Russia’s future.

---

There are numerous studies on the direction that Russia’s economic modernization will take the country. Most of the theories revolve around three or four paths forward for Russia’s economic progress or regress. In “Structural Alternatives for Russia’s Socioeconomic Development,” A. Shastitko and other authors describe four potential routes for Russia’s future: “inertia, rentier, mobilization, and modernization.” Additional scenarios for the Russian economy, outlined by the World Economic Forum, produce a similar analysis of the potential outcomes. The World Economic Forum’s “Russia and the World: Scenarios to 2025” outlines three paths that the Russian state could proceed down in the next fifteen years: “Oil’s Curse,” “Long March,” and “Renaissance.” For clarity, the three scenarios from the World Economic Forum will be used for this analysis.

Figure 1 provides a window into the varying factors that will contribute to the outcome of the modernization process. The three scenarios listed above are dependent on the x and y axis variables. On the y-axis is rent-seeking and rule of law, on the x-axis is resource based economy and diversified economy. The first scenario is, the “Oil’s curse” (OC) and shares many similarities with the first strategy of “inertia,” where the Russian government refuses to overcome the challenges of modernization, and allows itself to continue to be influenced by its reliance on energy resources, which will result in failure to improve economic and political freedoms. As stated at the World Economic Form, “In Oil’s Curse, a political class bent on its own enrichment is in charge, resulting in slow growth, poor levels of investment in infrastructure, capital flight, increased corruption and a decline in the competitiveness of domestic industries.” This scenario would foster a further increase in state regulation in the market, and have drastic impacts on
future economic and political stability in the country. The “inertia” or “Oil’s curse” strategy concludes that Russia will maintain its current political and economic structure and will reject any substantial changes to reform. “It calls for the government to maneuver tactically among interest groups, giving priority to economic and political “stability” (understood as preservation of the status quo) over development.”

Figure 1. From World Economic Forum “Russia and the World: Scenarios to 2025”

The second pathway in Shastitko’s model is the “rentier-mobilization” scenario, or the “Long March” (LM) in the World Economic Forum’s study. In this model, Russia will use high revenues from energy resources for redistribution efforts to improve the impoverished population while maintaining its current structure. “This option calls for a de facto increase in social obligations met by the state and increased government

---

92 Shastitko, Afontsev and Plaksin, Structural Alternatives for Russia's Socioeconomic Development, 4–23.

93 World Economic Fourm, World Scenarios Series “Russia and the World: Scenarios to 2025.”

94 Ibid.
This rentier strategy is thought to increase the size of the middle class and solve many of the historic social problems. The LM would show a considerable increase in social and domestic programs to provide for public critical shortfalls in the rule of law, but it will not address the fundamental issues of the socioeconomic dependence on energy. It also would not address the fundamental structures that are lacking in the political and economic institutions. It would rely on the high price of commodities to subsidize its programs, but in the long term would not prove economically beneficial.

The final scenario in Shastitko’s study is “modernization,” or “Renaissance,” (REN) in the World Economic Forum’s model, which would create a restructuring of social and economic institutions that would foster innovation and competition in the private sector. The REN scenario would be a fundamental restructuring of social and economic institutions critical for economic modernization. It would “foresee initially gradual, but eventually wide-reaching governance reforms combined with market reforms leading to strong GDP growth, an increase in real income, and general improvement in the quality of life for the population at large.” This path would be most difficult in the short term, due to political and social barriers, but the most rewarding in the long run once liberal economic policies are given time to succeed. Shastitko points to two main criteria that must be addressed: creation of a “favorable intellectual environment” and “development of nonprofit organizations.” The “modernization” strategy has short term economic and political volatility, roughly two to three years, since modernization often takes time to be fully implemented in the economic and social arenas. It would face considerable resistance from portions of the government that would not seek to gain from modernization. The “Oil Curse,” “Long March,” and “Renaissance” scenarios provide a structure in analyzing the challenges that face Russia in the efforts to modernize.

95 Shastitko, Afontsev and Plaksin, Structural Alternatives for Russia's Socioeconomic Development, 4–23.


98 Shastitko, Afontsev and Plaksin, Structural Alternatives for Russia's Socioeconomic Development, 4–23.
B. ECONOMIC STAGES OF DEVELOPMENT

The World Economic Forum assumes that each country has to achieve certain levels in the different pillars in order to achieve economic prosperity. The World Economic Forum separates development into three stages of development, Stage 1 “factor-driven,” Stage 2 “efficiency-driven,” and Stage 3 “innovation-driven” economies. Russia is currently in the Stage 2, “efficiency-driven” category (see Figure 2).

To analyze the potential outcome for the current modernization effort, an empirical analysis of global economic indexes can provide interesting insights into the critical factors that could move Russia into the next stage of economic development, from a Stage 2 “efficiency-driven” economy into a Stage 3 “innovation driven” economy. A radical modernization effort would see Russia shift into Stage 3 development and would be consistent with the “Renaissance” scenario, where complete economic and political systems would be liberalized. The “LM” scenario would see Russia maintain its economic and political status quo and maintain its current development position as a Stage 2 country. The “OC” scenario would severely degrade the economic and political actors over time, leading to rampant abuses in political and economic power, which could result in negative growth and capital flight. The OC would be consistent with sliding backwards in economic development into a potential Stage 1 country and potential regime change.

After the 2008 financial crises, a renewal for modernization in Russia has started. “Smart Russia” as it is also known, a plan by the Kremlin to seemingly transition Russia from a Stage 2 to a Stage 3, “innovation-driven” economy. The first step to becoming a Stage 3 is to begin the transition process by entering the transition Stage between 2 and 3, see Figure 3.
Russia is lacking in the primary pillars that allow for a country to transition from a Stage 2 to Stage 3 country. In order for Russia to become a member of the Stage 3 category, it needs further develop many of the efficiency, innovation, and sophistication factors listed in Figure 2. One of the criteria for a country to transition to the next category is to achieve a certain level of GDP per capita. Figure 3 lists the annual GDP per capita levels in determining the countries stage of development. Russia currently has 8,694 GDP per capita (U.S.) in 2009, leaving it on the border of becoming a transitioning from Stage 2 to Stage 3 country, see Figure 3.100


Russia has been a Stage 2 country for quite some time, unable to reach the necessary levels for Stage 3, or even become a part of the transitioning 2–3 countries. Russia has improved its overall standing in GDP per capita in the past decade, however, it is still lacking in the crucial areas of innovation-driven economies. The most developed and economic prosperous nations are members of Stage 3 (see Figure 4).

Russia has made great gains in its overall wealth of its population in the past decade, but has since declined from the 2008 financial crises. Recent reports indicate modest growth of 4 percent GDP in 2010, and predicted growth of 4 to 5 percent GDP in 2011. If Russia is able to sustain these growth rates it could easily increase its probability to reach a higher stage of economic development. Hypothetically, if Russia achieves 4 percent GDP growth over the next few decades it could reach Stage 3 level incomes in seventeen years, or around 2028. However, increases in income alone are not sufficient to achieve a higher stage of economic development, improvements in governance and other economic variables also contribute to the final stage.

---

**Key indicators, 2009**

<table>
<thead>
<tr>
<th>Population (millions)</th>
<th>GDP (US$ billions)</th>
<th>GDP per capita (US$)</th>
<th>GDP (PPP) as share (%) of world total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Figure 4.** From World Economic Forum’s GCI, Russia’s Key Indicators\(^{102}\)

**Figure 5.** From World Economic Forum’s Global Competitiveness Report, List of countries/economies at each stage of development\(^{103}\)


---


---

48
The recent successes of former communist countries in Eastern Europe are evident in their ability to begin their transition into a Stage 3 country (Estonia, Latvia, Hungary, Lithuania, Poland, and Czech Republic.) To understand what factors are required to transition Russia forward it is vital to look at other economic indexes over time to determine the factors that contributed to these countries’ abilities to move up in the development stages, and which areas Russia needs to improve.

C. ECONOMIC INDEXES

The framework that will be used will focus on multiple global indexes, and will conduct a factors analysis and discriminate analysis to determine what areas Russia lacks in its economic and political components, and if state-managed economic reforms through the “Smart Russia” efforts will be sufficient in transitioning Russia to the Stage 3 category. This analysis will identify the main variables required to transition to the Stage 3 levels. There are three main economic indexes that will be statistically analyzed to receive the necessary results. These three indexes will be combined in order to cover the economic, political, and social aspects of the Russian state. The three are the World Economic Forum’s Global Competitiveness Index Score (GCI), the World Bank Governance Indicators (WBGI), and the Heritage Foundation of Economic Freedom Scores (EF). These three indexes make up a total of 29 variables as listed in Table 1.

1. World Economic Forum’s Global Competitiveness Index (GCI)

For over three decades, the GCI has provided economic data on a whole range of factors that are considered necessary criteria for a state to become competitive and economically prosperous. The World Economic Forums’ Global Competitiveness Report consists of twelve pillars that contribute to the certain stage a state receives and consist of: institutions, infrastructure, macro-economy, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication, and innovation (see Figure 2).
2. **World Bank Governance Indicator (WBGI)**

Since 1996, the World Bank has collected data in countries that give numerical rankings to six pillars of governance. Due to the decline in many areas of economic and political freedoms across the globe, increased interest has been given to the governance factors in determining the success and failure of economic reforms or modernizations. The WBGI entails data from 213 countries over the period 1996-2009. When analyzed with the economic data of the World Economic Forum’s GCI, the WBGI provides critical evidence of the importance of governance factors in determining economic progression of Russia. The six pillars of Governance as defined by the World Bank in Figure 5.
1. Voice and Accountability (VA) – capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

2. Political Stability and Absence of Violence/Terrorism (PV) – capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

3. Government Effectiveness (GE) – capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

4. Regulatory Quality (RQ) – capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

5. Rule of Law (RL) – capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

6. Control of Corruption (CC) – capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Figure 6. From World Bank’s Governance Indicator 2010\textsuperscript{104}

In Russia’s case, its governance indicators are of grave concern as it ranks near the bottom percentile rank in the Europe/Eurasia region and among the developed nations, Table 1. The relationship of the Governance Indicators in determining the stage of development is shown in Table 2. Russia lies well below the mean average for Stage 3 countries, and has consistent levels of a Stage 2 country. In Table 2, Stage 1 to 3 are

broken down into five groups to show a category for countries that are in transitioning to different stages, and their mean scores for each group, shown in Table 2.

<table>
<thead>
<tr>
<th>Governance Indicator</th>
<th>Sources</th>
<th>Year</th>
<th>Percentile Rank</th>
<th>Governance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice and Accountability</td>
<td>15</td>
<td>2009</td>
<td>22.3</td>
<td>-0.95</td>
</tr>
<tr>
<td>Political Stability</td>
<td>9</td>
<td>2009</td>
<td>21.7</td>
<td>-0.72</td>
</tr>
<tr>
<td>Government Effectiveness</td>
<td>11</td>
<td>2009</td>
<td>44.8</td>
<td>-0.28</td>
</tr>
<tr>
<td>Regulatory Quality</td>
<td>12</td>
<td>2009</td>
<td>35.2</td>
<td>-0.46</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>17</td>
<td>2009</td>
<td>23.6</td>
<td>-0.77</td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>15</td>
<td>2009</td>
<td>11.4</td>
<td>-1.12</td>
</tr>
</tbody>
</table>

Table 1. From World Bank Governance Indicators, Russia\textsuperscript{105}

### Group Means on Governance Dimensions, World Economic Forum Development Stages, 2010-2011

<table>
<thead>
<tr>
<th>World Economic Forum Stages</th>
<th>Voice</th>
<th>Political Stability</th>
<th>Government Effectiveness</th>
<th>Regulatory Quality</th>
<th>Rule of Law</th>
<th>Control of Corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>-0.547</td>
<td>-0.685</td>
<td>-0.714</td>
<td>-0.562</td>
<td>-0.761</td>
<td>-0.731</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>37</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.557</td>
<td>0.813</td>
<td>0.389</td>
<td>0.443</td>
<td>0.461</td>
<td>0.388</td>
</tr>
<tr>
<td>2 Mean</td>
<td>-0.739</td>
<td>-0.300</td>
<td>-0.267</td>
<td>-0.278</td>
<td>-0.415</td>
<td>-0.402</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.649</td>
<td>0.787</td>
<td>0.582</td>
<td>0.710</td>
<td>0.552</td>
<td>0.723</td>
</tr>
<tr>
<td>3 Mean</td>
<td>0.015</td>
<td>-0.175</td>
<td>0.061</td>
<td>0.137</td>
<td>-0.223</td>
<td>-0.165</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.620</td>
<td>0.666</td>
<td>0.412</td>
<td>0.453</td>
<td>0.545</td>
<td>0.442</td>
</tr>
<tr>
<td>4 Mean</td>
<td>0.657</td>
<td>0.598</td>
<td>0.802</td>
<td>0.902</td>
<td>0.720</td>
<td>0.572</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.680</td>
<td>0.320</td>
<td>0.303</td>
<td>0.331</td>
<td>0.378</td>
<td>0.456</td>
</tr>
<tr>
<td>5 Mean</td>
<td>1.127</td>
<td>0.761</td>
<td>1.462</td>
<td>1.358</td>
<td>1.443</td>
<td>1.488</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.547</td>
<td>0.558</td>
<td>0.430</td>
<td>0.350</td>
<td>0.454</td>
<td>0.661</td>
</tr>
<tr>
<td>Total Mean</td>
<td>0.051</td>
<td>-0.038</td>
<td>0.183</td>
<td>0.240</td>
<td>0.109</td>
<td>0.097</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>139</td>
<td>139</td>
<td>139</td>
<td>138</td>
<td>116</td>
<td>139</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.932</td>
<td>0.882</td>
<td>0.932</td>
<td>0.886</td>
<td>0.989</td>
<td>1.006</td>
</tr>
</tbody>
</table>

Table 2. Group Means on Governance Dimensions, World Economic Forum Development Stages, 2010–2011

### 3. Heritage’s Foundation, Economic Freedom Index (EF)

The third and final index is the Economic Freedom Index. Since 1995, the Heritage Foundation and Wall Street Journal have published an annual report detailing economic freedom in a state. The Economic Freedom Index essentially measures the degree of freedom that is present in the economic and political spheres within a country. The score is made up of over ten factors including:

1. Business Freedom
2. Trade Freedom
3. Fiscal Freedom
4. Government Spending
5. Monetary Freedom
6. Investment Freedom

---

106 Factor and Discriminate analysis was conducted in partnership with Dr. Robert Looney, NPS, using SPSS statistical software.
7. Financial Freedom
8. Property Rights
9. Freedom from Corruption
10. Labor Freedom

With regards to Russia, it ranks near the bottom of all countries, with an overall score of 50.5 in the 2011 Economic Freedom Index, ranked 143rd out of 179 countries, and 41st out of 43 European countries. The current modernization plan will require Russia to address the ten pillars shown above and determine the degree of success the country has at becoming an innovative economy. Figure 6 shows the scores of Russia in each of the ten pillars in the Economic Index 2010.

<table>
<thead>
<tr>
<th>Score</th>
<th>Pillar</th>
<th>Avg</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.7</td>
<td>Business Freedom</td>
<td>64.3</td>
<td>25.0</td>
</tr>
<tr>
<td>68.2</td>
<td>Trade Freedom</td>
<td>74.8</td>
<td>40.0</td>
</tr>
<tr>
<td>82.7</td>
<td>Fiscal Freedom</td>
<td>76.3</td>
<td>25.0</td>
</tr>
<tr>
<td>65.1</td>
<td>Government Spending</td>
<td>63.9</td>
<td>22.0</td>
</tr>
<tr>
<td>63.1</td>
<td>Monetary Freedom</td>
<td>73.4</td>
<td>62.9</td>
</tr>
<tr>
<td>50.2</td>
<td>Investment Freedom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.5</td>
<td>Financial Freedom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.6</td>
<td>Property Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.5</td>
<td>Fdm. from Corruption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.5</td>
<td>Labor Freedom</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 7. Russia Scores from Heritage Foundation Economic Freedom Index

In Tables 3 and 4, the group means for the eleven pillars of the Economic Freedom Index are displayed with the development stages, which show that Russia fails to meet the mean score for a group 3 country, and that it should be in a lower stage than previously ranked by World Economic Forum. Russia’s overall score of 50.5 vs. a mean group 3 score of 61.89. The three largest deficient areas in Russian scores are the failures of Investment Freedom (25 vs. mean of 54.31), Property Rights (25 vs. mean of 40.17), and Freedom from Corruption (22 vs. mean of 38.14), see Table 4.

---


108 Ibid.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>54.300</td>
<td>55.460</td>
<td>69.537</td>
<td>77.051</td>
<td>75.168</td>
<td>69.886</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>5.867</td>
<td>11.605</td>
<td>7.503</td>
<td>9.418</td>
<td>15.816</td>
<td>5.591</td>
</tr>
<tr>
<td>2 Mean</td>
<td>57.260</td>
<td>65.150</td>
<td>74.792</td>
<td>82.204</td>
<td>71.667</td>
<td>66.329</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>3 Mean</td>
<td>61.890</td>
<td>67.110</td>
<td>78.090</td>
<td>80.517</td>
<td>71.893</td>
<td>71.928</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>4 Mean</td>
<td>68.910</td>
<td>72.550</td>
<td>84.136</td>
<td>80.693</td>
<td>63.229</td>
<td>72.879</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>4.936</td>
<td>9.822</td>
<td>7.166</td>
<td>9.408</td>
<td>17.512</td>
<td>4.184</td>
</tr>
<tr>
<td>5 Mean</td>
<td>73.190</td>
<td>85.470</td>
<td>86.391</td>
<td>64.234</td>
<td>49.128</td>
<td>78.613</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Total Mean</td>
<td>62.330</td>
<td>68.380</td>
<td>77.696</td>
<td>76.059</td>
<td>66.496</td>
<td>72.055</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>137</td>
<td>137</td>
<td>137</td>
<td>138</td>
<td>136</td>
<td>138</td>
</tr>
</tbody>
</table>

Table 3. Group Means on Economic Freedom Dimension I, World Economic Forum Development
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>41.180</td>
<td>43.290</td>
<td>30.210</td>
<td>27.010</td>
<td>57.600</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>2 Mean</td>
<td>45.430</td>
<td>43.750</td>
<td>35.220</td>
<td>31.000</td>
<td>60.429</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>23</td>
<td>24</td>
<td>23</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>3 Mean</td>
<td>54.310</td>
<td>53.450</td>
<td>40.170</td>
<td>38.140</td>
<td>63.403</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>4 Mean</td>
<td>68.570</td>
<td>63.570</td>
<td>62.500</td>
<td>54.500</td>
<td>66.621</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>11.673</td>
<td>13.927</td>
<td>13.552</td>
<td>10.559</td>
<td>15.062</td>
</tr>
<tr>
<td>5 Mean</td>
<td>75.310</td>
<td>70.630</td>
<td>80.940</td>
<td>74.530</td>
<td>66.678</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Total Mean</td>
<td>55.550</td>
<td>53.980</td>
<td>48.440</td>
<td>43.970</td>
<td>62.366</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>136</td>
<td>137</td>
<td>136</td>
<td>137</td>
<td>137</td>
</tr>
</tbody>
</table>

Table 4. Group Means on Economic Freedom Dimensions II, World Economic Forum Development Stages

D. ECONOMIC FACTOR ANALYSIS

After analyzing the indexes versus the development stages it has provided insights into the shortfalls of the Russia economic and political realities. These results are consistent with previous views that Russia severely lacks the crucial ingredients for economic modernization. These results will be further analyzed by conducting a factor analysis to see out of the 24 variables present in the merged data sets, were there any unique traits present, and what Russia’s prospects are in its modernization plan. A rotated factors matrix produced five main trends or dimensions.
Factor 1- Competitiveness Dimension
Factor 2- Economic Freedom Dimension
Factor 3- Labor Market Freedom/Efficiency Dimension
Factor 4- Government Spending/Fiscal Dimension
Factor 5- Trade Freedom Dimension

Table 5.  Factor Analysis, Five Relevant Trends

The five trends listed in Table 5 were then input into a rotated component matrix with the 24 variables from the three data sets, which encompass the economic competitiveness index (GCI), governance indicators index (WBGI), and economic freedom index (EF). The five groupings of variables show distinct significance to the corresponding factor by higher significance, noted with an asterisk, Table 6.
<table>
<thead>
<tr>
<th>Source</th>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCI</td>
<td>Business Sophistication</td>
<td>0.737*</td>
<td>0.365</td>
<td>0.300</td>
<td>0.324</td>
<td>0.190</td>
</tr>
<tr>
<td>GCI</td>
<td>Market Size</td>
<td>0.835*</td>
<td>0.009</td>
<td>-0.146</td>
<td>0.036</td>
<td>0.087</td>
</tr>
<tr>
<td>GCI</td>
<td>Innovation</td>
<td>0.688*</td>
<td>0.338</td>
<td>0.331</td>
<td>0.423</td>
<td>0.095</td>
</tr>
<tr>
<td>GCI</td>
<td>Macroeconomic Environment</td>
<td>0.675*</td>
<td>0.111</td>
<td>0.141</td>
<td>-0.111</td>
<td>0.162</td>
</tr>
<tr>
<td>GCI</td>
<td>Infrastructure</td>
<td>0.662*</td>
<td>0.313</td>
<td>0.349</td>
<td>0.288</td>
<td>0.395</td>
</tr>
<tr>
<td>GCI</td>
<td>Higher Education and Training</td>
<td>0.610*</td>
<td>0.267</td>
<td>0.282</td>
<td>0.345</td>
<td>0.525</td>
</tr>
<tr>
<td>GCI</td>
<td>Goods Market Efficiency</td>
<td>0.576*</td>
<td>0.463</td>
<td>0.533</td>
<td>0.139</td>
<td>0.231</td>
</tr>
<tr>
<td>GCI</td>
<td>Technological Readiness</td>
<td>0.573*</td>
<td>0.423</td>
<td>0.335</td>
<td>0.366</td>
<td>0.409</td>
</tr>
<tr>
<td>GCI</td>
<td>Financial Market Development</td>
<td>0.570*</td>
<td>0.464</td>
<td>0.401</td>
<td>0.082</td>
<td>0.116</td>
</tr>
<tr>
<td>WBGI</td>
<td>Government Efficiency</td>
<td>0.512*</td>
<td>0.493</td>
<td>0.416</td>
<td>0.407</td>
<td>0.337</td>
</tr>
<tr>
<td>EF</td>
<td>Monetary Freedom</td>
<td>0.284</td>
<td>0.792*</td>
<td>-0.11</td>
<td>0.179</td>
<td>-0.096</td>
</tr>
<tr>
<td>EF</td>
<td>Investment Freedom</td>
<td>0.038</td>
<td>0.791*</td>
<td>0.231</td>
<td>0.117</td>
<td>0.370</td>
</tr>
<tr>
<td>EF</td>
<td>Financial Freedom FIF10</td>
<td>0.111</td>
<td>0.737*</td>
<td>0.283</td>
<td>0.119</td>
<td>0.412</td>
</tr>
<tr>
<td>EF</td>
<td>Overall Freedom Score</td>
<td>0.307</td>
<td>0.686*</td>
<td>0.525</td>
<td>-0.009</td>
<td>0.375</td>
</tr>
<tr>
<td>WBGI</td>
<td>Regulatory Quality</td>
<td>0.411</td>
<td>0.635*</td>
<td>0.367</td>
<td>0.272</td>
<td>0.424</td>
</tr>
<tr>
<td>WBGI</td>
<td>Voice and Accountability</td>
<td>0.188</td>
<td>0.599*</td>
<td>0.073</td>
<td>0.542</td>
<td>0.359</td>
</tr>
<tr>
<td>EF</td>
<td>Property Rights</td>
<td>0.391</td>
<td>0.598*</td>
<td>0.403</td>
<td>0.443</td>
<td>0.231</td>
</tr>
<tr>
<td>EF</td>
<td>Freedom From Corruption</td>
<td>0.449</td>
<td>0.535*</td>
<td>0.425</td>
<td>0.437</td>
<td>0.271</td>
</tr>
<tr>
<td>WBGI</td>
<td>Control Over Corruption</td>
<td>0.424</td>
<td>0.527*</td>
<td>0.441</td>
<td>0.455</td>
<td>0.274</td>
</tr>
<tr>
<td>WBGI</td>
<td>Rule of Law</td>
<td>0.451</td>
<td>0.485</td>
<td>0.415</td>
<td>0.464</td>
<td>0.332</td>
</tr>
<tr>
<td>EF</td>
<td>Business Freedom</td>
<td>0.290</td>
<td>0.452</td>
<td>0.417</td>
<td>0.183</td>
<td>0.432</td>
</tr>
<tr>
<td>EF</td>
<td>Labor Freedom</td>
<td>-0.018</td>
<td>0.040</td>
<td>0.833*</td>
<td>-0.113</td>
<td>0.115</td>
</tr>
<tr>
<td>GCI</td>
<td>Labor Market Efficiency</td>
<td>0.231</td>
<td>0.283</td>
<td>0.785*</td>
<td>0.095</td>
<td>0.117</td>
</tr>
<tr>
<td>GCI</td>
<td>Institutions</td>
<td>0.510</td>
<td>0.371</td>
<td>0.598*</td>
<td>0.333</td>
<td>0.145</td>
</tr>
<tr>
<td>EF</td>
<td>Fiscal Freedom</td>
<td>-0.144</td>
<td>-0.255</td>
<td>0.113</td>
<td>-0.832*</td>
<td>0.242</td>
</tr>
<tr>
<td>EF</td>
<td>Government Spending</td>
<td>0.043</td>
<td>0.002</td>
<td>-0.029</td>
<td>-0.824*</td>
<td>-0.385</td>
</tr>
<tr>
<td>EF</td>
<td>Trade Freedom</td>
<td>0.291</td>
<td>0.332</td>
<td>0.146</td>
<td>0.033</td>
<td>0.757*</td>
</tr>
<tr>
<td>GCI</td>
<td>Health and Primary Education</td>
<td>0.556</td>
<td>0.224</td>
<td>0.159</td>
<td>0.162</td>
<td>0.621*</td>
</tr>
<tr>
<td>WBGI</td>
<td>Political Stability</td>
<td>0.250</td>
<td>0.299</td>
<td>0.375</td>
<td>0.407</td>
<td>0.433</td>
</tr>
</tbody>
</table>

Notes: Rotated Component Matrix, Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 9 iterations. GCI = World Economic Global Competitiveness scores, 2010; WBGI = World Bank Governance Indicators, Scores, 2009, EF = Heritage Index of Economic Freedom Scores, 2010; * = loading greater than 0.5.

Table 6. Factor Analysis, Competitiveness, Governance, and Economic Freedom Components

---

109 Factor and Discriminate analysis was conducted in partnership with Dr. Robert Looney, NPS, using SPSS statistical software.
When Russia is compared with other emerging markets, specifically the BRIC countries, we can begin to see the patterns of how Russia scores comparatively, see Table 7. Russia scores comparatively well in labor market freedom and government spending, but is severely deficient in Factor 2, economic freedom dimension.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0.677</td>
<td>-0.348</td>
<td>-0.903</td>
<td>0.912</td>
<td>-0.662</td>
</tr>
<tr>
<td>China</td>
<td>2.913</td>
<td>-1.909</td>
<td>-0.271</td>
<td>-0.573</td>
<td>-1.394</td>
</tr>
<tr>
<td>India</td>
<td>1.507</td>
<td>-0.798</td>
<td>-0.510</td>
<td>0.103</td>
<td>-1.608</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>0.973</td>
<td>-2.366</td>
<td>-0.314</td>
<td>-0.040</td>
<td>0.278</td>
</tr>
</tbody>
</table>

Notes: Factor 1 = competitiveness dimension, Factor 2, economic freedom dimension, Factor 3 = labor market freedom/efficiency, Factor 4 = government spending, fiscal dimension; Factor 5 trade freedom. Russia scores the worst in economic freedom dimension, followed by labor market freedom.

Table 7. Country Factor Scores

E. DISCRIMINATE ANALYSIS

After the factors analysis, the five factors identified were used in a discriminate analysis to determine the accurateness of the World Economic Forum stages, and to determine if these variables are significant with a high degree of confidence in placing the country in the correct stage. Also, what are the certain variables, out of the 24 analyzed, that act as key variables in moving a country from one stage of development to the next, or conversely, decline to the next lower stage?

The discriminate analysis added one variable at a time from the combined data set to eliminate all the variables until there were not significantly relevant changes in country grouping. Out of the three data sets of over 24 variables, the discriminate analysis output showed that there were only 4 variables significant in organizing the five groups, see Table 8. In order of most importance, Technological Readiness, Rule of Law, Infrastructure, and Innovation are the significant variables able to predict placement of 75 percent of World Economic Forum countries.
Discriminant Analysis Variable Selection

<table>
<thead>
<tr>
<th>Entered</th>
<th>Entered Statistic</th>
<th>df1</th>
<th>df2</th>
<th>df3</th>
<th>Statistic</th>
<th>Exact F</th>
<th>df1</th>
<th>df2</th>
<th>Sig</th>
<th>Entered Statistic</th>
<th>df1</th>
<th>df2</th>
<th>df3</th>
<th>Statistic</th>
<th>Exact F</th>
<th>df1</th>
<th>df2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technological Readines</td>
<td>0.158</td>
<td>1</td>
<td>4</td>
<td>110.0</td>
<td>146.26</td>
<td>4</td>
<td>110.0</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rule of Law</td>
<td>0.118</td>
<td>2</td>
<td>4</td>
<td>110.0</td>
<td>51.953</td>
<td>8</td>
<td>218.0</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Infrastructure</td>
<td>0.099</td>
<td>3</td>
<td>4</td>
<td>110.0</td>
<td>22.390</td>
<td>12</td>
<td>286.0</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Innovation</td>
<td>0.086</td>
<td>4</td>
<td>4</td>
<td>110.0</td>
<td>26.288</td>
<td>16</td>
<td>327.53</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Discriminate Analysis Results

Table 8 clearly identifies the main variables required for Russia to improve in order for it to transition into a Stage 3 country. The discriminate variables identified to be the most important clearly show that Russia is lacking in all four areas, but is the most deficient in rule of law, with a score of -0.77, unable to reach the mean score of -0.30 for group three countries. The modernization plan currently underway is slowly making improvements in the “technological readiness” and “innovation” variables with state-led technology ventures, but has not adequately addressed the other two variables of “rule of law” and “infrastructure.”

A comparison with other emerging market countries (BRIC), Russia was predicted to be a group 2 with a 65 percent chance of placement, not the group 3 with a 33 percent correct placement that the World Economic Forum placed them in, see Table 9.

Discriminant Analysis Group Placement Probabilities

<table>
<thead>
<tr>
<th>Country</th>
<th>Original WEF Group</th>
<th>Discriminant Placement</th>
<th>Probability of Group Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1 Group 1</td>
<td>Stage 1 Group 2</td>
<td>Stage 1 Group 3</td>
</tr>
<tr>
<td>Brazil</td>
<td>3</td>
<td>3</td>
<td>0.001</td>
</tr>
<tr>
<td>China</td>
<td>3</td>
<td>2</td>
<td>0.062</td>
</tr>
<tr>
<td>India</td>
<td>1</td>
<td>1</td>
<td>0.608</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>3</td>
<td>2</td>
<td><strong>0.004</strong></td>
</tr>
</tbody>
</table>

Table 9. Discriminate Analysis, Probability of Group Placement
The results from the factor and discriminate analysis provide in-depth analysis into the necessary variables for a country to transition to a higher level of development. According to the results, Russia is actually lower than the Stage 2 the World Economic Forum classifies them, but actually a group 2, which is transitioning between Stage 1 and Stage 2, see Table 9. It can be concluded that Russia is still yet to adequately address many areas that are crucial for drastic economic development. The data indicates Russia is currently heading down the path of the “Long March” scenario, which is consistent with critics of the modernization efforts. The “Long March” is just enough economic reform to maintain the current levels of political structure while seemingly adopting minimal liberal economic policies. However, on a positive note, Russia is addressing two of the four variables identified in the discriminate analysis critical to transition to the higher stage of development, technology readiness and innovation. The real unknown is whether these focused efforts in these technological areas will carry over into the political sphere to reach the next level of development.

Recent Russia modernization efforts in technology and innovation through the “Smart Russia” campaign alone will undoubtedly be insufficient to bring Russia into a more prosperous stage of development. The government needs to also address additional areas of the socioeconomic structures in Russia, specifically rule of law and infrastructure. The economic analysis does not account for recent international economic tools that promote new partnerships that increase investment and rule of law adherence, such as the P4M, USRBC, and WTO. These outside forces are beginning to offer the Russian economy a missing variable that could contribute to the development process and accelerate Russia forward to the much desired “Renaissance” scenario.
VI. CONCLUSION

A. THE WEST’S ROLE, ASSISTANCE OR ISOLATION?

Russia is currently on the cusp of economic modernization or returning to the status-quo of economic stagnation from the lack of innovation, rule of law, and corruption in the Russian economy. Beyond the obvious shortcomings of the Russian state, progress has been made over the past twenty years. While the Kremlin is far from committing to complete economic modernization, outside actors will have to contribute to the long process of economic integration. Patience and resolve are something Westerners and Russians must both adopt in promoting a steadfast commitment to increase economic cooperation. Westerners must not forget that truly liberal and free market economies were not conceived in twenty years, but took a substantially longer time than what we have given the short life of the Russian Federation. “Integration fatigue” has plagued the efforts of the U.S. and West in the past.110 We should give the Russian people the same unbiased economic assistance we have offered other states across the world when each embarks on a path towards free market principles. Today, the world and Russia have enormous tools at their disposal for transforming a country forward, which can allow for positive factors to influence liberalization in a fraction of the time historic. These tools must be used to focus their efforts on the most important areas in the Russian economy that are prohibiting progress, rule of law and diversification away from an energy dependent economy.

Decreasing corruption and diversifying an energy dependent economy will prove challenging but should not remain the traits of Russia forever. The window of opportunity to assist in defeating these traits is currently open, as Russia is reaching out for economic cooperation. While political unknowns remain in Russia’s future and could potentially shift the direction of any economic reforms in a short time, most Russian

---

leaders admit the need for a new direction in their economic policies. Increases in foreign direct investment can assist Russia in overcoming these areas if they are allowed into the strategic sectors so closely guarded by the Russia regime. Privatization of its highly guarded strategic sector is the first step that Russia must pursue to encourage foreign investors and governments of its real commitment for economic integration.

The recent actions by the Russian government with the “Smart Russia” movement is indicative of the consensus within the leadership that the current dependence on energy, is not the way forward for Russia if it wants to become a truly developed nation within the international economic system. While the Skolkovo project is impressive on paper, it alone can not provide Russia with the missing variables in economic transformation. Additional support will be required, most notably from outside actors, U.S., Europe, and WTO, which can help provide Russia the missing variables for economic transformation into the world economic market.

International organizations such as the EU, WTO, and U.S.R.B.C. can assist in fostering the investment climate that spurs innovation and international economic prosperity. The Partnership for Modernization (P4M) is a substantial economic forum for financial assistance and adherence to pro-business regulations. Assistance goes both directions, Russia needs to agree to adhere to the additional regulations that come from membership in these institutions to clearly display its level of commitment to reform and integration. One of the first steps in economic integration will be U.S. and European support for Russia’s entrance in the WTO, which will assist in increasing below standard levels of rule of law and intellectual property rights to Western norms.

Russia displays some signs of the “oil-curse,” but evidence shows that with effective government policy, along with international integration, Russia can move into new sectors that can create a strong and viable middle class, thus overcoming the effects of the oil-curse and potentially allowing for radical modernization. The strength of the middle class in Russia is the primary vehicle for demanding new ways of economic and political reforms. The current stalemate between the elite reformers and liberal reformers can move in the favor of liberal reformers if evidence for more democratic reforms shows to be beneficial for the state and public sectors. Once time and liberal reforms have a
chance for success, the cost-benefit of pursuing hegemonic and transnational policies will decline in favor of liberal principles. Inaction by the West, due to Cold War mentalities will only solidify the actions of Putin and the elite reformers who wish to maintain the status-quo. The “neocontainment” strategies supported by some critics of Russian integration often ignore the different realities of the power of economic integration in the twenty-first century. By continuing with past containment strategies it could foster the very environment that they so reject. As stated by Samuel Charap,

The neocontainment strategy has the appeal of seeming tough on Russia. However, it is likely to worsen the very trends that its proponents find objectionable. Isolating Russia could make the Kremlin less likely to cooperate with the international economic system, could undermine those in Russia who wish to deepen connections with the West, and could empower the reactionary hawks in the Russian political establishment who prefer a “fortress Russia” model, complete with tight political controls, a closed economy, domination in the former Soviet region, and greater confrontation and competition with the United States and its allies. Isolation would also eliminate external leverage or incentives for reform.  

Russian partnership is vital in the twenty-first century in countering the expansion of other world powers, notably China. Russia and the U.S. both wish to use global partnerships to counter a potential expansion of a Chinese East Asian empire. While China strategically influences U.S. economic policy, Russia could become a strategic backstop for Chinese expansion, and vital for maintaining regional security in the twenty-first century. Russian support is also crucial to many U.S. national security policies at the Security Council, and a dedicated economic partnership is an area to solidly that support.

B. A NEW DAY FOR RUSSIA?

The economic scenarios and analysis chapter provides interesting insights into the shortfalls of the Russian economy. The factors analysis shows that Russia is severely deficient in the economic freedom category, confirming the literature and conclusions of

---

critics of the modernization effort. The discriminate analysis also shows the importance of similar variables in the quest for a stage three modernized country. Technological readiness, rule of law, infrastructure, and innovation are crucial for any country, especially Russia in making its way forward in its modernization plan. While recent modernization plans are trying to confront technological readiness and innovation, no substantial actions have been taken on rule of law, and could allow Russia to continue down the “Long March” scenario. Or even worse, leaving Russia to its own vices could foster a much undesirable outcome, of the “Oil Curse” scenario, which could turn economic turmoil into a fragile regime on the brink of collapse.

The consensus in the world is still out on the right form of government participation in its economic policies. After the setback to free market democracies from the 2008 financial crises, and the successes of China’s autocratic-capitalist system, some predict resurgence in these regimes across the globe. If hesitation or isolation is pursued in assisting Russia in its economic modernization, Russia could follow the path of China. Possibly, opening the door for Russia to pursue more autocratic economic policies and create future political and military unknowns not favorable to the West.

The West and free world have more at stake than they realize in Russia’s economic modernization. It is not only a test of the Russian people and its ability to overcome the remnants of the Soviet legacy, but it is also a test of the validity of the free-market system and the principles that all market economies are founded upon. The U.S. and EU should encourage businesses to invest in Russia through the forum of the P4M and U.S.R.B.C., encourage the Russian government to pursue radical privatization, and allow WTO membership to adhere Russia to international rule of law and business standards. The West failed to assist in the areas of economic and political reforms after the fall of the Soviet Union, and settled for “integration fatigue” for the past two decades. The West can utilize twenty-first century tools of integrating Russia into the global economic system, and foster economic partnerships which could provide Russia an economic strategic link with the West and a foster the “Renaissance” scenario which will produce a new modernized democratic Russia.
## APPENDIX DISCRIMINATE ANALYSIS TABLES

### Discriminant Analysis Group Placement

<table>
<thead>
<tr>
<th>Original WEF Stage</th>
<th>Predicted Group Membership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Note: 75% of original grouped cases correctly classified

Table 10. Discriminate Analysis Group Placement
## Discriminant Analysis Grouping: Group Means

<table>
<thead>
<tr>
<th>Predicted Group for Analysis</th>
<th>Rule of Law</th>
<th>Technological Readiness</th>
<th>Innovation</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>-0.785</td>
<td>120.710</td>
<td>101.250</td>
<td>120.110</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.465</td>
<td>13.075</td>
<td>28.922</td>
<td>14.364</td>
</tr>
<tr>
<td>2 Mean</td>
<td>-0.487</td>
<td>94.520</td>
<td>94.390</td>
<td>79.170</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.488</td>
<td>15.802</td>
<td>31.276</td>
<td>17.515</td>
</tr>
<tr>
<td>3 Mean</td>
<td>-0.303</td>
<td>66.650</td>
<td>86.900</td>
<td>84.550</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.479</td>
<td>13.425</td>
<td>29.207</td>
<td>16.321</td>
</tr>
<tr>
<td>4 Mean</td>
<td>0.638</td>
<td>41.650</td>
<td>51.550</td>
<td>39.250</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.336</td>
<td>13.196</td>
<td>23.068</td>
<td>13.768</td>
</tr>
<tr>
<td>5 Mean</td>
<td>1.565</td>
<td>15.800</td>
<td>17.680</td>
<td>17.920</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.313</td>
<td>9.866</td>
<td>11.870</td>
<td>12.114</td>
</tr>
<tr>
<td>Total Mean</td>
<td>0.109</td>
<td>69.960</td>
<td>70.840</td>
<td>69.900</td>
</tr>
<tr>
<td>Number of Countries</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.989</td>
<td>41.153</td>
<td>41.253</td>
<td>40.399</td>
</tr>
</tbody>
</table>

### Table 11. Discriminate Analysis Grouping: Group Means
LIST OF REFERENCES


69


Parsons, Christi, Paul Richter, and Sergei L. Loiko. "NATO Plans Missile Defense Shield; Allies Say they're Optimistic Russia Will Help Build the System Aimed at Protecting Europe and the U.S.” *Los Angeles Times*, November 20, 2010, sec. MAIN NEWS; Foreign Desk; Part A.

Place for Russia in Nuclear Shield.” *The Sunday Mail (Queensland, Australia)*, November 21, 2010, sec. WORLD.


INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California