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Dating the Russian Business Cycle, Identifying Coherence and persistence in Its Major Macroeconomic Indicators

Aidar Vafin

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Abstract

This study attempts to examine the business cycle, coherence, and persistence of the GDP, investment, export, consumption, and savings from the period 1992 to 2019. We used Bry and Boschan quarterly (BBQ) algorithm to examine the business cycle, and Granger causality and correlation tests to examine the coherence and persistence, respectively. The BBQ algorithm showed that the expansion periods ranged from 12 quarters to around 32 quarters; the contraction period ranged from 5 quarters to around 9 quarters. According to the results, the investment, export, consumption, and savings were hit by the 1998 rouble crisis, 2008 global and 2014 Russian financial crisis. The causality test showed that there are bidirectional causal relationships between investment and GDP, as well as between savings and GDP. Additionally, the data imply that there is one-way causation between consumption and GDP, as well as between trade and GDP. The majority of variables, except for export, are extremely procyclical. As can be observed, all variables are persistent, which means that their values do not considerably deviate from those of their preceding period. While trade and investment are significant, their persistence rate is weak in comparison to the other variables. The Great Recession, the Ruble crisis, and the post-crisis economic situations have provided a chance for Russia to reconsider and expedite economic reforms, as well as encourage diversification. The majority of these difficulties will need robust and comprehensive reform measures.

Keywords: BBQ algorithm, Business cycle, Causality, GDP, Russia

Declarations

Competing interests:

The author declares no competing interests.

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1. Introduction

Even before the Soviet Union disintegrated, the Russian government commenced implementing reforms aimed at transitioning the economy away from central planning and toward a market-based liberal economy (Feige, 2017). This period of transition is referred to as the shift to a market-based economy. The strength of a market-oriented economy lies in the fact that it fundamentally benefits its participants by increasing production and consumption over time. The status of the business cycle affects every participant in the economy. GDP measures an economy's rising output and expenditure levels, and a rising GDP is a necessary component of economic success. Considering everybody is a component of the larger Russian economy, it stands to reason that the status of its business cycle affects everyone. Generally, it is every business's wish that the economy is expanding so that more revenue may be earned. Once the economy is expanding, firms create profits, which results in more employment and consumer spending. This, in turn, results in increased earnings for firms, and the cycle continues. However, When the economy experiences contraction, firms experience a loss of earnings, resulting in downsizing and layoffs (A. Vafin, 2018). When workers lose their employment, their disposable income decreases and consumer spending decreases, resulting in even fewer firm earnings.

Although an economy should expand continuously, contractions are necessary to control inflation and avoid overheating (Jahan and Mahmud, 2013). An overheating economy is one that has had a sustained period of rapid economic expansion but has also started to face elevated inflation. In a market-based economy, excessive inflation results in inefficiencies. Business cycles are cyclical in nature and have no set duration. A business cycle might be brief, lasting a few months, or it can be prolonged, lasting many years. In general, expansion periods are longer than contraction phases, although the duration may vary considerably (Gabisch and Lorenz, 2013).

There are four stages in a business cycle. The first stage is expansion. It is seen as the "natural" — or at the very least, the most desired — condition of the economy.

When in a boom, businesses and corporations expand their output and earnings consistently, unemployment continues to drop, and the share market performs well. The period of economic expansion is the time period during which the economy grows. Because production is growing, it is often shown as an upward motion on a curve. The expansion stage is sometimes referred to as the period of economic recovery since it happens after a prolonged period of contraction in the economy (Romer, 2008).

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The second part of the cycle is called the peak. It happens when all expansionary indicators reach a point of equilibrium (Sørensen and Whitta-Jacobsen, 2010). Transitioning to the recession phase of the economy may take weeks or perhaps a year. The pace of growth of gross domestic product falls under 2% and starts to drop. On a graph, the peak represents the curve's highest point before it begins to descend. The apogee of this frenetic activity occurs at the top. It happens at the conclusion of an expansion and signifies that output and pricing have reached their maximum levels.

Contraction is the third step. It starts when the economy reaches its peak and concludes when GDP as well as other economic indices stop declining. The economy somehow doesn't increase during this era; rather, it shrinks. When the gross domestic product (GDP) rate falls below zero, the economy is said to be in recession. Businesses lay off workers, the unemployment rate increases over usual, and prices begin to fall. On a graph, a contraction is often shown as the portion of the graph that is continuously decreasing. When the gross domestic product (GDP) declines for two quarters, the economic condition is often classified as being in recession (Jacobs, 1998) (Aidar Vafin, 2018).

The business cycle's fourth stage is called the trough. The decreasing GDP starts to slow its pace of decline and finally reverses to a positive value. The economy enters the growth phase after a period of decline. On a graph, the trough represents the curve's lowest point (Abel and Bernanke, 1998). When GDP starts to grow again, the economic cycle resumes, and the curve continues to rise higher.

A typical business cycle is drawn in figure 1. The curve represents an idealistic route for real GDP growth through time, whereas the linear line represents the real GDP growth trend. Over time, real GDP revolves around the trend, with the trough being the highest negative divergence from the trend and the peak representing the highest positive deviation from the trend. The amplitude indicates the magnitude of the highest deviance from the trend, while the frequency indicates the peaks occurring during a year.



A critical characteristic of time series data is their propensity to move in unison; this tendency is referred to as coherence. Economists divide time series among those that advance on the same path as GDP and those that move in the other way. If a data series increases with GDP growth (and decreases with GDP decline), we define the process as procyclical (Ihori and Kameda, 2018). Countercyclical series are those that move in the opposite path of GDP. In other words, a time series is procyclical if it has a high positive correlation with GDP. When the coefficient of correlation between it and GDP is negative, it is anti-cyclical.

Two time series that move in the same path have a correlation value near +1 (Urasawa, 2007). In this scenario, we would argue that they exhibit a high degree of positive coherence (Li, 2012). If two time series travel in opposing directions, their correlation coefficient will be close to zero. In this scenario, we would argue that they exhibit a significant degree of negative coherence. Although coherence may be used to describe the degree to which two series are connected, economics literature uses GDP as a benchmark series to describe the peaks and troughs of the economic cycle. While several of the macroeconomic time series are very procyclical or highly countercyclical, others do not exhibit substantial comovements in either direction.

The persistence of economic time series is another characteristic that differentiates them from pure random values. The persistence of several factors is what explains the effectiveness of economic projections over very short time periods. Persistence implies that if we compare the value of GDP's departure from the trend line in one period versus its amount in the preceding period, these departures from the trend are linear (Bernanke and Rotemberg, 1997). We can

Figure 1. A typical business cycle

evaluate persistence by examining the coefficient of correlation between a factor and its own prior levels. If the correlation is around +1, a significant divergence from the trend will remain for an extended period of time; if it is near 0, the series will soon revert to the trend (Federal Reserve Bank of Minneapolis, 1994) (Fanelli

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will soon revert to the trend (Federal Reserve Bank of Minneapolis, 1994) (Fanelli, 2007). A persistent GDP with a positive correlation with its first lag is depicted in figure 2.



Figure 2 Persistent GDP

Russia's economic transformation has been characterized by a continuous transition phase of economic depression and economic uncertainty: seven years of continuous decline did result in a cumulative drop in GDP of more than 40% between 1989 and 1996; there were also numerous outbursts of near-hyperinflation during that period (Agarwal, 2005) (Brainerd, 1998). The IMF-aided stabilization program of 1995 was the first bold attempt to combat inflation. It emphasized strict money management and exchange rate objectives; as a result, direct central bank funding of the budget was halted, and the exchange rate was stabilized.

2. An overview of the current Russian economy

Following the demise of the Soviet Union, Russia's first phase of the shift from a centrally planned economy to a market economy was disastrous: nominal GDP plummeted from around 516 billion in 1990 to nearly 196 billion in 1999, a drop of more than 60% (Kullberg and Zimmerman, 1999; Kontorovich, 2001). During the 1990s, the Soviet government moved to privatize several Russian companies in an effort to solve economic upheaval and implement IMF recommendations.

The energy and military industries, on the other hand, were notable outliers (Galeeva, Ivanov and Vafin, 2016).

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The depreciation of the Russian currency rouble in 1998 (Tiusanen and Others, 2003), following the monetary downturn known as the rouble crisis, combined with the continuous upward trend in oil prices from 1999 to 2008, propelled the Russian economy, which is heavily reliant on energy sector exports, to increase at a yearly average rate of 7%. Russia was one of the worst-affected countries by the 2008 global financial crisis, with the GDP contracting 7.8 percent in 2009 as oil prices fell and foreign financing dried up (Bogetic, 2009; Kuboniwa, 2015). The economic downturn was the greatest since 1994, although there was minimal long-term damage as a result of the government's and Central Bank's aggressive and quick reaction to protect critical sections of the economy, particularly the financial system, from the consequences of the crisis. As a consequence, Russia's economy started to recover, increasing 4.5 percent, 4.3 percent, and 3.4 percent in 2010, 2011, and 2012, before falling to 1.3 percent in 2013 and 0.6 percent in 2014 (Aganbegyan, 2014; Tanning and Tanning, 2014; Alhaddad, 2018).

GDP growth is positively aided by private spending, as real incomes rise after a period of slow decline. Rising consumption also helps to keep spending going. Greater oil prices are pushing up export income, but increased uncertainties about sanctions and higher borrowing costs for developing nations are slowing investment growth and capital goods imports. The rouble fell in value on speculation of fresh sanctions, and cash fled to safer havens amid turbulence in developing markets. Inflation is rising as a result of the devaluation, while it stays below the 4% objective. At fewer than 5%, the unemployment level stays low (Evstigneev, 2019).

The economy is expected to increase by 1.5 percent in 2019 and 1.8 percent in 2020, owing to increasing real earnings and public investment. Because oil prices are no more climbing, exports will slow. The account balance is predicted to continue to be in excess. The VAT increase, stricter monetary policy, and more modest consumer credit growth are forecasted to briefly dampen GDP in 2019 (Evstigneev, 2019). However, welfare reform and the development program is expected to contribute to higher growth in 2020.

(Djankov & Others, 2015) argued that for three reasons, Russia's microeconomic change was more challenging than that of Eastern Europe. First, political influence from the formerly communist elite in Russia was greater than in other post-communist nations. As a consequence, the administration of reformist Yegor Gaidar lasted little over a year; the reform effort was not given a fair opportunity. The abundance of rich environmental assets, gas, oil, and metals—served to weaken support for changes as the second challenge in Russia's economic

transition process. Revenues from these industries may be used to conceal inefficiencies in other areas, making most governments less willing to make difficult transformative choices. Furthermore, this affluence significantly enhanced corruption in privatization bids involving natural resource holdings. Third, the collapse of the Soviet Union, which occurred roughly concurrently with the outset of the economic transition process, meant that public attention in Russia was divided—for example, the Chechen war took a massive toll on previous administrations that the psychological atmosphere in Russia was less favorable than in Eastern Europe.

After 2014, the Russian economy succeeded to break out of the negative cycle caused mostly by sanctions and lower oil prices, which had a significant impact on the Russian economy, which was still struggling from Dutch disease due to its over-reliance on natural resources exports (Efremov, 2019) (Вафин, 2012) (Вафин, 2013). In comparison to earlier eras, the economy has a positive trade balance and favorable current accounts, the fiscal deficit is low, unemployment is low (4.5%), and inflation is reasonably low (an estimate of 4% for 2019). As part of government rule, the central bank purchases money to increase its currency reserves. Nonetheless, Russia's economic development has been slower than planned (Efremov, 2019). In 2016, it was 0.3 percent, 1.6 percent in 2017, and 2.2 percent in 2018. The main GDP index produced by the Ministry of Economy increased by 1.7 percent year on year in July (Arlashkin et al., 2018).

Despite some negative concerns, the Russian economy has a number of significant strengths. Russia is the world's biggest continent, with rich oil, gas, and other mineral wealth, low debt, and a significant labor participation rate (Kryukova, Vetrova, and Maloletko, 2015; Medvedev, 2015) (Alhaddad, 2017) (Vafin, 2017). Its worldwide leadership in space technology suggests latent potential in other fields. Russia has the world's sixth-biggest economy in terms of GDP per capita and the ninth-largest in terms of population.

Methodology

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This study applied the BBQ algorithm (Bry and Boschan, 1971) for identifying the points of business in Russia. To test the persistence and coherence of the major macroeconomic variable, we used the Pearson correlation and Granger causality test.

Any cycle may be detected and described by first identifying inflection points in the dataset, and then using those dates to denote periods of expansion and contraction. Visually locating turning locations is sometimes possible. (Harding and Pagan, 2002) claimed that such an algorithm should fulfill at the very least three tasks. 1. Identifying a group of possible inflection points, i.e. the peaks and troughs of a series. 2. A process for alternating peaks and troughs. 3. A collection of rules for recombining the turning points produced in stages 1 and 2 two in order to meet predefined parameters for the length and amplitude of phases and entire cycles; these are referred to as "censoring rules".

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The recession shown in Figure 1 is stylized, with A representing the peak and C representing the trough. The amplitude is represented by the triangle's height, while the duration is represented by the triangle's base. Knowing these two factors for every cycle allows one to calculate the size of the triangle and hence an estimation of the cumulative output losses from peak to trough in relation to the preceding peak (Harding and Pagan, 2002).

Correlation does not always indicate causation in any reasonable sense of the term. The econometric cemetery is replete with spectacular relationships, which are just erroneous or useless. The Granger causality method to the issue of whether x drives y is to evaluate how much of the present y can be described by previous levels of y and thereafter determine if adding delayed values of x may enhance the explanation (Granger, 1969). series Y is said to be Granger-caused by series x if assists in the forecasting of series y, or correspondingly if the coefficients estimations on the lagged x's are significant statistically. Note that two-way causality is commonly the case; x Granger causes series y and y Granger causes series x.

Despite the significance of Granger causality, though, we shouldn't let ourselves into believing that it enables us to show economic causation in any rigorous manner. If one variable before ("Granger causes") another, we can't be confident that the first variable "causes" the second to change. As a consequence, even if we're able to establish that event x always occurs before event y, we did not show that series x "causes" series y. There are various distinct tests for Granger causality, and all the various procedures require lagged dependent variables in one way or another. Our choice is to employ an original version of a test initially devised by Granger.

The time-series data for all the variables are collected from the WDI datasets compiled by the World Bank. All the variables are annual and in real terms at constant 2015 USD.

Figure 3 Recession phase (Harding and Pegan, 2002)





Results

The peaks in the Russian GDP have occurred in the first quarters of 1997, the second quarter of 2008, and the second quarter of 2014. The trough, on the other hand, occurred in the third quarter of 1996, the second quarter of 1998, the third quarter of 2009, and the 4th quarter of 2015. The expansion of the economy started after 2009Q3. Therefore, it took approximately 5 quarters for the Russian economy to re-bounce after the 2008 crisis. The Russian rouble crisis is indicated at the low point of 1998 in quarter 2. The average duration of expansion is 20.33 quarters, and the duration of contraction is 5.33 quarters. The average amplitude for expansion and contraction is a 29% increase, and a 6% decrease, respectively. Table 1 and 2 shows all the turning points in the cycles of major economic variables of the Russian economy.

In 1997, Russia's economic development was favorable for the first time since the founding of the Russian Federation in 1991. However, the nation fixed exchange rate system coupled with its frail fiscal situation seemed to be unstable once the international markets became influenced by ripple implications of financial crises elsewhere in the globe. In 1998, the development of catastrophic banking, currency, and government debt problems could not be stopped.

Page 10	Table 1					
	GDP cycle		Investment	cycle	Export cycle	
	peaks	troughs	peaks	troughs	peaks	troughs
	1997Q1	1996Q3	2008Q1	1999Q1	1996Q4	1992Q4
	2008Q2	1998Q2	2012Q3	2009Q3	2008Q1	1998Q1
	2014Q2	2009Q3	2017Q4	2015Q4	2019Q1	2009Q2
		2015Q4		2018Q2		
	Duration:		Duration:		Duration:	
	expansion	20.33333	expansion	18.66667	expansion	31.66667
	contraction	5.333333	contraction	7.000000	contraction	5.000000
	Amplitudes:		Amplitudes:		Amplitudes:	
	expansion	0.285660	expansion	0.760205	expansion	0.470846
	contraction	-0.060580	contraction	-0.307318	contraction	-0.035777
	Cumulation:		Cumulation:		Cumulation:	
	expansion	5.182510	expansion	13.35888	expansion	8.891891
	contraction	-0.170437	contraction	-1.201370	contraction	-0.093738
	Excess:		Excess:		Excess:	
	expansion	-7.652910	expansion	17.62035	expansion	6.767457
	contraction	-7.423023	contraction	5.721874	contraction	7.136779

The financial upheaval caused by the subprime mortgage crisis in the United States reached Russia in early September 2008, leading Russia to adopt a series of swift and coordinated actions to mitigate the crisis' effect. As the crisis progressed, the Russian central bank's policy options for alleviating the credit crunch and restoring the ailing economy were hampered by double-digit inflation in 2008. Simultaneously, the Russian economy confronted a large budget shortfall as tax receipts from oil export profits fell precipitously since the end of 2008. In brief, the Russian economy had negative growth and a huge budget deficit in 2009, a stark turnaround from the country's long-term positive trend from 2000 to 2007.

Table 2

Page	Ľ	1	1
		-	-

Consumption cycle		Savings cycle		
peaks	troughs	peaks	troughs	
1997Q3	1996Q2	2000Q4	1999Q1	
2008Q3	1999Q1	2008Q2	2002Q1	
2014Q1	2009Q3	2011Q4	2009Q3	
	2016Q2	2018Q4	2016Q2	
Duration:				
expansion	20.33333	Duration:		
contraction	6.333333	expansion	12.75000	
		contraction	9.333333	
Amplitudes:				
expansion	0.317439	Amplitudes:		
contraction	-0.067213	expansion	0.919130	
		contraction	-0.477292	
Cumulation:				
expansion	4.835705	Cumulation:		
contraction	-0.305564	expansion	8.032338	
		contraction	-2.255193	
Excess:				
expansion	-1.809857	Excess:		
contraction	9.875919	expansion	9.607832	
		contraction	-12.88173	

Table 3 shows the results of the Granger Causality Tests. The table reports the Fstatistics and associated P-values. It can be seen that there are bi-directional causalities between investment and GDP and between savings and GDP. The results also suggest that there is a one-directional causality running from consumption to GDP and trade to GDP. The directions of causalities among the variables other than GDP can also be seen in the table.

Table 3

Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
CONSUMPTION does not Granger Cause GDP	110	2.46752	0.0897
GDP does not Granger Cause CONSUMPTION		1.48488	0.2312
EXPORT does not Granger Cause GDP	110	10.2339	9.E-05
GDP does not Granger Cause EXPORT		1.09814	0.3373
INVESTMENT does not Granger Cause GDP	110	10.9515	5.E-05
GDP does not Granger Cause INVESTMENT		5.40001	0.0059
SAVINGS does not Granger Cause GDP	110	3.09725	0.0493
GDP does not Granger Cause SAVINGS		4.67212	0.0114

Pairwise Granger Causality Tests nlay 100201 201004

	TRADE does not Granger Cause GDP GDP does not Granger Cause TRADE	102	3.25999 1.28574	0.0426 0.2811
	EXPORT does not Granger Cause CONSUMPTION CONSUMPTION does not Granger Cause EXPORT	110	5.48888 0.32008	0.0054 0.7268
Page 12	INVESTMENT does not Granger Cause CONSUMPTION CONSUMPTION does not Granger Cause INVESTMENT	110	0.94342 3.95599	0.3926 0.0221
	SAVINGS does not Granger Cause CONSUMPTION CONSUMPTION does not Granger Cause SAVINGS	110	1.05768 4.85221	0.3509 0.0096
	TRADE does not Granger Cause CONSUMPTION CONSUMPTION does not Granger Cause TRADE	102	3.76475 1.64400	0.0266 0.1985
	INVESTMENT does not Granger Cause EXPORT EXPORT does not Granger Cause INVESTMENT	110	4.56976 4.34469	0.0125 0.0154
	SAVINGS does not Granger Cause EXPORT EXPORT does not Granger Cause SAVINGS	110	4.50204 5.22689	0.0133 0.0069
	TRADE does not Granger Cause EXPORT EXPORT does not Granger Cause TRADE	102	0.35085 2.58587	0.7050 0.0805
	SAVINGS does not Granger Cause INVESTMENT INVESTMENT does not Granger Cause SAVINGS	110	3.61966 3.10165	0.0302 0.0491
	TRADE does not Granger Cause INVESTMENT INVESTMENT does not Granger Cause TRADE	102	6.29758 0.79766	0.0027 0.4533
	TRADE does not Granger Cause SAVINGS SAVINGS does not Granger Cause TRADE	102	2.32628 0.01499	0.1031 0.9851

Figure 4 graphically shows the procyclical nature of the variables. It can be seen from the figure that most of the variables except trade are highly procyclical. We used the differenced series, where "D" indicated the first difference. Moreover, the variable trade seems to be volatile in the Russian economy.



Figure 4

Table 4 shows the results of persistence analysis in the Russian economy. It can be seen that all the variables are highly persistent, meaning that the values in one period do not significantly differ from the values of the previous period. Although

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13 high, the trade and investment have relatively lower persistence compared to the other variables.

Table 4

Consumption_lag	Consumption	0.987378
Exports_lag	Exports	0.993802
Gdp_lag	Gdp	0.986980
Investment_lag	Investment	0.842595
Savings_lag	Savings	0.899239
Trade_lag	Trade	0.820146

The rouble had dropped dramatically against the dollar, and the major Russian stock market had almost collapsed. This happened at the end of 2008, as industrial output slowed, unemployment rose and scattered incidents of civil unrest erupted throughout the nation (CSIS, 2017). These issues, along with an increasing problem of capital flight, compelled the government to intervene by enacting a sweeping economic stimulus program and pouring more than 2 hundred billion dollars into the market. Oil prices recovered from their low point early in the year in the march of 2009, and the worldwide effect of the crisis subsided (CSIS, 2017). Nonetheless, economists believe that Russia will undergo the consequences of the crisis in the coming years, with an economic drop of 7 to 8% projected in 2009 and an only moderate recovery in subsequent years. The global financial crisis has exposed fundamental flaws in the Kremlin's economic policy as well as the Russian economy. The pace and course of Russia's recovery are heavily dependent on Russian officials' willingness to diversify their income sources and implement much-needed economic and monetary policies (Petersen and Barysch, 2011; Roaf et al., 2014).

Because of the carry-over impact from the 2013 expansion of 1.3 percent, growth in 2014 was mild at 0.6 percent. This outcome was influenced by two factors (Grant and Hansl, 2015):

The authorities as well as the Central Bank acted quickly, and their national policies for both crises were appropriate. The economy was effectively stabilized: the anticipated changeover to free-floating of the rouble was pushed back to

November, and additional steps to ensure financial stability were implemented quickly, including bank recapitalization in December (Grant and Hansl, 2015). Because the oil price collapse and tougher sanctions occurred late in 2014, their impacts on the economy did not become apparent until the fourth quarter of that year—the repercussions are anticipated to be more in coming years (Grant and Hansl, 2015). Other favorable conditions include the balancing effect that fewer imports had as a result of regional tensions and sanctions in cushioning the effects of the oil shock.

Conclusion

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The Russian economy made great progress during 2000 and 2007, but the economic growth declined following the 2008-09 crisis, and since 2014 Russia has gone into recession. A variety of short-term causes have created recession: reduced oil prices, the crisis with Ukraine, sanctions against Russia, and subsequent trade decline.

Economic cycle dating is crucial for decision-makers and businesses. The economic cycle is the upward and downward trend in production or economic indices. Macroeconomic cycles, in particular, which represent the broad economic perspective, are critical for management and policy decisions.

Following the monetary slump known as the rouble crisis in 1998, the Russian currency rouble, along with the steady upward trend in oil prices from 1999 to 2008, drove the Russian economy, which is primarily dependent on energy sector exports, to grow at an annual average rate of 7%. Russia was one of the nations most hit by the 2008 global financial crisis, with GDP shrinking 7.8% in 2009 as oil prices collapsed and external finance dried up.

Russia must solve immediate challenges, but in the medium- to long-term, it must address underlying institutional and regulatory disadvantages: oil and resource reliance, as well as an unfavorable business and investment environment fueled by bad governance. Russia, in comparison to many other producers, is better positioned to rebalance its economy, owing largely to its superior human capital. The weakening of the ruble facilitates this effort.

Russia must undertake difficult structural changes if it wants to catch up with Western Europe in terms of production and revenue. Despite their difficulty, public sector reforms digitalization, and increased spending efficiency—hold the greatest potential. Reforming the financial system and the investment environment is also critical, as is resolving significant infrastructural shortages. Additionally, Russia must strengthen its financial industry and safeguard the longterm viability of its financial system. Additionally, the investment environment must be greatly enhanced. The business climate continues to be a significant impediment to the Russian economy. While Russia has achieved significant progress on various fronts, it might do more to reduce red tape, accelerate privatization, and alleviate restrictive international trade and investment frameworks. Additionally, there is a need to minimize the extent to which the state is involved in the economy, combat high levels of corruption, and reinforce the fragile rule of law.

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