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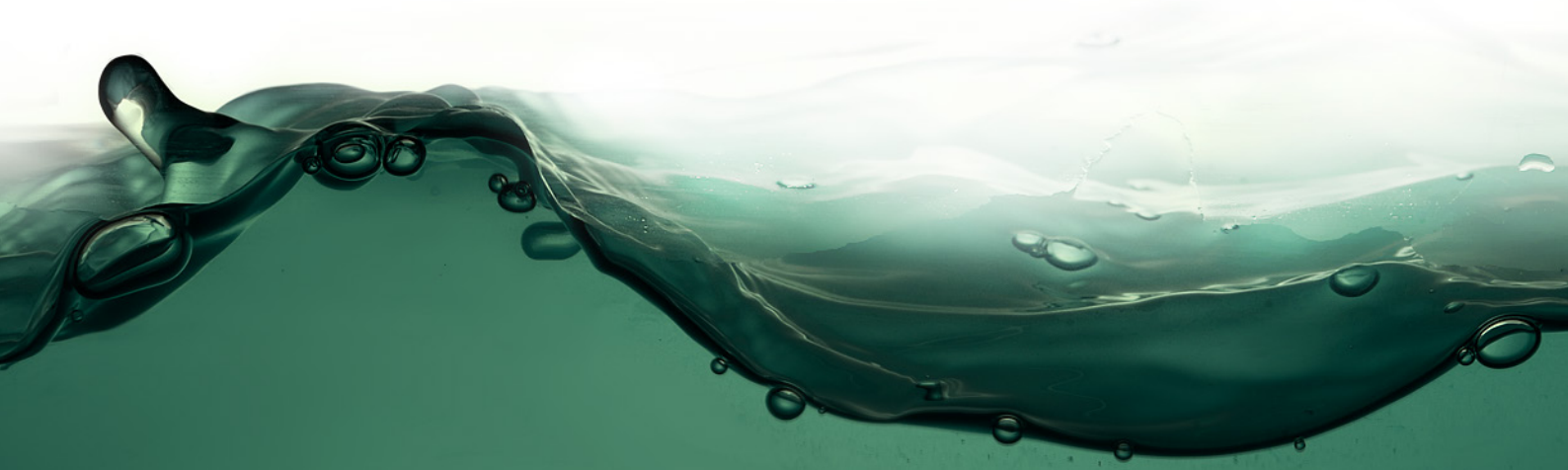
A Russian Sudden Stop or Just a Slippery Oil Slope to Stagnation?



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A Russian Sudden Stop or Just a Slippery Oil Slope to Stagnation?

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Can the Russian economy weather the combined effect of falling oil prices and massive capital outflows while preserving some growth or is the economy heading for a sudden stop scenario with falling GDP?

Recent forecasts of Russian growth

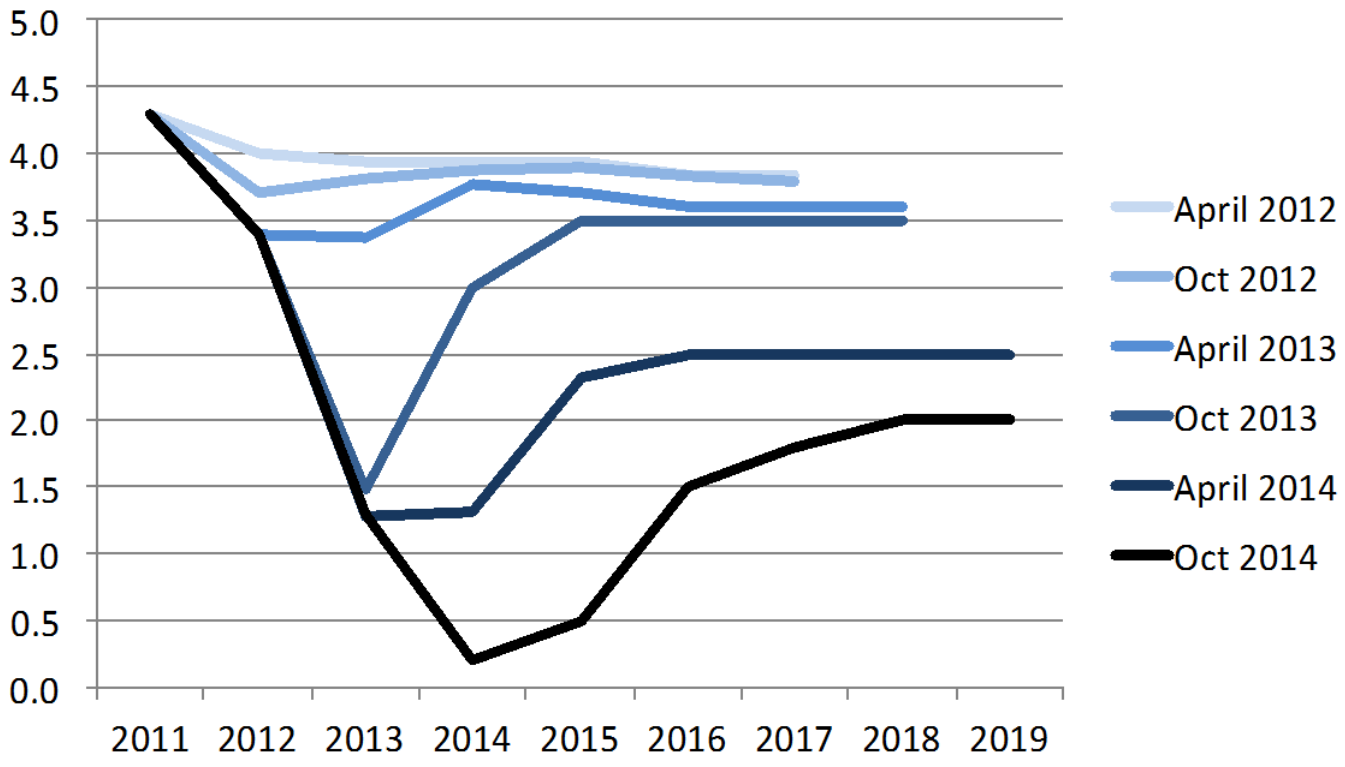
Forecasts for Russian GDP growth have been revised down several times over the last couple of years, starting well before the conflict with Ukraine and the sanctions that followed. This is well illustrated by how different vintages of the IMF's World Economic Outlook forecasts change in Figure 1.

The forecasts from 2012 projected a real GDP growth of around 4 percent per year for 2014 and 2015, and then just slightly below 4 percent over the next two years. In 2013 the April forecast was lowered to around 3.5 percent over the forecast horizon, while the October forecast the same year was revised down significantly for 2013 as the poor growth performance that year became hard to ignore. However, it nevertheless showed a strong rebound in growth in 2014 and in 2015, and going forward the forecast was back at 3.5 percent growth. Then in April 2014, there was a sharp downward revision of growth for 2014, from 3 to less than 1.5 percent, followed by a long-run growth forecast of 2.5 percent. The slippery slope of growth revision has not stopped there and the latest forecast in October 2014 projects a barely positive growth rate for 2014 and a modest pick-up in 2015 before a gradual climb back to 2 percent growth in 2018 and 2019.[1]

Implications for income levels

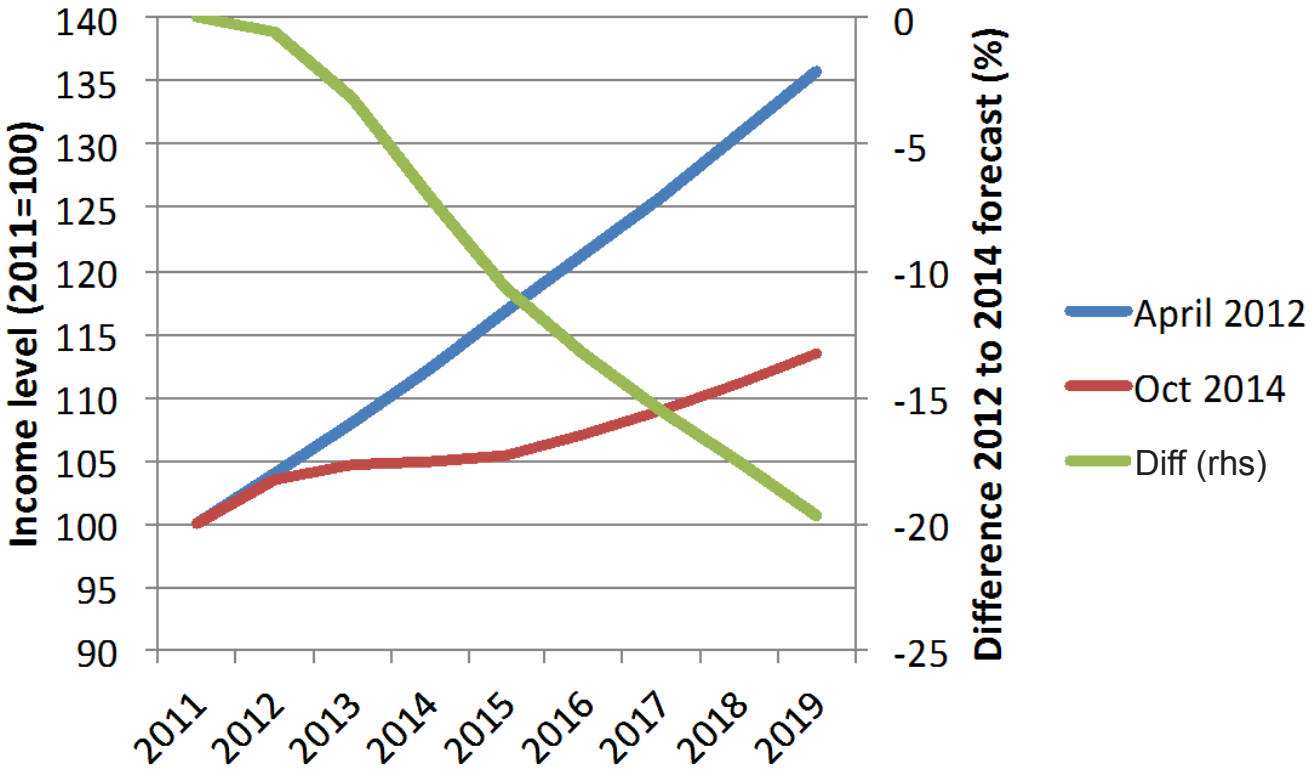
It may not sound very dramatic that growth falls a percent or two in the revised forecasts, but summing up all the growth revisions — both in

Figure 1. IMF forecasts of Russian real GDP growth



Source: IMF World Economic Outlook vintages from April 2012 to October 2014

Figure 2. Income levels based on different forecast of real GDP growth



Source: Authors calculations based on IMF WEO forecast April 2012 and October 2014

the short-run and adding the significant drops in projected long-run growth — amounts to enormous losses of income for the Russian economy should the forecasts be realized. Figure 2 compares how income levels evolve until 2019 using the April 2012 and October 2014 forecasts.[2]

In the April 2012 growth scenario, Russian GDP would be 12 percent higher in 2014 than in 2011 and by 2019, growth would have lifted GDP by more than 35 percent. However, the October 2014 forecast has GDP in 2014 only 5 percent higher than in 2011 after the end of 2014 and merely 13 percent up in 2019. Comparing the two scenarios, the income level at the end of the forecast period is 20 percent lower based on the current forecast compared with the April 2012 projection.

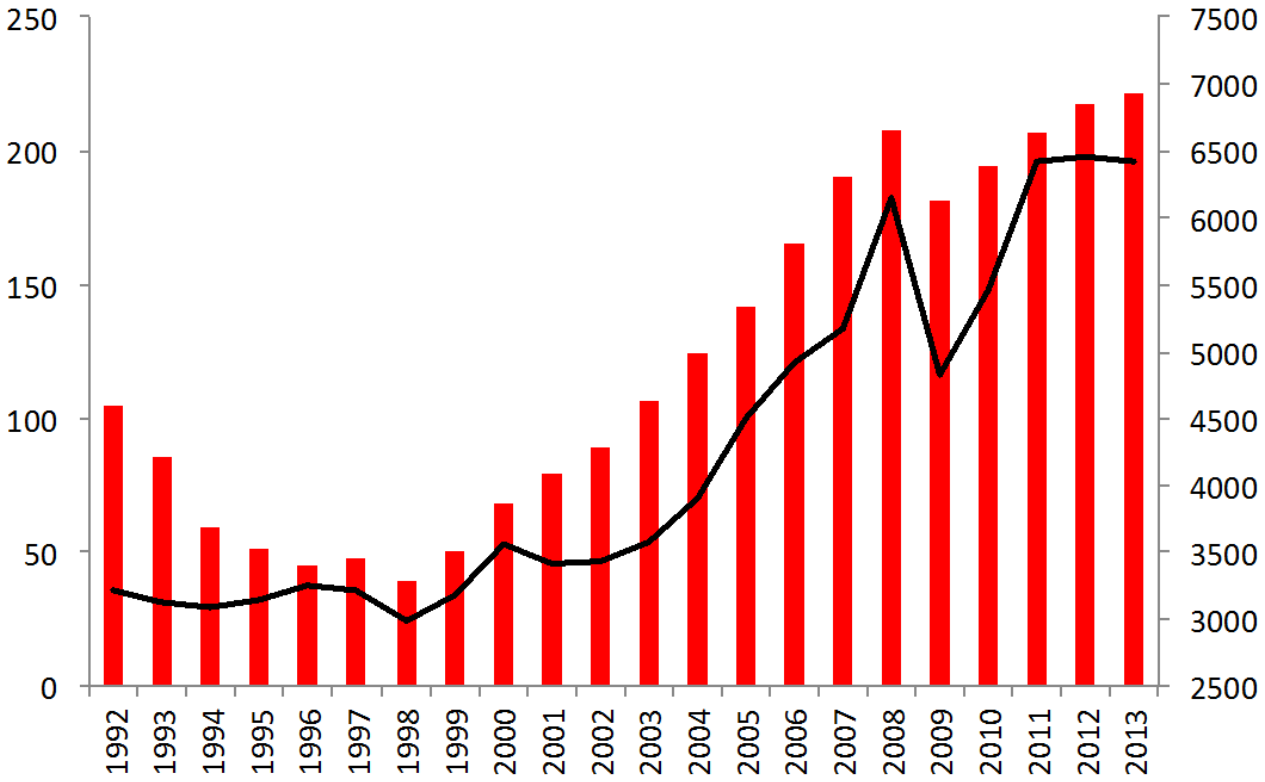
However, also the 2014 forecast shows increasing income levels which given the latest development of oil prices and capital flows seems unrealistic. The following sections of this brief will detail why Russian GDP growth is in grave danger of not only continue a slow slide down but could instead enter a "sudden stop" scenario with falling GDP.

Oil and growth

The price of oil is the single most important determinant of Russia GDP growth. Figure 3 shows how real oil prices and income per capita in USD have developed over the last two decades. The rising incomes from 1999 to late 2008 were strongly correlated with a real oil price index that went from around 25 to over 180. Similarly the decline in income in 2009 was concurrent with the oil price index sliding to 116. With oil prices rebounding in 2010 and 2011 before leveling off in 2012, Russian income levels followed suit. Of course many other factors changed in the economic environment, not least in 2008/9, but in many ways this just reinforces how strong the link between oil prices and Russian incomes is.

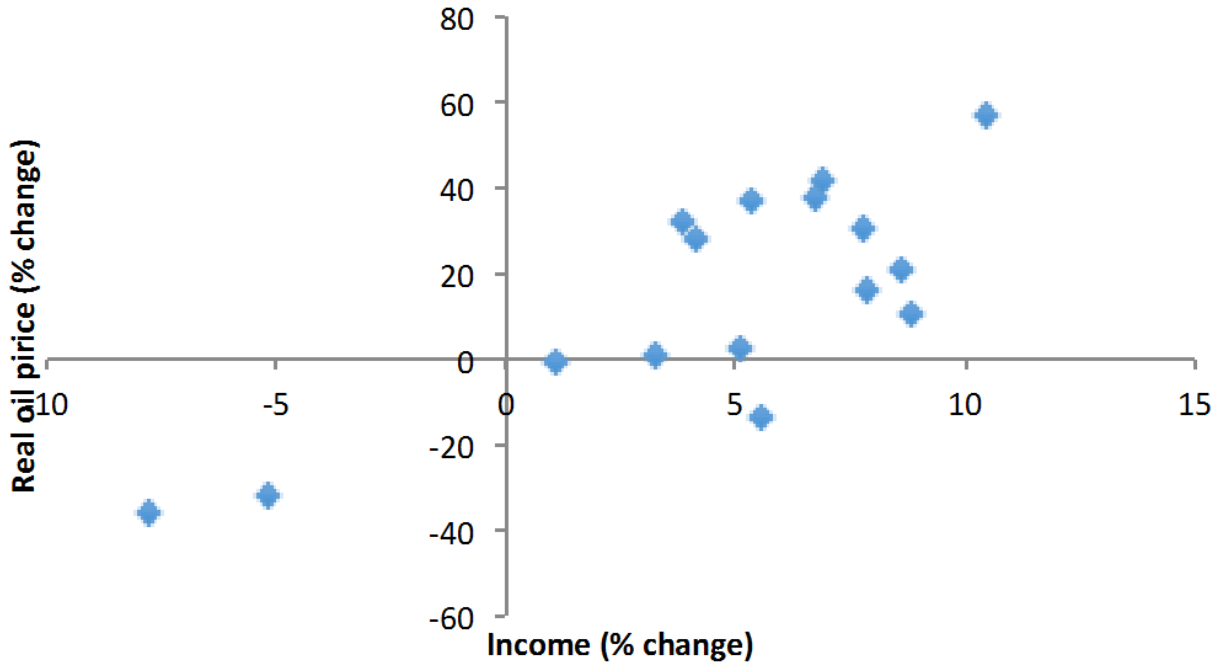
The question is if the strong relationship evident in Figure 3 between oil prices and income levels also holds for growth rates, which would be a bit less susceptible to criticism of spurious correlations between non-stationary time series. Figure 4 shows that the impression from time series of price and income levels follows through also when both series are in growth rates and pre-

Figure 3. Oil prices and income growing together



Source: IMF oil price index, World Bank for GDP per capita in 2005 USD

Figure 4. Scatter plot of oil prices and income



Source: Author's calculation based on data from IMF and the World Bank

sented in a scatter plot. Note that the charts include oil prices and not oil revenue, so it abstracts from changes in oil production. In this sense, it does not capture what would be included in the calculation of real GDP (which would include changes in production rather than prices) but simply the correlation between an exogenous variable — international oil prices — and Russian growth.

A simple OLS regression presented in Table 1 quantifies the relationship in Figure 4. It is quite striking how a regression with one explanatory variable manages to pick-up 60 percent of the variation in growth of Russian GDP per capita. The estimated "model" basically says that without any changes in oil prices, Russian GDP growth would be just above 2 percent. This happens to coincide rather closely with the IMF's October 2014 longer-run forecast. In addition, a 10 percent increase (decline) in oil prices adds (subtracts) 1.5 percent GDP per capita growth. The coefficient on oil price changes is not only highly significant from an economic perspective but also from a statistical. The equation is estimated with only 16 observations and no other control variables are included, so there are reasons to take the result with plenty of caution. Nevertheless, it is not often a one-variable regression accounts for this amount of variation in a country's growth rate. Again, it should be stressed that it is the price of oil — which is an exogenous variable — that is included in the regression and not the value of Russian oil export revenues.

Table 1. Regressing income growth on oil price changes

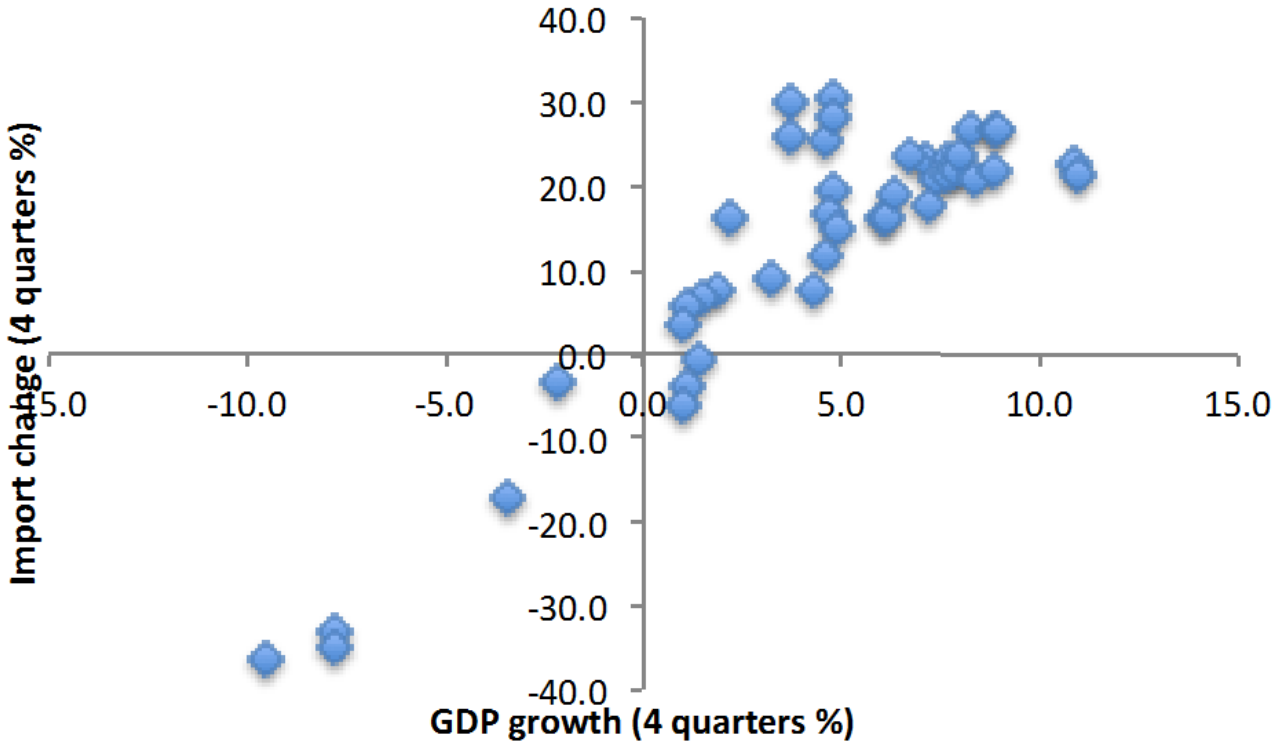
Dependent variable is GDP/capita in 2005 USD (% change)			
	Coeff.	Std.err.	t-stat
Real oil price (% change)	0.15	0.03	4.8
Constant	2.42	0.89	2.7
Obs.	16		
Adj. R-square	0.60		

Imports, growth and capital flows

The reason oil prices are so important for Russian growth is that it determines how much the country can import, which in turn contributes significantly to domestic consumption and investment. It may be puzzling at first that imports contribute to growth since it enters the national income accounting identity with a negative sign.[3] However, whatever is imported is either used for consumption or investment, and since this consumption or investment is usually accompanied by domestically produced inputs, it means that the overall effect on growth from imports is positive. Russia GDP growth also shows a strong positive correlation (90%) with import growth as can be seen in Figure 5.

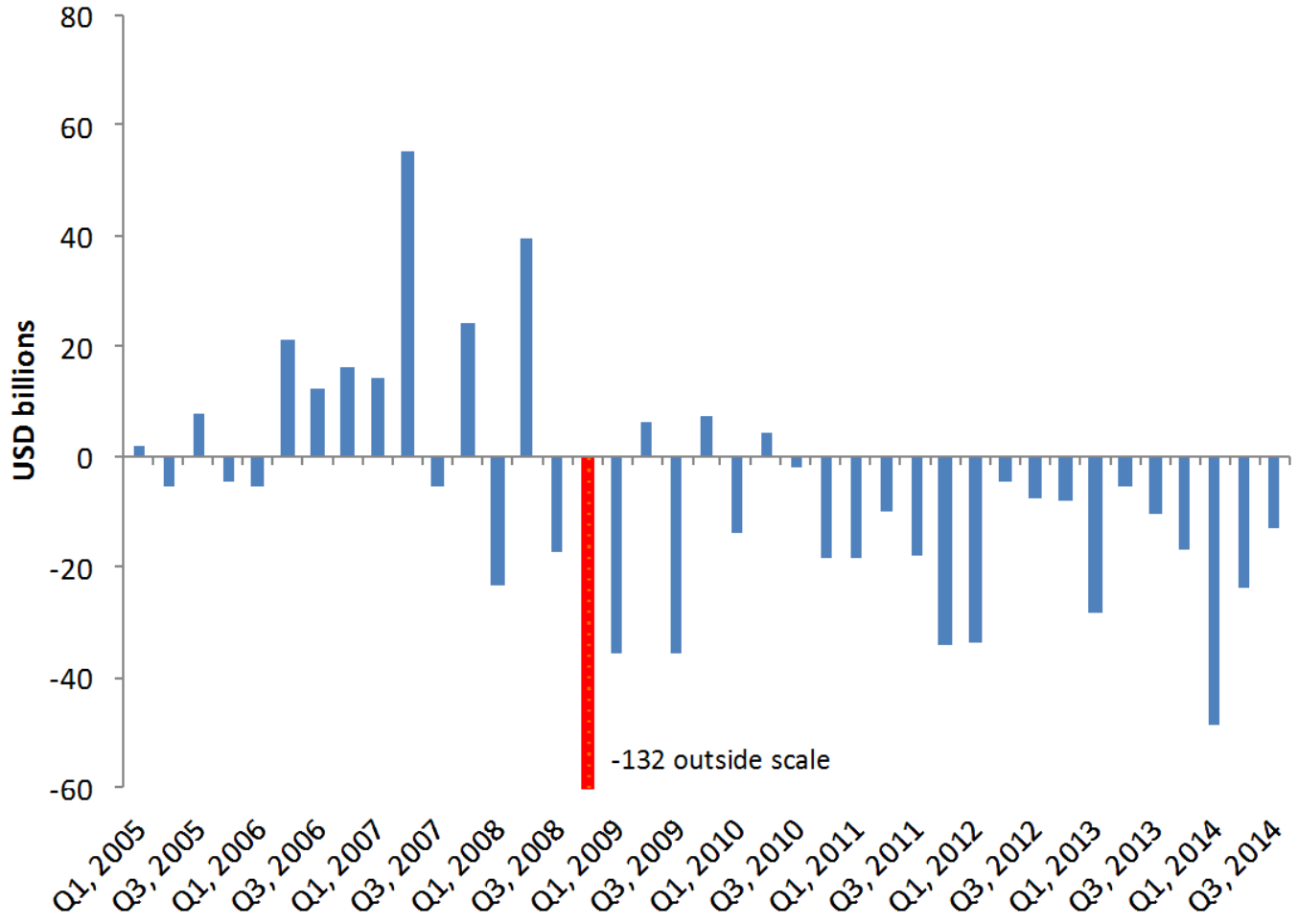
However, imports are not included in the regression above since it is part of GDP and thus an endogenous variable with respect to growth. The scatter plot in Figure 5 can obviously not be given a causal interpretation for the same reasons, but it is still informative that imports have shown a higher positive correlation with growth than exports have. In fact, net exports, the difference between exports and imports that enter the accounting relationship with GDP with a positive sign, showed massive "contributions" to GDP growth in all of the quarters of 2009 when GDP growth fell significantly. Again, this was linked to large declines in imports coupled with sharp contractions of investments. In other words, what at a first glance can look as an improved trade balance may instead be a sign of lost confidence and reduced external financing for domestic investments and consumption.

Figure 5. Scatter plot of quarterly GDP growth and changes in import



Source: Author's calculation based on Goskomstat data

Figure 6. Net capital flows, private sector



Source: Central Bank of Russia

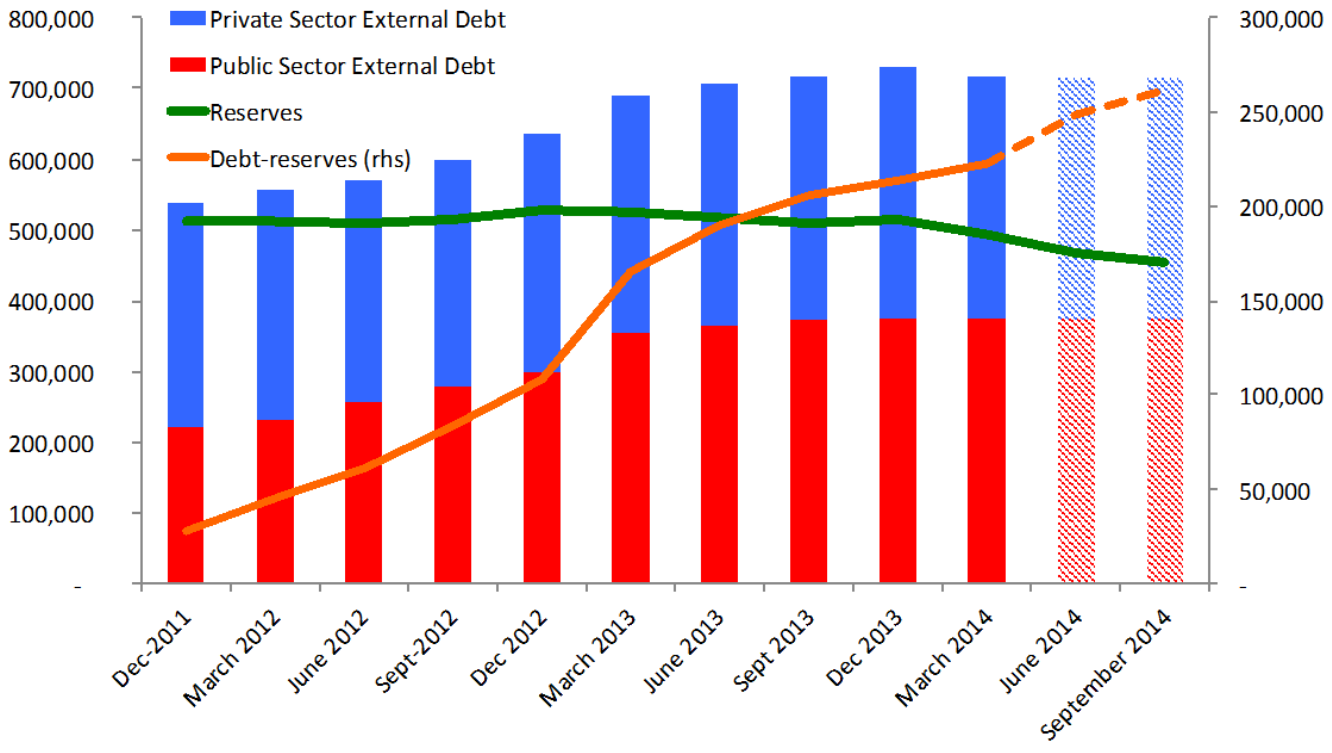
In many emerging market countries, capital inflows are highly correlated with imports as well, since they are needed to finance imports when export revenues are not sufficient to do so. For Russia, strong growth in oil revenues due to increasing prices has made the country less dependent on capital flows to finance imports in the past. However, with lower oil prices, this will change and capital flows will be a more important factor also for Russia in this respect. Capital flows are basically determined by expected returns on financial and real investment in a country relative to alternative investments abroad. These expectations are in turn dependent on many different factors, including real growth prospects linked to macro economic policies, economic and legal institutions and the elusive concept of market "sentiment". Attracting the necessary capital will be a challenge for Russia if policies do not change.

Net private capital flows have been negative in all but three quarters since mid-2008 with peak outflows of $132 billion in the final quarter of 2008 in the midst of the global financial crisis (Figure 6). With the crisis in Ukraine, capital outflows accelerated in the beginning of 2014, reaching almost $50 billion in the first quarter alone. Over the first three quarters of 2014, outflows amounted to $85 billion, which is more than the total value of imports in the second quarter.

The net outflow of capital and lower oil prices are also leaving a mark on Russia's external balance sheet. Often when Russia's external position is discussed, the focus is on the Central Bank of Russia's (CBR)[4] large international reserves. However, they are also not immune to changes in oil prices or capital flows since the CBR intervenes in the foreign exchange market to stabilize the ruble as is evident in Figure 7. Nevertheless, even after significant interventions, reserves were around $450 billion at the end of September 2014, which is a non-trivial amount for a $2,000 billion economy and the third largest in the world after China and Japan. The CBR can probably continue to intervene at a similar rate as it has done in 2014 for several years, but the question is if Russia do not have better ways to spend $50-100 billion a year. Another question is how confidence in the foreign exchange market is affected by these interventions. It may be good to keep the ruble from a complete free fall, but at the same time, the CBR does not want to find itself in a situation that looks too much like a central bank that loses much if its reserves in a regular speculative attack on a fixed exchange rate.

What has been less in focus, but came into the spotlight already in the global financial crisis, is the external debt of the private and public sector beyond regular sovereign borrowing. Banks and non-financial firms in the private and public sectors had together borrowed over $700 billion at the end of the first quarter of 2014, which is the latest available number. If borrowing has remained unchanged in the following two quarters, it would mean that external borrowing is now over $250 billion more than the international reserves held by the CBR. External debt at 35 percent of GDP is in itself not alarming but if major companies are unable to access international markets it can soon become a problem.

Figure 7. External debt and international reserves



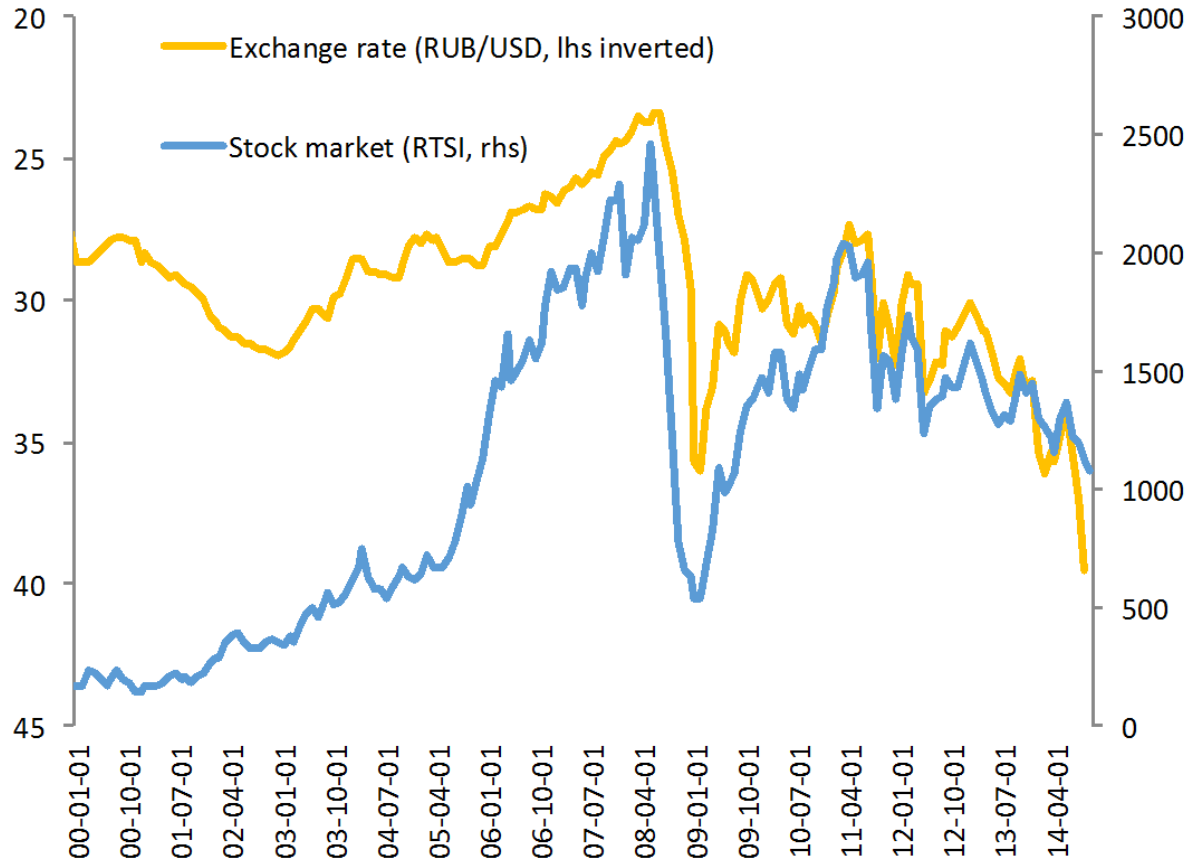
Source: CBR and author's calculations

Despite significant interventions by the CBR, early October the ruble had lost 20 percent of its value against the dollar since the beginning of 2014, as had the stock market (Figure 8). In some ways the global financial crisis was a good lesson for the CBR on the cost of trying to defend an overvalued currency. Then the CBR lost more than $200 billion while trying to keep the ruble exchange rate fixed. The currency defense did not prevent the ruble from falling by around 30 percent at the end of 2008 and beginning 2009. Since then, the exchange rate has been allowed more flexibility, although the CBR tries to avoid more abrupt changes. Russia also intends to focus its policy on inflation rather than the exchange rate going forward, but the question is if this is credible given what has happened in the second half of 2014.

The stock market is also affected by capital outflows, falling oil prices, and a deterioration of confidence in the Russian economy that has come with the sanctions related to the conflict in Ukraine. At around 1,000, the RTSI is back to its 2005 level, after having peaked at almost 2,500 before the global financial crisis and then reaching a post-crisis peak of 2,000 in 2011.

Although the sanctions have played a role in the developments in 2014, it is clear that the decline in both the stock market and exchange rate goes back to 2011 when oil prices leveled off and growth started to slow. In other words, the structural dependence on increasing oil prices to generate growth again shows its importance also for capital flows, the exchange rate and stock market returns. The reform program launched by then-president Medvedev in 2009 in response to

Figure 8. Exchange rate and stock market



Source: MICEX

the crisis, under the "Russia forward" heading, made little difference since the most important parts were never implemented.

Sudden stops dynamics and a more realistic growth forecast

In a paper studying the correlates of output drops, Becker and Mauro (2006) look at a long list of shocks that include both macro-financial shocks as well as real shocks. One of the findings is that sudden stops in capital flows cause the most damage in emerging market countries. In a typical sudden stop triggered crisis, the average emerging market country loses an aggregate of 64 percent of initial GDP, which is related to a large initial drop in income and several years of recovering to bring income back to the pre-crisis level. The sudden stop episodes in the paper are defined as a reversal of capital inflows that suddenly turn around and become outflows. In countries with insufficient export revenues, this leads to a sharp contraction in imports, which (as discussed above) leads to a significant drop in output.

Reducing imports may sometimes be interpreted as a sign of a country being able to produce more at home and therefore a sign of strength. But when imports contract very quickly in response to a drop in available financing, it signals something different; the lack of confidence in an economy, with large economic costs in terms of falling incomes as a consequence. This type of scenario is a very real possibility in Russia given recent developments. All the indicators above — oil prices, capital flows and imports — point to a much more negative growth outlook than the IMFs World Economic Outlook forecast published in October 2014. Since July of 2014, the WTI price has fallen from around $100/barrel to just north of $80/barrel in mid-October. The IMF World Economic Outlook in October 2014 forecasted a continued decline in oil prices for 2015 and 2016, but this was based on mid-year prices rather than mid-October prices. Futures contract over the next five years price oil around $80/barrel for the entire period. Although this is mostly a function of historical oil prices following a random walk so it makes it hard to predict changes up or down, it still means that there is currently no information that would suggest that oil prices will move up any time soon.

Taking $80/barrel as the relevant forecast for 2015 it would be a drop in oil prices of over 20 percent compared to mid-2014. If we use the simple growth-oil price equation estimated above — which despite its simplicity generated an adjusted R-square of 60 percent — it implies that the oil effect on growth is around minus three percentage points. The intercept in that regression is 2.4 so the forecast from this regression is negative growth of around half a percent for Russia in 2015. Of course this empirical estimate is not really a proper macro model and excludes a long list of other important variables that will affect growth, including policy changes.

However, one crucial factor that will contribute to the downside risk of the already negative forecast based on falling oil prices is capital outflows — linked to investor confidence — which suggests that there will be less money for imports and further negative pressure on growth rates in 2015 and forward. Capital usually flows to countries with good growth prospects and rewarding investment opportunities. Capital rarely flows to places where the growth outlook is negative and uncertain. It is not easy to predict capital flows with any precision. In the event capital outflows continue at the pace they have in the first three quarters of 2014, it will push imports down by a significant amount and perhaps shave off another 1 to 2 percent of an already negative projected growth rate for 2015.

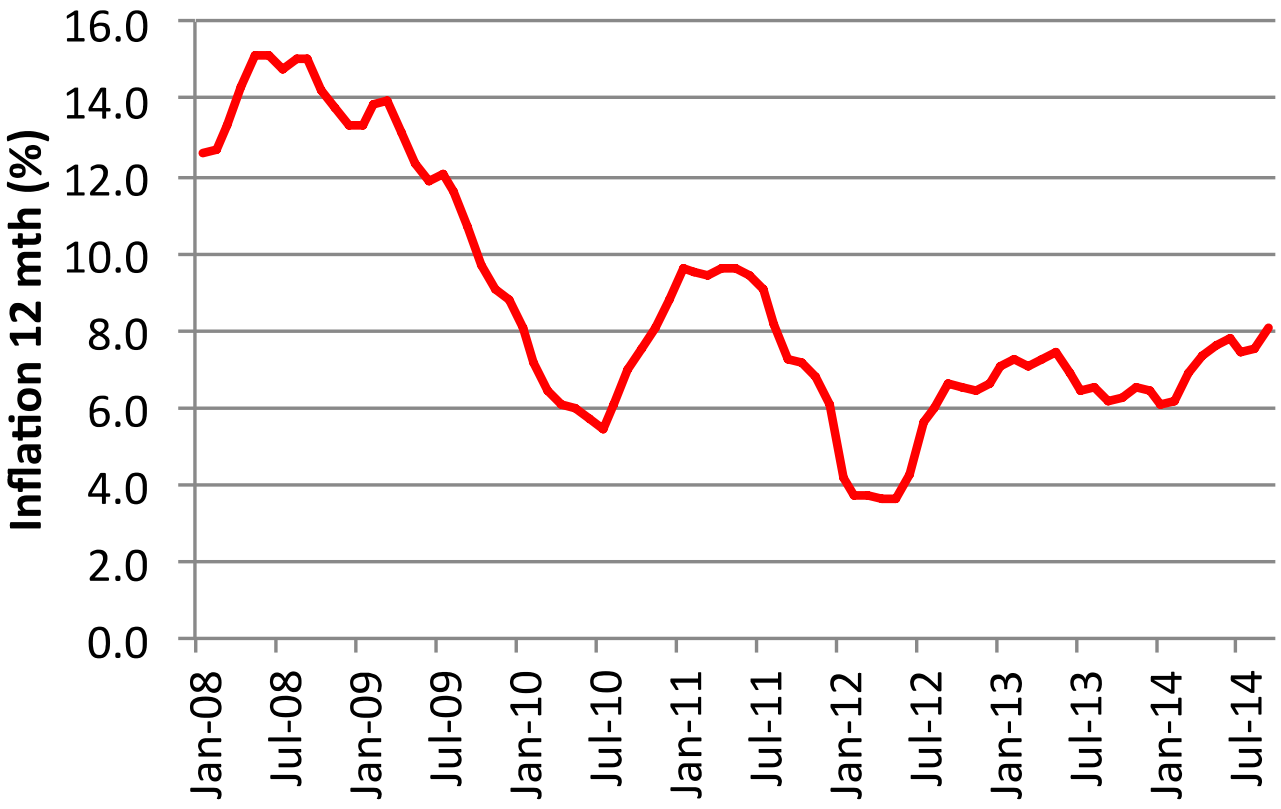
Import growth has already turned negative in the first two quarters of 2014, and if the trend continues, there is a strong likelihood that imports decline so much that quarterly GDP growth turns negative in the last part of this year. It may still be that the growth for the full year stays positive, but probably not by much. The real problems with growth will then be for 2015 if nothing positive happens with oil prices and capital flows. In sum, the no-change scenario for Russian growth in 2015 points to a real danger of a sudden stop type of output decline of 2-3 percent rather than IMF's October 2014 forecast of 1.5 percent positive growth. Needless to say, if the sudden stop scenario rather than the IMF forecast materializes it will have serious effects on Russian income levels in the years to come as was illustrated in Figure 2 earlier.

Policy options to avoid a growth collapse

The question is then how Russia can avoid a full-blown sudden stop scenario with accelerating capital outflows, shrinking imports and a collapse in growth. What policies can be implement to generate growth in the economy in 2015? The first option is to do nothing and hope for higher oil prices. A significant increase in oil prices will in all likelihood provide conditions to resume import growth that can feed domestic consumption and investment. However, this is not in the cards at the moment as discussed above.

The economic policy areas under control of Russian policy makers include monetary and exchange rate policy, fiscal policy and the "catch-all" area of structural reforms. The latter a crucial area that affect investor and consumer sentiment which determine capital flows

Figure 9. Inflation



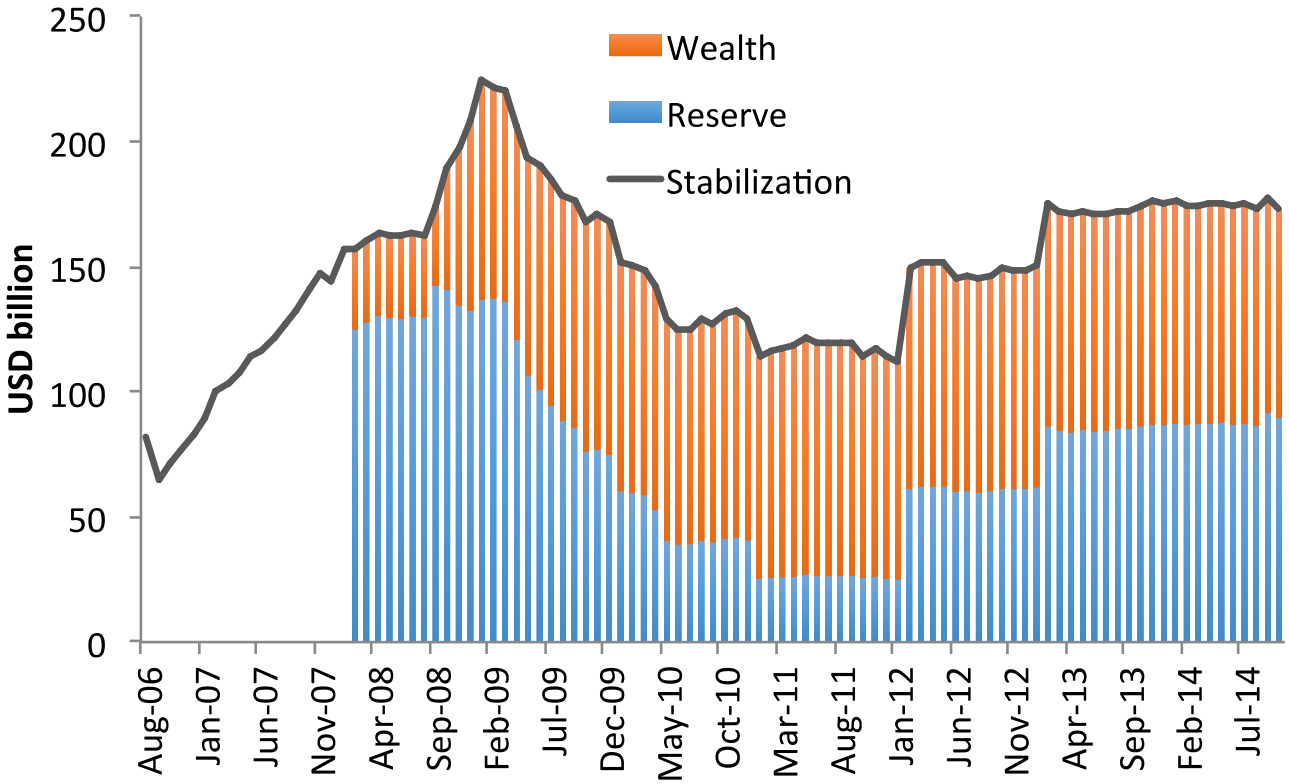
Source: Central Bank of Russia

and domestic demand. A closer look at these areas below suggests that the policy space is mainly in the area of structural reforms.

First out is monetary and exchange rate policy. As students of basic macro knows, in a world of capital mobility, policy makers have to either focus on targeting inflation or the exchange rate. Attempts at steering both will regularly have only short-lived effects or be associated with significant economic costs coming from trying to regulate capital flows more vigorously. Russia has over the last couple of years stated that inflation rather than the exchange rate should be the primary policy target for the CBR from 2015. The inflation target is initially set at 5 percent and supposed to move to 4 percent over the medium-term. Governor Nabiullina of the CBR states that the inflation targeting framework and associated goals will not be implemented if the cost of doing so is too high (CBR, 2014). However, with inflation now running at around 8 percent, capital flowing out of the country and the exchange rate falling, trying to stimulate growth with looser monetary policy does not seem to be a viable option regardless of the CBR pursuing an explicit inflation target or not.

Fiscal policy can possibly help stimulate demand. The low oil prices put pressure on fiscal policy as well, but the falling exchange rate means that the ruble value of oil revenues is kept up. The result is a relatively modest fiscal deficit of around 1 percent of GDP at the General government level.

Figure 10. Fiscal funds



Source: Russian Ministry of Finance

Behind this is a nonoil deficit of around 12 percent of GDP. In other words, government oil revenues account for around 11 percent of GDP, which is a strong indication of the importance of oil in all sectors of the economy. The reserve and wealth funds that have been accumulated from past oil revenues provide some additional fiscal room to maneuver.[5] In September 2014 the reserve fund stood at $90 billion and the wealth fund at $83 billion. These are of course significant amounts, but relative to net capital outflows of $85 billion in the first three quarters of 2014, they are perhaps a bit less impressive. It is also noteworthy how quickly the reserve fund was run down in response to the global financial crisis. From the start of 2009 to 2011 the reserve fund went from almost $140 billion to $25 billion, or a drop of $115 billion, more than what is currently in the reserve fund. The message for fiscal policy is that there is some room for providing stimulus but the funds are not sufficient to keep doing this for several years. It may be enough to add a few percent to GDP in 2015, but if nothing else then happens, 2016 will not have the same fiscal space available. At best, fiscal policy can buy a year or so of time, but it really just delays much needed reforms aimed at underlying structural weaknesses that puts a drag on confidence and economic performance.

The most obvious "reform" is for Russia to contribute to a peaceful resolution of the conflict in eastern Ukraine. This would alleviate the serious confidence effect the sanctions have had on investment and capital flows. More importantly, the main effects of the sanctions are still to come when important Russian companies need to refinance large loans in 2015 and 2016. If they are shut off from international financial markets it will contribute to net capital outflows as the expiring international loans are replaced by domestic ones. The impact on capital flows does not stop with the direct sanctions targeting specific firms since the confidence effect of sanctions hit all possible investments in Russia. Even if some international loans will be available to Russian firms, the conditions for such loans will be worse as long as the sanctions are around, which is a real cost for the Russian economy. It is hard to quantify the exact gain of restoring confidence and removing sanctions for the Russian economy, but in the current circumstances, confidence is a crucial element to avoid a full-blown sudden stop scenario.

In addition to the hugely important aspect of resolving the conflict in Ukraine, Russia has a long structural reform agenda ahead if its leaders want to move Russia's citizens up the global income ranking where they currently are in 51st place just behind Argentina and a few places behind Latvia in 47th place.[6] Again, this is not news to the leaders of Russia and several key elements were part of Medvedev's "Russia forward" plan of 2009. Institutional reforms aimed at fighting corruption at all levels, creating a rule of law and modernizing government are still high on the list of priorities. However, it is hard to see how real changes in these areas are going to be made, in particular if the leader(s) that push reforms want to stay in power once the reforms are implemented.

Any internal reform efforts that directly contribute to a positive development for the Russian economy is likely to also have important indirect effects through its trading partners. Although the Russian economy is not large enough to alone make a significant impact on world growth directly — it accounts for less than 3 percent of global GDP — its importance for trade and finance should not be ignored. Besides being one of the key energy providers to the global economy, it is also capable of affecting confidence and market sentiment in the rest of the world. The exact effect is hard to quantify but in times of ample volatility in financial markets, removing one piece of uncertainty would possibly be of great importance. From a Russian perspective this is also important since improved sentiment in the global economy is likely to lead to increased energy demand and upward pressure on oil prices.

Without serious reforms aimed at rebuilding international financial confidence and trade ties, the Russian economy will likely face a sudden stop scenario in 2015 or at best find itself on a slippery slope towards stagnation. This is not in the interest of the current leaders and citizens of Russia, nor of its neighbors and trading partners. There are clear win-win propositions in terms of policies that Russia can undertake today to avoid an economic crash landing. The question is if Russia is ready to move towards the modern approach of looking for win-win solutions or if it will remain stuck playing strategic games where your gain is always my loss.

Endnotes

[1] Note that this brief was written in mid-October 2014 and therefore based on the data and forecasts available at that point in time.

[2] The original April 2012 forecast ends in 2017 and the forecast to 2019 here is based on extending the 2016 and 2017 forecast of 3.8 percent growth over 2018 and 2019.

[3] The basic accounting identity says that national income is equal to private and public consumption and investment, plus exports minus imports.

[4] The Central Bank of the Russian Federation, also called Bank of Russia, will be abbreviated as the commonly used acronym CBR which is also its web address www.cbr.ru.

[5] The initial oil fund was called the Stabilization fund but was divided up in a National wealth fund and a Reserve fund in 2008, where the former should support future pensions while the latter has the stated purpose of financing the federal budget when oil and gas revenues decline.

[6] Income ranking based on market exchange rates and IMF data from 2013.

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