Deutsche Bank Research

Russia's quasi-sovereign debt

January 27, 2011

A sizeable contingent liability

Russia's public-debt-to-GDP ratio has been significantly reduced over the past decade. This stands in contrast to developments in other emerging markets as well as most developed markets, where public finances have deteriorated – especially due to sizeable fiscal stimulus and banking sector rescue measures in the context of the global economic crisis.

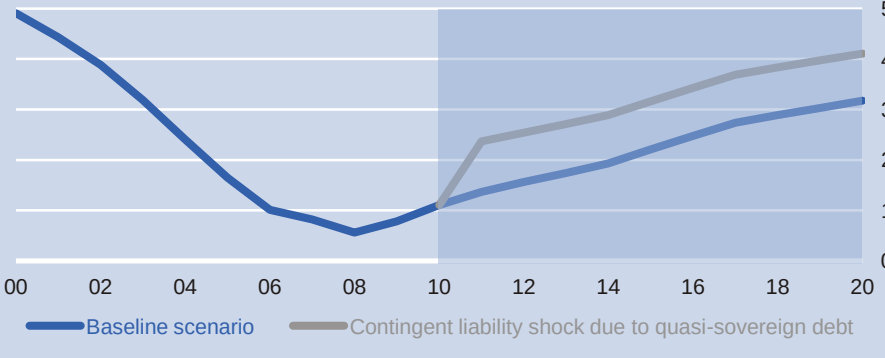
Russia's corporate and bank debt, by contrast, has increased over the past decade. The government owns a large part of corporate and bank assets in Russia. As Russian quasi-sovereigns have received state support in the past, it is relevant to examine their debt positions in order to quantify possible contingent liabilities for the Russian government. Adding, for instance, quasi-sovereign bonds and syndicated loans to Russia's government debt would mean a doubling to around 20% of GDP. To be sure, this ratio is still low, but may rise significantly over the next decade.

Russia's state debt will increase to 30% of GDP by 2020 in our baseline scenario. This can still be considered as a rather moderate level of public debt in an international comparison. The baseline scenario takes into account that the oil price needed to balance Russia's budget has increased significantly and that spending pressure is likely to remain high. Downside and upside scenarios are very sensitive to the development of the primary fiscal balance, which itself is heavily impacted by oil price developments. The public-debt-to-GDP ratio could almost vanish in an upside scenario or increase to 60% of GDP in a downside scenario.

Just looking at federal government debt in Russia provides an overly benign picture. A contingent liability shock caused by quasi-sovereign debt could raise public–debt-to-GDP levels to above 40% by 2020, a level associated with increasing debt sustainability problems in emerging markets. While the financial health of the largest quasi-sovereign borrowers is no major cause for concern at present, the magnitude of quasi-sovereign debt is sizeable. Looking forward, the wave of privatisations currently envisaged by the government would reduce contingent liability risks for the sovereign.

Public debt level will still be moderate in 2020 - quasi-sovereign debt represents sizable contingent liability

Public debt, % of GDP



Source: DB Research

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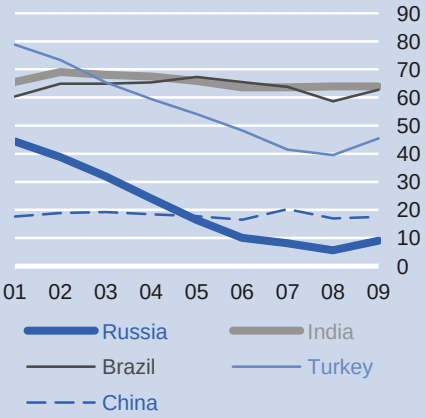
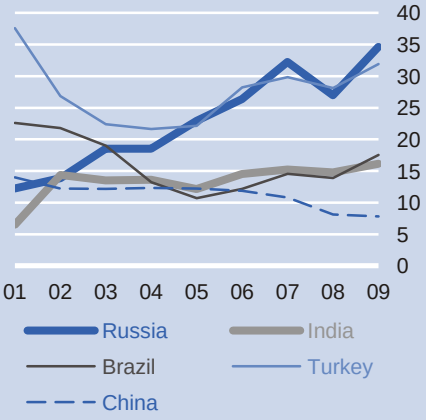
Russia: Very low public debt ...
Total public debt, % of GDP



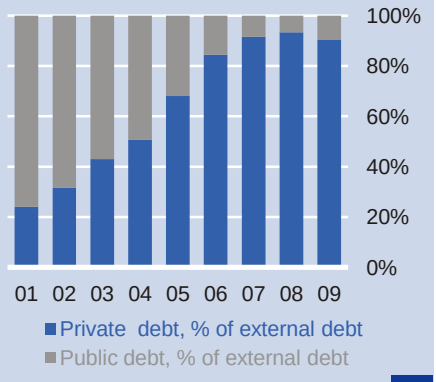
Source: DB Research 1

... along with ballooning corporate debt
Corporate and bank external debt, % of GDP



Source: DB Research 2

Rising share of private debt



Sources: CEIC, CBR, DB Research 3

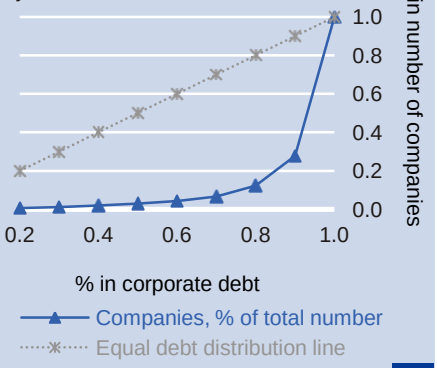
Introduction

Massive fiscal stimulus and banking sector rescue measures as a consequence of the global financial crisis have resulted in a considerable deterioration of public finances around the world. Several governments are adopting harsh austerity packages to reduce or at least to stabilise public-debt-to-GDP ratios. However, debt incurred by quasi-sovereigns, i.e. companies and banks of which the government is a shareholder, is seldom considered in the context of public debt analysis. As the government has historically owned a large part of corporates and banks in Russia[1], risks associated with public debt are underestimated when omitting quasi-sovereign debt. In this context, it is noteworthy that the Russian government last year stated its intention to monitor the sustainability of large-scale borrowing by quasi-state entities.[2]

Public finances in Russia are in good shape. In contrast to peer countries, the public-debt-to-GDP ratio has been significantly reduced over the past decade (see chart 1). Russia's public debt reduction was mainly achieved by reducing external debt, i.e. debt owed to non-residents.[3] In contrast to public external debt, corporate and bank debt in Russia has soared throughout the last decade while peer countries, with the exception of Turkey (see chart 2), showed a downward trend or at least more moderate growth.[4] Hence, the share of public debt in Russia's overall external debt decreased until 2008 when the share of the private sector debt reached its peak (see chart 3).[5] According to central bank data, around 30% (USD 134 bn) of this corporate and bank external debt was accounted for by quasi-sovereigns as of June 2010 - 38 % by quasi-sovereign banks and 62% by quasi-sovereign corporates.[6] This implies large fiscal costs in case the government needs to support quasi-sovereigns.[7] Against this background, we first provide an overview of corporate and quasi-sovereign debt in particular. Subsequently, we analyse fiscal sustainability in Russia in a broader framework. We provide scenarios for public debt developments until 2020, also taking into account the impact of quasi-sovereign debt on public debt sustainability.

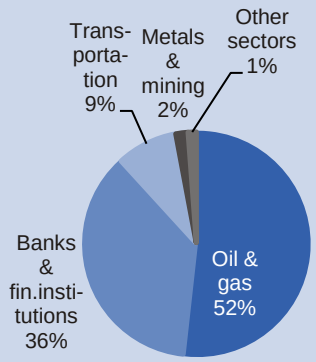
1 According to Russian Finance Minister A. Kudrin, the state's share in the economy in 2009 reached 50%, but is to be reduced first to a target level of 40% and later to 30% (see http://www.rian.ru/crisis/20091005/187644688.html).
2 See July 2010 IMF Article IV report, p.18.
3 We refer to the CBR classification of external debt, i.e. debt held by non-residents regardless of the currency. The Ministry of Finance classifies foreign-currency-denominated debt as external debt.
4 An increase in corporate debt at the expense of public debt can be viewed positively if it represents a crowding-in of private investment, which may also be more efficient than public investment.
5 Implicit government guarantees may have amplified huge borrowings by the quasi-sovereigns. See July 2010 IMF Article IV report, p.35.
6 See CBR website: http://www.cbr.ru/eng/statistics/print.aspx?file=credit_statistics/debt_an_det_e.htm
7 Moody's, for instance, observes that larger institutions, particularly state-owned entities, have been benefitting from state support. See "Russia: Banking system Outlook", 12.10.2010, pp 3-4.

12% of corporates account for 80% of debt
Debt defined as outstanding bonds and syndicated loans



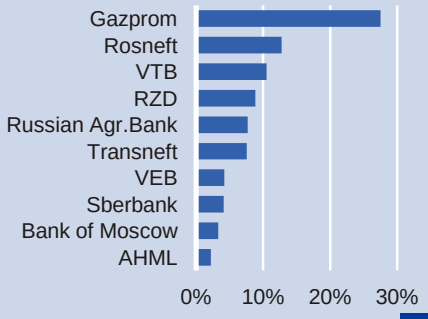
Sources: Cbonds, DB Research 4

Oil & gas largest borrower
% of total quasi-sovereign bonds and syndicated loans



Sources: Cbonds, Company Reports, DB Research 6

Top 10 quasi-sovereign borrowers account for 89%
% of quasi-sovereign bonds and syndicated loans

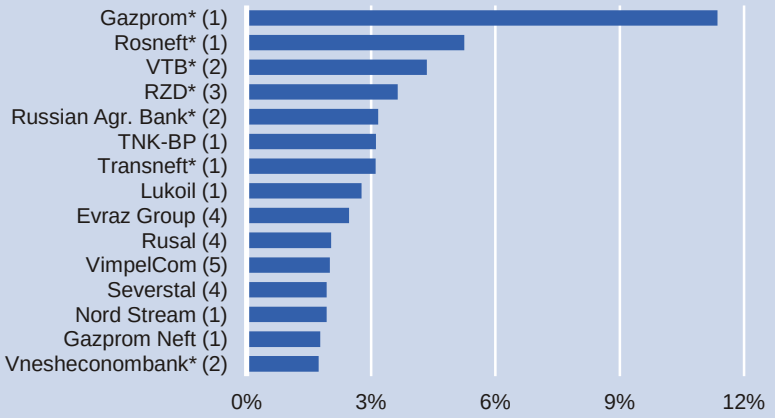


Sources: CBonds, DB Research 7

Overview of bond and syndicated loan debt

To study Russia's corporate debt in more detail, we concentrate on outstanding domestic bonds, Eurobonds and syndicated loans.[8] These are almost equally important debt instruments for Russian corporates and banks. Corporate borrowing is highly concentrated: 12% of companies account for 80% of bonds and syndicated loans (see chart 4). State-owned Gazprom is the leader, accounting for more than 10% of bonds and syndicated loans (see chart 5).[9]

Top 15 companies account for 50% of bonds and syndicated loans
% of total bonds and syndicated loans



*State share exceeds 50%
Sectors: (1) Oil and gas, (2) Banking, (3) Transportation, (4) Metals and Mining, (5) Telecommunications

Sources: Cbonds, DB Research 5

Overview of quasi-sovereign bonds and syndicated loans

We estimate the share of quasi-sovereign entities in outstanding bonds and syndicated loans based on the capital structure of individual companies.[10] Our quasi-sovereign debt estimate comes in at USD 114 bn, i.e. 41% of total corporate bonds and syndicated loans (see chart 9 on next page). This lower bound estimator (see below) accounted for roughly 8% of GDP as of July 2010. Hence, the ratio of public debt to GDP doubles when quasi-sovereign bonds and syndicated loans are added.

Companies in the oil & gas and banking sectors account for 88% of quasi-sovereign debt. With a share of 52%, the oil & gas sector is the main debtor with regard to bonds and syndicated loans, followed by state-owned banks and transportation companies (see chart 6).

[8] Data availability on another major financing source, companies' bilateral loans, is limited.

[9] High concentration also holds for the loans extended by the banks. According to Moody's, the 20 largest borrowers in Russia accounted for about 50% of total bank loans in mid-2009. See "Moody's Annual Survey of Russian and CIS Banks' Single-Client Concentrations", December 2009, p. 5.

[10] The sample comprises 80% of outstanding bonds and syndicated loans. For companies with a government stake in excess of 50% we include the company's total debt in the quasi-sovereign debt estimator. For the rest of the companies, debt is multiplied by the share of state participation in the capital. Capital structure information of the companies is taken from the companies' annual reports or websites. 94% of the quasi-sovereign debt is owed by companies in which the state holds a stake of more than 50%.

Debt segments by sector

In %	Domestic bonds	Eurobonds	Syndicated loans
Oil & gas	9	55	35
Banks	29	59	12
Transportation	71	15	14
Metals & mining	41	42	17
Other sectors	83	0	17

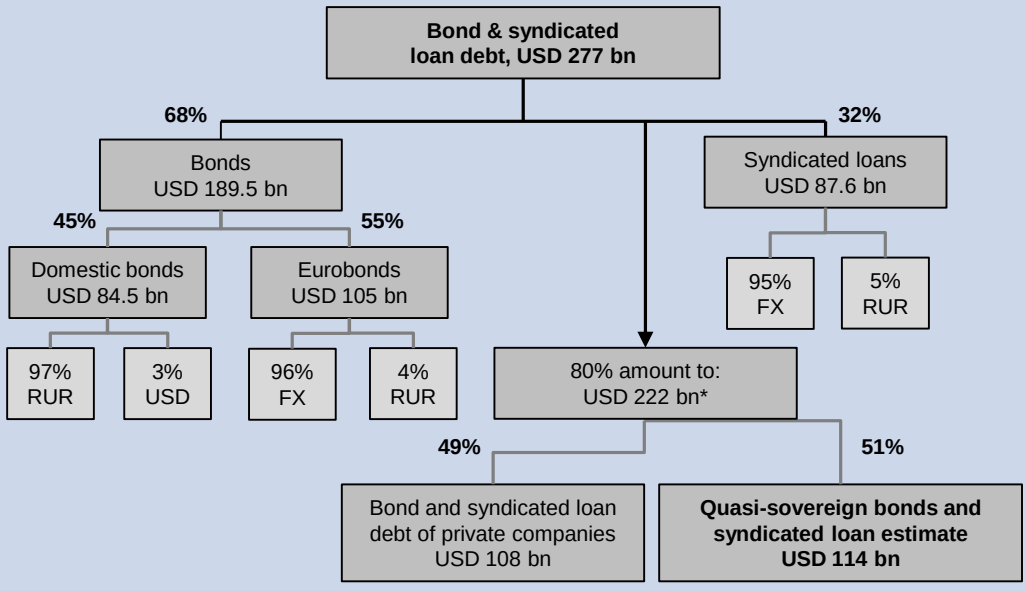
Sources: Cbonds, DB Research 8

Ten quasi-sovereigns (all majority state-owned) account for 89% of quasi-sovereign debt. Two oil & gas sector companies (Gazprom and Rosneft), two banks (VTB and Russian Agricultural Bank) as well as Russian Railways (RZD) dominate (see chart 7). Together they account for 67% of quasi-sovereign debt and almost 28% of total bonds and syndicated loans.

Eurobonds are mainly used by the oil & gas and banking sectors. Overall, Eurobonds account for more than 50% of quasi-sovereign bonds and syndicated loans. Eurobonds are mainly used by the oil & gas and banking sectors, while domestic bonds are a popular means of financing in transportation and other sectors (see chart 8).

Bonds and syndicated loans only provide lower bound estimates of total quasi-sovereign debt outstanding. It is worth noting that total bilateral loans to corporates and banks amounted to over USD 500 bn as of July 2010 (see chart 18, Appendix), part of which are extented to quasi-sovereigns. According to our calculations, bilateral loans and other debt instruments of the 10 largest quasi-sovereign debtors (ranked by quasi-sovereign bonds and syndicated loans) add up to USD 34 bn.[11] In addition, we can add USD 46 bn, which is the share of quasi-sovereign external debt not accounted for by Eurobonds and syndicated loans.[12] Hence, adding debt to bonds and syndicated loans for just 10 quasi-sovereigns as well as the remaining part of external debt, we already obtain an estimate of USD 194 bn for quasi-sovereign debt outstanding. We estimate total quasi-sovereign debt in the range of USD 200-300 bn.

Overview of Russia's corporate bond & syndicated loan debt

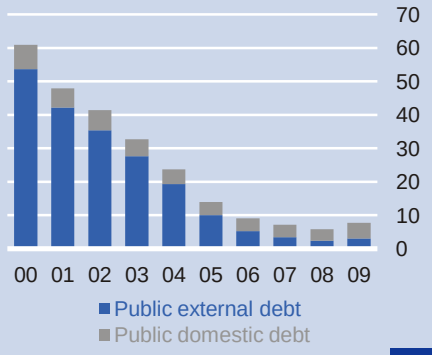


* The sample comprises 80% of outstanding bonds and syndicated loans (see footnote 9).
Note: Data refer to July 2010. All currencies converted to USD using CBR exchange rates as of 01.07.2010.
Sources: Bond and syndicated loans are taken from Cbonds, aggregate figures on external debt and other loan debt is taken from the Russian Central Bank. Individual company loan debt is calculated as total debt (taken from company websites or reports by external rating agencies) minus bonds and syndicated loan debt. 9

[11] We obtained this estimate (focusing on the 10 largest quasi-sovereign debtors in terms of bonds and syndicated loans) by subtracting bonds and syndicated loans from total debt of the respective companies as shown in reports by external rating agencies or company reports. Further details are available upon request.

[12] To come up with this figure, we subtract Eurobonds and syndicated loans from the aggregate quasi-sovereign private external debt figures provided by the central bank. For this to make sense, we implicitly need to assume that all Eurobonds and syndicated loans are held by non-residents.

Impressive decline in public-debt-to-GDP ratio
% of GDP



Sources: CEIC, MinFin, DB Research 10

Scenarios for Russia's public debt path until 2020

The Russian sovereign's fiscal situation improved markedly from 2000 to 2008 due to prudent fiscal policies. While Russia built up reserves in two rainy day funds, the Reserve Fund and the National Wealth Fund, the sovereign actively paid down debt, e.g. to the Paris Club. As a result of budget surpluses and debt repayments, the public-debt-to-GDP ratio declined to a mere 6% of GDP by the end of 2008 from 61% in the year 2000 (see chart 10).

Rainy days hit Russia in 2008-09 with falling oil prices and declining budget revenues on the one hand and additional crisis-related spending requirements on the other hand. Given savings of USD 130 bn in the Reserve Fund, which formed part of overall FX reserves of USD 533 bn in mid-2008, Russia was able to finance one of the world's largest stimulus programmes (around 6.7% of GDP in 2008 and 2009 according to the World Bank) without having to compromise its fiscal stance in the way many developed markets did. The year 2010 ended with another fiscal deficit which was, however, reduced to around 4% of GDP, down from 5.9% in 2009. In the coming 3 years, the Ministry of Finance expects the budget to remain in deficit but further declines are envisaged, resulting in a deficit of 2.9% of GDP in 2013 (chart 11).

Federal budget, official forecast
% of GDP

	Average 2000-2007	2008	2009	2010	2011	2012	2013
Revenues	20.5	22.4	18.8	17.4	17.6	17.0	16.8
Expenditure	16.5	18.3	24.7	22.7	21.2	20.1	19.7
Balance	4.0	4.1	-5.9	-5.3	-3.6	-3.1	-2.9
Primary balance	5.5	4.5	-5.5	-4.6	-2.8	-2.2	-1.9
GDP (RUB bn)	17,374	41,429	39,101	45,175	50,389	55,950	61,920

Sources: CEE MarketWatch, MinFin 11

In the coming years, Russia plans to cover the budget deficit mainly by issuing new debt. To estimate the future path of Russia's public-debt-to-GDP ratio, it is crucial to make assumptions about Russia's real GDP growth, primary balance (fiscal balance excluding interest payments) and the real interest rate paid on debt.

According to the simple arithmetic, the trajectory of public debt in relation to GDP is defined as:

$$d_t = \frac{1+r_t}{1+g_t} d_{t-1} - pb_t \quad (1)$$

where d_t is the public-debt-to-GDP ratio, r_t is the real interest rate paid on debt, g_t is real GDP growth and pb_t is the primary balance in % of GDP.

Ceteris paribus, higher interest rates, lower GDP growth and a lower primary balance push up the public-debt-to-GDP ratio. To project Russia's debt-to-GDP ratio in 2020, we use a more sophisticated framework than shown in (1). The augmented model takes several aspects of the debt structure into account such as the currency denomination (see chart 12) or the maturity profile of public debt (see chart 13).[13]

Currency composition of Russia's public debt

	RUR	USD	EUR	Other
Domestic bonds*	92%	8%	0%	0%
Eurobonds*	4%	70%	20%	6%
Synd. loans*	5%	94%	1%	0%
Sovereign bonds	79%	21%	0%	0%

* Top 15 quasi-sovereign borrowers

Sources: CBonds, DB Research 12

Maturity structure of Russia's public debt

years	Domestic bonds	Euro-bonds	Average term to maturity
Sovereign	4.4	15.8	6.8
Corporate*	5.8	6.2	6.1

* Top 15 quasi-sovereign borrowers

Sources: CBonds, DB Research 13

[13] See Becker, S. (2011). Public debt in 2020: Structure matters! Deutsche Bank Research. Current Issues. January 21, 2011.

Baseline scenario assumptions: In our baseline scenario, we assume an average of 4.1% real annual GDP growth over the period 2010-2020, a primary deficit of 2.3% of GDP and nominal interest rates of 7.3% for external debt and 8% for internal debt (chart 14).

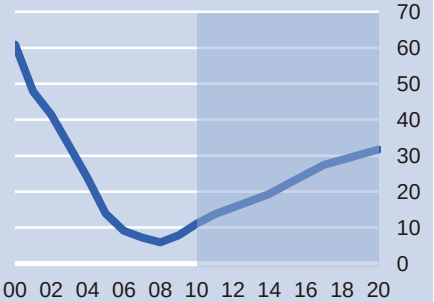
Assumptions for public debt scenarios
% of GDP

	Domestic real GDP	Primary balance	Domestic nominal interest rate	Foreign nominal interest rate
2005	6.4	8.4	7.7	5.9
2006	8.2	8.0	6.8	5.9
2007	8.5	5.8	6.6	5.8
2008	5.2	4.5	7.4	6.7
2009	-7.9	-5.4	9.9	7.4
Average 2005-2009	4.1	4.3	7.7	6.3
Std. deviation 2005-09	6.8	5.6	1.3	0.7
Average 2010-2020	**4.1**	**-2.3**	**8.0**	**7.3**

Source: DB Research 14

Rationale for assumptions in baseline scenario: The assumption of an average of 4.1% real GDP growth is based on Russia's potential GDP growth, which was estimated at around 4-6% in several empirical studies.[14] With respect to the primary deficit, we expect it to be 2.3% on average until 2020 – despite the fact that Russia was able to run a primary surplus of 4.3% on average over the period from 2000 to 2009. This is partially due to the fact that we expect oil prices to rise only moderately. In addition, the oil price needed to balance the budget has risen to USD 107 in 2010 from USD 23 in 2007[15], making a primary surplus more difficult to attain than in the past in case oil price rises remain modest. Furthermore, the pressure on expenditures is expected to stay high. Demographic developments, for instance, remain unfavourable and transfers to the pension fund are likely to rise rather than decline; they already accounted for around 50% of the federal budget deficit in 2010.[16] To approximate external nominal interest rates, we use US Treasury yield forecasts calculated by our colleagues analysing developed markets (4.5% on average between 2010 and 2020) and assume a risk premium of around 300 basis points, which yields a figure of around 7.3%. For domestic nominal interest rates, we also add a premium to our inflation forecast (5.6% on average from 2010 to 2020), which yields an interest rate of around 8%.

Russia's public debt path until 2020
Public debt in % of GDP



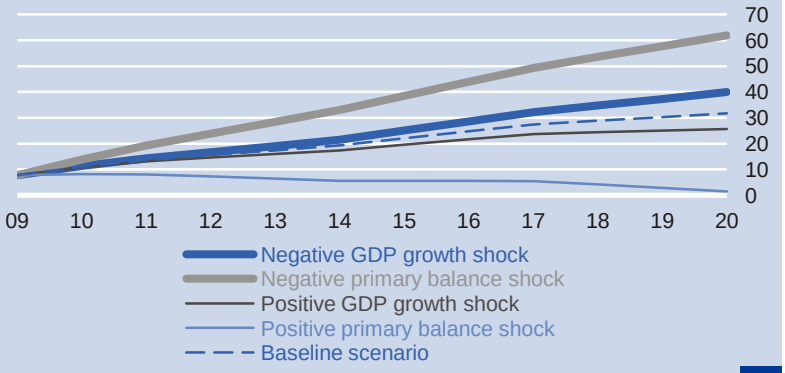
Source: DB Research 15

Baseline scenario for Russia's public debt in 2020: Under these baseline assumptions, the public-debt-to-GDP ratio is expected to rise to 32% of GDP by 2020 from 7.8% in 2009 (see chart 15). This estimate is roughly in line with estimates by the Ministry of Finance, when assuming 4% GDP growth, 3% budget deficit (including interest payments) and 6-8% borrowing costs.[17] To stabilise public debt in relation to GDP at the 2010 level (11% of GDP), a primary deficit of -0.14% of GDP on average would be required, which we consider as challenging to attain.

[14] See e.g. Beck et al (2007):"Long-term growth prospects for the Russian economy". Occasional Paper Series 58. ECB.
[15] See July 2010 IMF Article IV report, p. 26. The higher oil price needed to balance the budget is not least due to significant expenditure increases.
[16] The transfer amounted to around EUR 30 bn; see BOFIT Weekly, 26, 2.7.2010.
[17] See MinFin Website: http://info.minfin.ru/project_fb_param.php.

Sensitivity analysis: To check the sensitivity of this result with respect to our assumptions, we estimate the impact of a shock to GDP growth and the primary balance. We define positive and negative shocks by adding or subtracting 0.5 times the standard deviation from the average over 2010-2020.[18] As chart 16 shows, the debt-to-GDP ratio could rise to 40% in case of a negative GDP growth shock and to 26% in case GDP were to grow by an average 7.5% rather than 4% per year. For the primary balance, a surplus of 0.5% would yield a debt-to-GDP ratio of only 1.5% by 2020, while a deficit of 5.1% (primary deficit in 2009 was 5.5%) would lead to a 62% public-debt-to-GDP ratio by 2020. Hence, a relatively large variation in GDP growth does not lead to very large changes in the debt-to-GDP ratio while the development of the primary deficit is crucial for the path of public debt. Of course, there is large-scale uncertainty over the future path of Russia's primary balance but we note that neither the downside nor the upside scenario are unrealistic given past primary balances.

Public debt path under different scenarios
Public debt, % of GDP



Source: DB Research 16

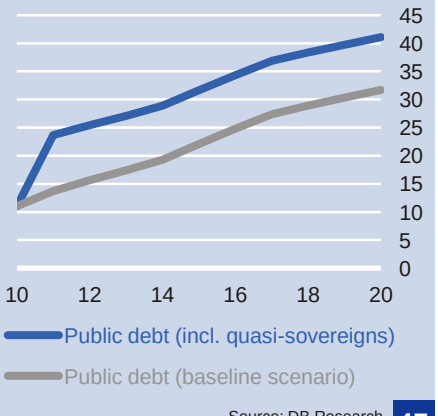
Impact of quasi-sovereign debt on debt sustainability

Our baseline estimate of a 32% public-debt-to-GDP ratio in 2020 would represent a moderate level. However, when adding our quasi-sovereign debt estimate based on bonds and syndicated loans, which adds up to around USD 114 bn, public debt doubles to around 20% of GDP. As a consequence, the public-debt-to-GDP would reach 40% by 2020 (see chart 17), a level associated with increased risk of public debt crisis in emerging markets.

An obvious caveat is that this scenario represents a contingent liability shock, i.e. quasi-sovereign bonds and syndicated loans are added to Russia's public debt stock at one point in time and from then on contribute to the public debt burden. In case data were available, it would be more appropriate to add total quasi-sovereign debt (including bilateral loans and other debt instruments) and at the same time to factor in that quasi-sovereign entities also have revenue streams. These revenue streams should be factored into the primary balance as they contribute to the debt servicing capacity.

Concerning the size of the contingent liability shock shown here, it should be noted that bonds and syndicated loans only provide a lower bound estimate for quasi-sovereign debt, which makes this shock look rather realistic.

Critical level for public debt reached in 2020 if quasi-sovereign debt is added
% of GDP



Source: DB Research 17

[18] As an example consider a negative GDP growth shock of 0.8% GDP growth. This shock is derived by subtracting 0.5 times the standard deviation of average GDP growth over 2000-2009 (6.8%) from the average assumed over 2010-2020 (4.1%).

While the financial health of the largest quasi-sovereign borrowers is no major cause for concern at present, the magnitude of quasi-sovereign debt is sizeable. Just looking at federal government debt in Russia therefore provides too benign a picture of risks associated with public debt. Looking forward, the wave of privatizations currently envisaged by the government would reduce contingent liability risks for the sovereign.

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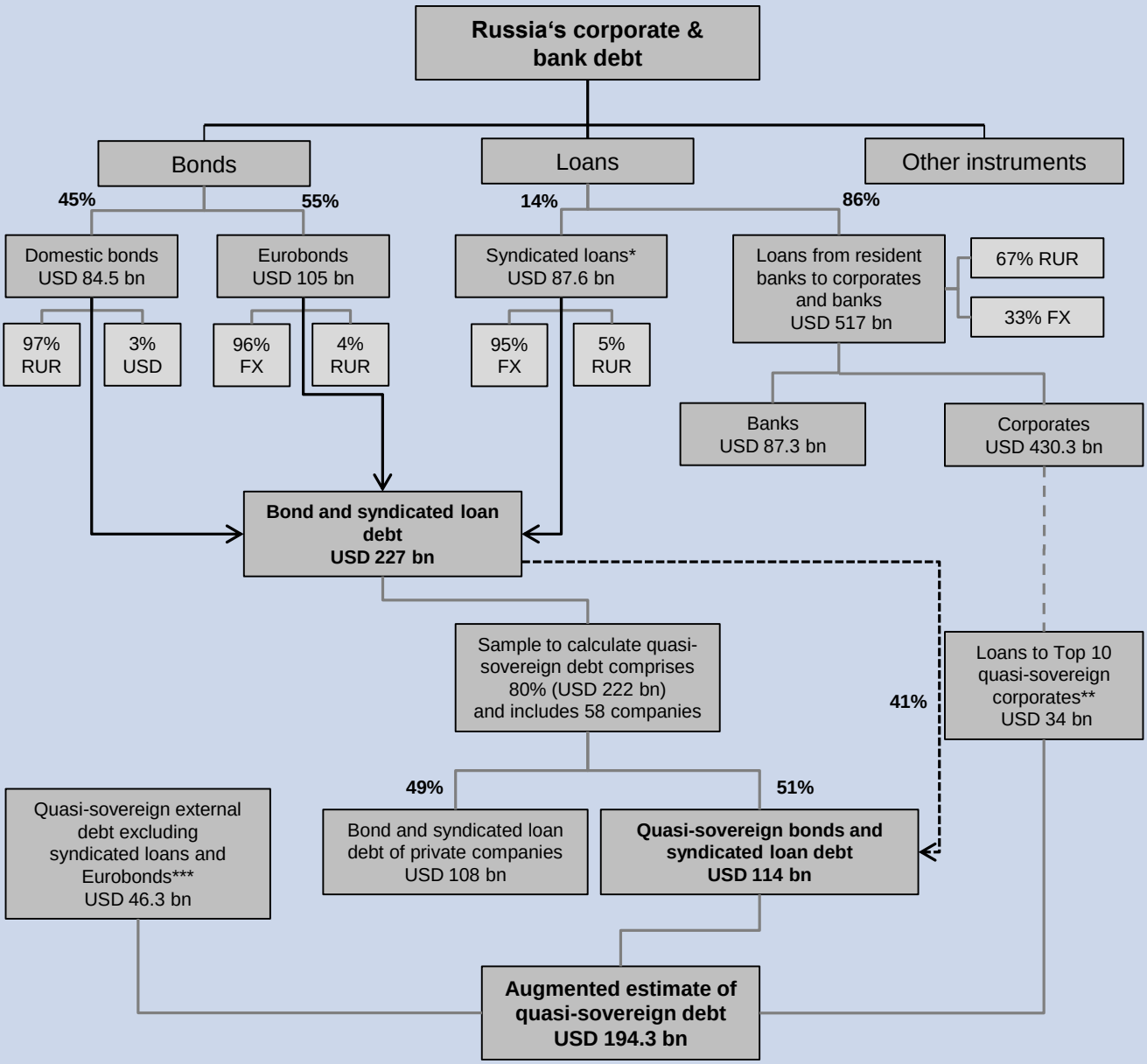
Appendix

Overview of Russia's corporate & bank debt



* Some double counting is possible in case Russian banks form part of a loan syndicate. However, the majority of syndicated loans involve international banks.

** Top 10 quasi-sovereign corporates defined by rank order in total quasi-sovereign bonds and syndicated loans outstanding. Amount derived by subtracting bonds and syndicated loans from total debt mentioned in company reports.

*** Derived by subtracting Eurobonds and syndicated loans of quasi-sovereigns from total quasi-sovereign external (i.e. versus non-residents) debt. Implicit assumption is that all Eurobonds and syndicated loans are held by non-residents.

Note: Data refer to July 2010. All currencies converted to USD using CBR exchange rates as of 01.07.2010.

Sources: Bonds and syndicated loans are taken from Cbonds, aggregate figures on external debt and other loan debt is taken from the Russian Central Bank. Individual company loan debt is calculated as total debt (taken from company websites or reports by external rating agencies) minus bond and syndicated loan debt.

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Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg

ISSN Print: 1612-314X / ISSN Internet and e-mail: 1612-3158