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REPUBLIC OF BELARUS

FINANCIAL SYSTEM STABILITY ASSESSMENT

September 2016

This report of the Financial System Stability Assessment for the Republic of Belarus was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on July 25, 2016.

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FINANCIAL SYSTEM STABILITY ASSESSMENT

July 25, 2016

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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited the Republic of Belarus during April 5-21, 2016. The FSAP findings were discussed with the authorities during the Article IV consultation mission in June, 2016.

- The FSAP team comprised: Sònia Muñoz (IMF mission chief) and Aquiles Almansi (WB mission chief); Mustafa Saiyid (IMF deputy mission chief), Tanai Khiaonarong, Peter Lohmus, Pavel Lukyantsau, Torsten Wezel, Rasool Zandvakil (all MCM), Beata Jajko (EUR), José Tuya, José Rutman, Rodolfo Wehrhahn (IMF consultants); Angela Prigozhina (WB deputy mission chief), Pasquale Di Benedetta, Henri Fortin, Natalie Manuilova, Harish Natarajan, Jan Nolte, Juan Ortiz, (all WB); and Adolfo Rouillon (WB consultant). The FSAP team greatly appreciates the excellent cooperation it received from the authorities.
- The mission met with Mr. Pavel Kallaur, Governor of the National Bank of the Republic of Belarus, Mr. Vladimir Amarin, Minister of Finance of the Republic of Belarus, Mr. Vladimir Zinovsky, Minister of Economy of the Republic of Belarus, other senior central bank and government officials. The mission also met with Mr. Sergei Roumas, Chairman of the Development Bank, and senior representatives of state-owned, foreign and private banks, insurance companies, stock exchange, research organizations, law firms, the Ministry of Justice, tax authorities, accounting and auditing firms, and professional bodies.
- FSAPs assess the stability of the financial system as a whole and not that of
 individual institutions. They are intended to help countries identify key sources of
 systemic risk in the financial sector and implement policies to enhance its resilience
 to shocks and contagion. Certain categories of risk affecting financial institutions,
 such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- This report was prepared by Sònia Muñoz and Mustafa Saiyid, with contributions from the FSAP team.

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Glossary

AMC Asset Management Company

AML/CFT Anti-Money Laundering/ Combating the Financing of Terrorism

BCBS Basel Committee for Banking Supervision

BCP Basel Core Principles for Effective Banking Supervision

BU Bottom-up

CAR Capital Adequacy Ratio
DB Development Bank

DIA Deposit Insurance Agency
DIF Deposit Insurance Fund

EBIT Earnings before Interest and Taxes
ELA Emergency Liquidity Assistance

EWS Early Warning Systems

FMI Financial Market Infrastructure FSA Financial Sector Assessment

FSAP Financial Sector Assessment Program
FSSA Financial System Stability Assessment
FSC Financial Supervision Committee
FSD Financial Stability Department

FX Foreign exchange

GDP Gross Domestic Product

GDL Government-Directed Lending

IADI International Association of Deposit Insurers
IAIS International Association of Insurance supervisors

IAS International Accounting Standards

ICP Insurance Core Principles

IFRS International Financial Reporting Standards
ISGD Insurance Services General Directorate

ΙT Information Technology **KYC Know Your Customer** LCR Liquidity Coverage Ratio LLP Loan Loss Provision **LOLR** Lender of Last Resort MaPP **Macroprudential Policies** MoE Ministry of Economy MoF Ministry of Finance

MoU Memorandum of Understanding
MSME Micro Small and Medium Enterprise
NIIP Net International Investment Position
NBRB National Bank of the Republic of Belarus

NFRSB National Financial Reporting Standards for Banks

NPL Nonperforming Loan

NSFR Net Stable Funding Ratio P&L Profit and Loss Statement P&A Purchase and assumption PPP Public Private Partnership

PPT Percentage Point ROE Return on Equity

Report on the Observance of Standards and Codes **ROSC**

RR Reserve requirement SBA Stand-By Arrangement

SME Small- and Medium-sized Enterprises

SOE State Owned Enterprises

SSIS Single Settlement and Information Space

TD Top-down

EXECUTIVE SUMMARY

The state-dominated financial sector confronts several critical challenges. Deep and long standing structural problems and negative external spillovers are creating distortions affecting the credit channel and overall financial stability. Financial sector contingent liabilities are on the rise accentuating an already weak fiscal situation. The government is directing a large proportion of loans from state-owned banks to unhedged state-owned corporates. A Development Bank (DB), created in 2011 to centralize such directed lending, has grown rapidly to assume systemic significance. External imbalances, combined with low international reserves and significant negative spillovers from Russia—the main trade and financial partner, have weakened corporates' ability to service foreign-currency obligations.

Credit risk is being reflected in increasing NPLs while provisioning remains low. Banks' reported NPLs have risen to over 12 percent of total loans in April 2016 from 7 percent in December 2015, of which only about 40 percent are provisioned. A suite of solvency stress tests, adjusted partly for underprovisioning and evergreening, confirms very high credit risk. In the same vein, credit concentration risk is large at individual banks and indirect credit risk from unhedged borrowers in foreign currency remains a concern. Cross-border contagion risks are high on direct exposure to Russia. A small insurance sector, also mainly state-owned, is exposed to significant contagion risk from banks.

Foreign currency liquidity risk is high. Key systemic liquidity risks derive from high dollarization of deposits and limited access to foreign currency liquidity. Liquidity stress tests reveal significant pockets of vulnerability in some foreign currency positions. At the same time, liquidity facilities of the National Bank of Republic of Belarus (NBRB) and mandatory reserve requirements are in local currency. Liquidity needs seem underestimated, especially in foreign currency, since currently term deposits can be pre-cancelled by depositors at no penalty. The interbank payment system carries liquidity, operational, and legal risks.

Transition to an independent and risk-based oversight of the financial sector is urgently required. State dominance increases the complexity of achieving independent risk-based financial oversight. Banking and insurance oversight is constrained by lack of operational independence. Despite progress in establishing an integrated supervisory process and some prudential steps to reduce banking sector vulnerabilities, the adjustment and relaxation of prudential standards as a form of forbearance has eroded market discipline. The lack of detailed requirements on corporate restructuring has resulted in an understatement of problem loans and evergreening. Forward looking measures to reinforce capital requirements and strengthen risk analysis of liquidity needs in foreign currency should address the heightened banking risks. The risk management framework for financial market infrastructures will need a stronger legal basis. The recent move of DB supervision to the NBRB will need additional skilled staff.

State-directed bank lending should be consolidated in the DB and gradually phased out. The DB should become the principal agent of directed lending, while state banks should increasingly operate on commercial terms to reduce fiscal costs and increase their public value and competitiveness. The DB should focus on a viable development finance agenda not served by commercial banks and strengthen its governance, risk management, and supervision. Its increased role in development finance warrants that no further NPL transfers to the DB should occur.

A comprehensive and in-depth NPL resolution strategy is also needed alongside corporate restructuring. There are strong merits for delegating the responsibility for NPL resolution to an entity with wide powers for debt and enterprise restructuring, including privatization and advisory help from established debt resolution and corporate restructuring firms. These efforts should be complemented with drastic changes in the incentive structures by removing blanket government guarantees and improving credit risk management and governance in all state-owned banks. Resolution of private sector NPLs should be done using market-based solutions through an enhanced framework for bankruptcy, enterprise restructuring, and debt foreclosure.

Steps in two other areas could also help preserve financial stability:

- **First, a set of macroprudential policies** that could support macroeconomic policies in the dedollarization of the financial system. Measures could include a gradual increase in the mandatory reserve requirement for foreign currency deposits to be held in foreign currency accounts, the identification of unhedged foreign currency debtors, increases in the risk weight on exposures to unhedged debtors, and the standardization of the minimum sensitivity analysis that banks should apply to unhedged debtors. The recent creation of the Financial Stability Council should help in this area along with a formal mandate for ensuring financial stability and crisis management.
- Second, a well-functioning financial safety net. The NBRB should be designated as the agency responsible for bank resolution, for which it will need an expanded set of resolution tools, additional skilled staff, and accountability in the exercise of its powers. A new Emergency Liquidity Assistance (ELA) facility to provide collateralized emergency liquidity support to solvent banks is also urgently needed. Strong policy measures should be introduced to reduce the risk of banks' foreign currency liquidity needs before considering ELA in foreign exchange. The Deposit Insurance Agency should be allowed to provide funding for purchase & assumption transactions. The authorities should consider limiting the amount of deposit insurance coverage and shortening its payout period, in line with international standards, over time.

Recommendations and Authority Responsible for Implementation	Time ¹
Systemic Risks	
Conduct AQR for banks with significant differences between IFRS and prudential provisions (NBRB).	I
Apply Pillar 2 measures to specific banks to reinforce capital and prudential requirements (NBRB).	I
Conduct bottom-up solvency and liquidity stress tests for banks on a regular basis (NBRB).	NT
Increase the RR for foreign currency deposits, require its integration in foreign currency accounts at the NBRB and consider an increase in the daily maintenance requirement (NBRB).	NT
Consolidate and gradually phase out directed lending in DB (NBRB).	NT
Financial Oversight	
Strengthen loan provisioning by issuing standards on restructuring and interest accrual (NBRB).	I
Link temporary forbearance only to plans for strengthening specific banks (NBRB).	I
Initiate collection of data on unhedged borrowers in foreign currency (NBRB).	I
Consider an increase in the risk-weight of banks' foreign currency loans to unhedged borrowers.	NT
Improve risk assessment for early termination of foreign currency term deposits (NBRB).	I
Improve design of liquidity indicators and supervision of liquidity for individual institutions and aggregate system with focus on foreign currency liquidity risk (NBRB).	I
Develop risk-based insurance supervision with EWS, stress testing, and onsite risk inspection (MoF).	NT
Introduce a risk-sensitive capital regime for insurances and regulation following IAIS (MoF).	NT
The recently-created Financial Stability Council should include a subcommittee on crisis management that includes DIA as a member (NBRB, MoF, MoE, DIA).	I
Financial Infrastructure	
Refine the risk management framework to include all FMIs, risk-based scenarios and testing (NBRB).	I
Draft law and amend regulations to protect settlement finality, netting, and collateral (NBRB). Stress test payment system to assess sufficiency of liquidity under stressed conditions (NBRB).	NT
Governance	NT
Discontinue restrictions on the operational independence of the NBRB (NBRB).	NT
Amend NBRB statute to introduce concept of independence for the NBRB (NBRB).	MT
Divest banks' stakes due to resolution to avoid conflicts of interest as supervisor (NBRB).	MT
Discontinue employing resources and powers to enforce monetary policy or criminal law (NBRB).	NT
Strengthen insurance supervisor's operational independence and remove conflicts of interest (MoF).	NT
Allow DB to lend only to viable projects not financed by commercial banks (NBRB)	NT
Amend Bankruptcy Law to upgrade priority of secured creditors and establish effective procedures for rehabilitating viable businesses (Government).	NT
Establish mechanisms to enable and incentivize out-of-court debt restructuring (Government).	NT
Restructuring and Financial Safety Nets	
Delegate NPL resolution to a single entity with powers for restructuring / privatization (NBRB).	I
Designate the NBRB as a resolution authority (Government)	NT
Establish comprehensive powers for bank recovery and resolution using FSB Key Attributes (NBRB).	I
Establish an ELA framework and define conditions for support (NBRB).	I
Require all banks to establish and test recovery plans; initiate planning for systemic banks (NBRB).	MT
Limit coverage of deposits, shorten the payout period over time and end NBRB's co-financing (DIA).	MT
¹ I-Immediate" is within one year; "NT-near-term" is 1–3 years; "MT-medium-term" is 3–5 years.	1711

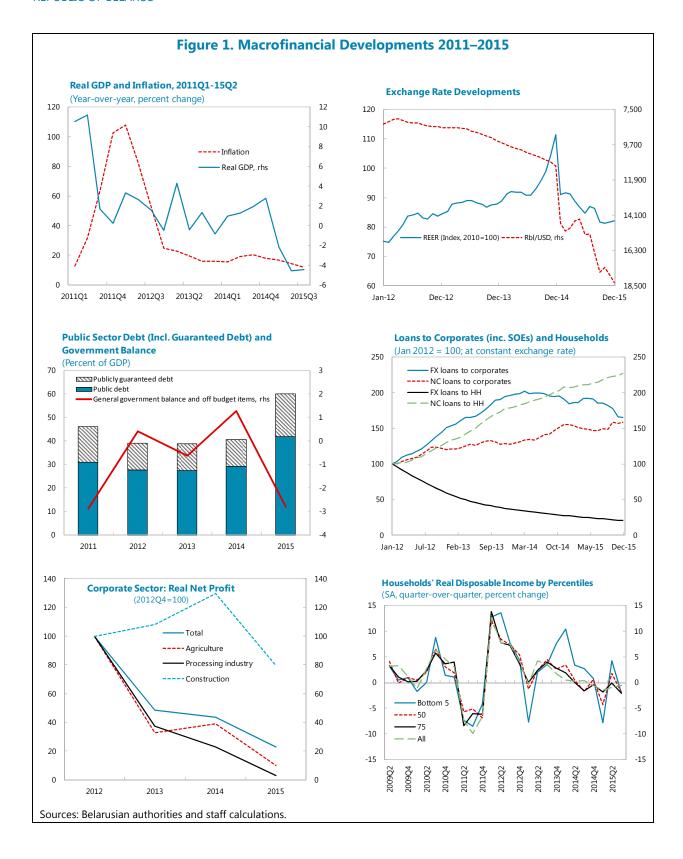
MACROFINANCIAL SETTING: STATE DOMINANCE

A. Recession and Vulnerabilities to Economic Shocks

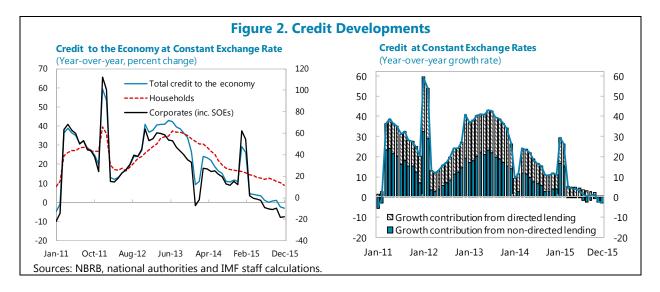
- **1.** The state-dominated financial sector faces deep domestic structural problems and external sector challenges. Domestic structural challenges include heavy state involvement in the banking and corporate sector, the lack of hard budget constraints for state-owned enterprises (SOEs) given state support, and high dollarization. Belarus is in recession and faces significant spillovers from Russia, its largest trade and financial partner (Figure 1). Low and falling international reserves (US\$4.3 billion as of end-May, i.e., an equivalent of two months of imports) offer a limited buffer to potential external shocks. Although the exchange rate depreciated sharply, by nearly 40 percent versus the U.S. dollar during 2015, inflation has trended downwards, falling to 12 percent by end-2015, mainly due to domestic demand contraction. ^{1, 2}
- 2. Public and private sector balance sheets are under pressure due to the deteriorating economic situation. Corporate profits have been falling and leverage rising particularly in the private sector (Figure 1). Arrears (including wage arrears) have been accumulating and companies have sought to reduce hours worked by employees. The sharp depreciation of the rubel has weighed on the unhedged corporate sector, which borrow mostly in foreign currency. Corporate debt to equity rose to 50 percent in 2015Q1 from 26 percent at end-2012 reflecting a pickup in leverage. Household disposable income fell sharply during 2015. Household sector debt of some 8 percent of GDP is relatively low in international comparison, and debt-servicing costs are only about 7.5 percent of household earnings on average.
- 3. Growing financial sector contingent liabilities constitute a key fiscal challenge. The recent macroeconomic deterioration has increased the size of fiscal contingencies arising from government's support to state-owned banks and SOEs. Some of these are related to the realization of guarantees on state-directed loans and the issuance of new loans with guarantees—without due assessment of creditors' payment ability and offered at below-market rates—requiring the government to cover the payments or recapitalize banks frequently. Such realization has affected public balances adversely and added to public debt (Figure 1). Weakening of the fiscal position also means that the sovereign may have to issue more debt, which would have to be placed with banks.

¹ Exchange rate depreciation versus the Russian ruble was more limited, helping to reduce the inflationary impact.

² The exchange rate regime in Belarus is classified as de jure floating from June 2015. In 2015, the authorities took several steps to move to a more flexible exchange rate policy, which included: (i) limiting the use of foreign exchange reserves in exchange rate interventions to cases of strong fluctuations; (ii) raising the share of Russian rubles in the currency basket to 40 percent, versus 30 percent each for the euro and the U.S. dollar; and (iii) modifying the exchange rate trading mechanism from a fix to a two-way auction. In the 2014 IMF Annual Report on Exchange Arrangements and Exchange Restrictions, the de facto exchange rate was classified as a crawl-like arrangement.



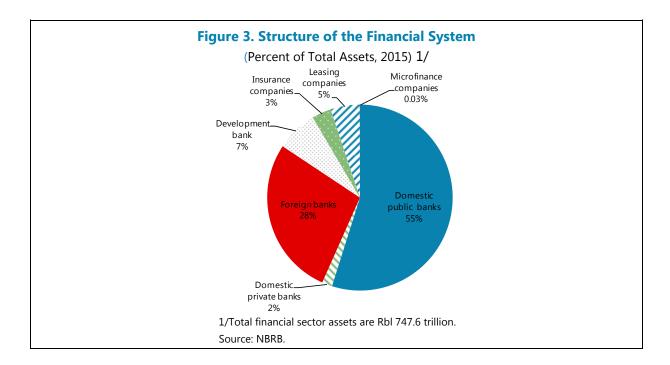
4. Credit growth has been declining rapidly. Overall credit growth to corporates and households has fallen sharply in both national and foreign currency since 2013 and turned negative at a constant exchange rate during 2015.³ During this period, the growth of state-directed lending almost halved, mainly due to high debt amortization (Figure 2). Credit to households has also declined sharply, though real estate loans are still being offered. Commercial real estate is contracting as companies cut down investment amid the economic downturn.



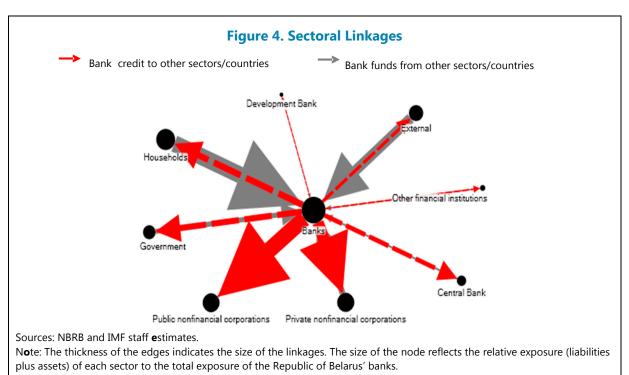
B. Financial Structure

5. The financial system is marked by a high degree of government involvement. The majority of the financial sector is comprised of commercial banks, equivalent to about 85 percent of total assets and 73 percent of GDP (Figure 3). The remainder is shared among the DB (7 percent), the insurance sector (3 percent), and leasing and microcredit companies with about 5 percent. Within the banking sector, the largest 10 banks make up most of the banking system and the top five and other two foreign banks are part of conglomerates. Nearly 65 percent of total assets are state-owned, foreign banks account for 33 percent, while domestic private banks are only 2 percent. State-owned banks do not operate on a level playing field with private banks, because they are able to offer government-subsidized interest rates to customers.

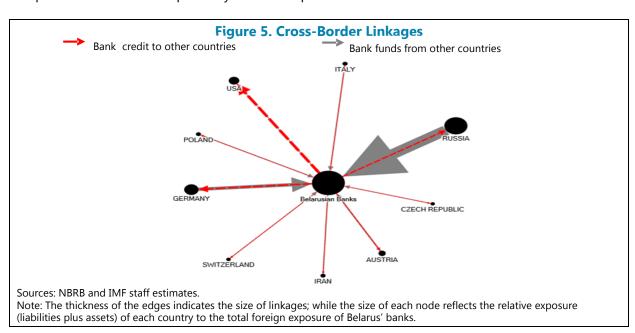
³ Since 2010, households have been unable to obtain foreign currency loans following a NBRB resolution. At present, there are no restrictions on borrowing by corporates in foreign currency, whereas past regulation required them to have foreign currency receivables from non-residents.



6. Banks are strongly interlinked to SOEs. Domestically, banks mainly provide financing to SOEs. The largest source of deposits is households (Figure 4). About 10 percent of interbank funding comes from the domestic market, where the DB plays a small role. Banks hold ownership, funding, and lending links with nonbank financial institutions (insurance, leasing, and microcredit companies). Though small, the interconnections are a channel of risk transmission.



- **Russia**.⁴ The majority of external liabilities are to banks located in Russia, followed by Germany and Austria. Most of the funding comes from parent banks. About 90 percent of these liabilities are interbank loans—over half exceeding a residual maturity of 1 year, while the rest are deposits mainly held in euro. On the asset side, cross-border exposure is mostly denominated in US dollar due to correspondent accounts in the United States, followed by corresponding accounts in euros in Germany (Figure 5).⁵
- 8. The DB, created in 2011 to centralize state-directed lending, has become a sizeable institution. The bank, which does not take private deposits and obtains funding mainly from the issuance of government-guaranteed debt, has grown rapidly to become the fourth-largest institution by assets. It acquired assets originated by two state-owned commercial banks under directed lending programs and is now responsible for about one-third of new directed lending. The DB also acts as an agent for resolving NPLs for the Ministry of Finance.
- **9. The small insurance sector is state-dominated.** Nonlife business accounts for the majority of the insurance sector while life business is only eight percent of the overall insurance business, compared to the world average of around 50 percent. The largest insurers in life, non-life and reinsurance lines of business are all state-owned and comprise 90 percent, 60 percent and 100 percent of the total respectively. Insurance penetration remains low.



⁴ At End-December 2015, Belarus' banks carried exposure to banks in the following countries (ordered by average exposure): Russia, Germany, USA, Austria, Iran, Italy, Poland, Switzerland, Czech Republic, Kazakhstan, Latvia, Turkey, France, Lebanon, Netherlands, Japan, Slovenia, Luxembourg, Belgium, Slovakia, Finland, Denmark, Lithuania, Morocco, Barbados, China, Taiwan, UK, Georgia, Ukraine, Sweden, Armenia, Azerbaijan, Estonia, Norway, Moldova, Libya, Tajikistan, UAE, and Kyrgyz Republic.

⁵ The majority of correspondent accounts are on behalf of clients of the bank who use such accounts for their import and export activities.

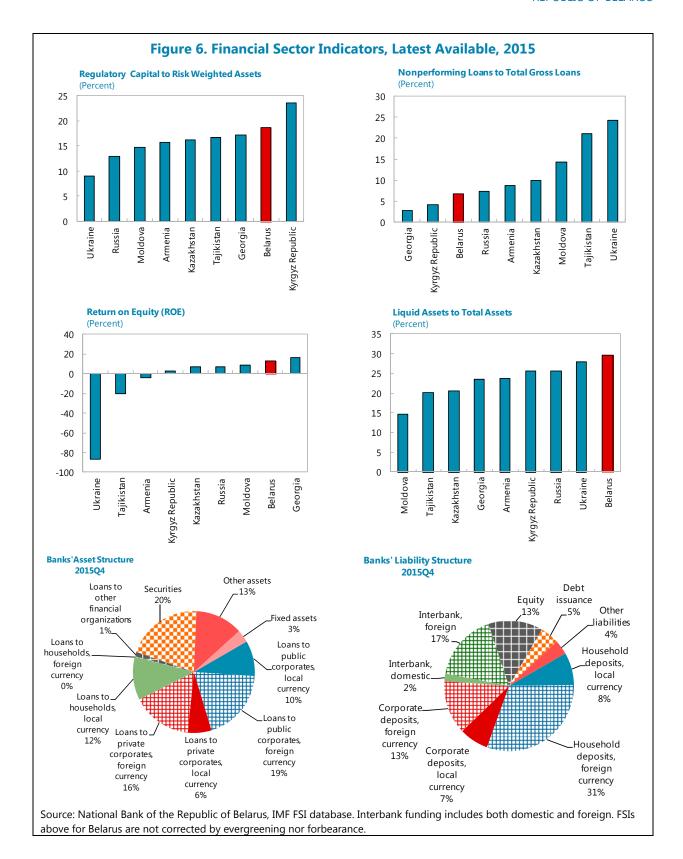
FINANCIAL SECTOR STABILITY

10. Financial sector credit risk has already materialized, while foreign currency liquidity risk is high. In response to the deterioration in the domestic and external macroeconomic environment, banks have faced a significant pickup in NPLs and reduced profitability. While the authorities have injected capital in some systemically important banks recently, some banks may require further capital support in the near-term particularly if risks materialize (See Appendix Table 5 for a Risk Assessment Matrix) and loan impairments are recognized adequately. The highly dollarized banking system also faces a significant mismatch in foreign currencies, which could lead to a liquidity shortage in a crisis situation. Contagion from banks could have adverse consequences for the small insurance sector.

A. Rising Credit and Liquidity Challenges for Banks

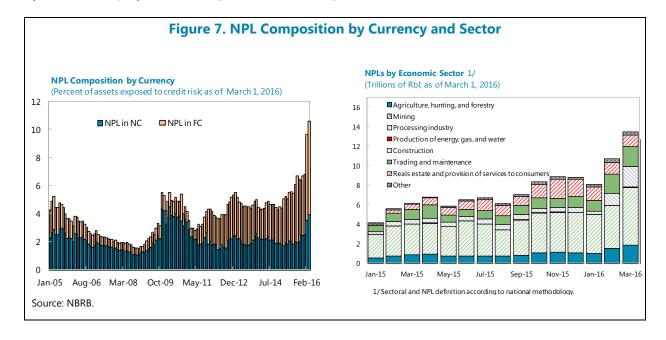
Snapshot

- 11. Banks carry high credit risk exposure to weak-performing SOEs. For the system as a whole, lending to SOEs made up 29 percent of banking assets at end-2015, while claims on SOEs were 55 percent of all banks' claims on the corporate sector. Individual state-owned banks have accumulated higher exposure to SOEs over time partly due to government programs aimed at developing certain economic sectors, such as woodworking or agricultural machinery, for which lending has been frequently subsidized at rates well below the market. At end-2015, loans to SOEs made up most of credit extended. Due to the domestic recession and weaker external conditions the corporate sector is facing difficult operating conditions and lower profits, which are hurting their ability to service debt.
- 12. Although most banks operate within the net open foreign currency limit imposed by the NBRB, they remain indirectly exposed to exchange rate depreciation. Just over 70 percent of banks' deposits, mostly from households, and about 60 percent of loans, mostly to corporates, are in foreign currency (Figure 6). While the net open foreign currency position of the banking system has tightened, credit risks from unhedged corporate borrowers of foreign currency loans have risen. While banks have typically required additional cashflow buffers—often as much as 50 percent more—on such lending, this has not been enough to offset the impact of reduced corporate earnings and the sharp exchange rate depreciation of 40 percent in 2015.



13. Correspondingly, banks' asset quality has fallen sharply and profitability has weakened. Reported banks' NPLs have risen by more than 50 percent during the past year to reach 6.8 percent of gross loans at end-2015 (Figure 7). April data under national standards indicates an even higher pickup in NPLs to over 12 percent. The increase appears to be due to the expiration of an NBRB exemption on the classification of certain state-supported loans at zero risk and moral suasion. Higher NPLs have also led to rising provisioning costs for banks, although they remain inadequate at less than 40 percent of NPLs. At end-2015, banking sector profitability, as measured

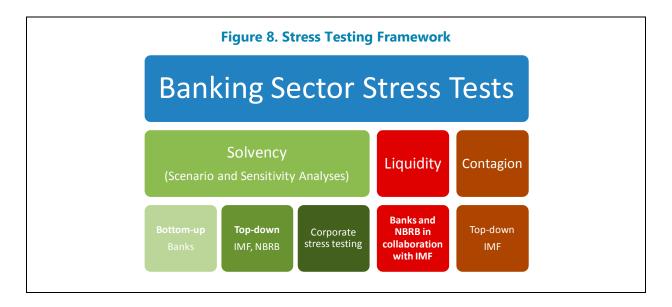
by return on equity, fell to 10.4 percent from 15.3 percent at end-2014.



- 14. Overall banking sector capital has been bolstered but remains under pressure. In part due to capital injections in the three largest banks, the overall banking sector capital adequacy ratio (CAR) reached 18.7 percent at end-2015. Nevertheless, the adequacy of capital buffers is being eroded by rising risk-weights on assets due to higher NPLs and the lesser scope for building capital through retention of profits, as banks' earnings are falling.
- **15.** The highly dollarized banking system faces increasing liquidity challenges in some foreign currencies. System-wide liquidity declined to 26 percent at end-2015 compared with 30 percent a year earlier. The banking system carries a mismatch in liquid assets to cover short-term liabilities in euros and Russian rubles. With a high loan-to-deposit ratio of near 114 percent, liquidity challenges were highlighted during 2015 when the rapid exchange rate depreciation led to a sharp decline in rubel deposits, which were reinvested in foreign currency deposits, causing some banks to tap the central banks' standing and bilateral facilities.

Stress Testing Exercise

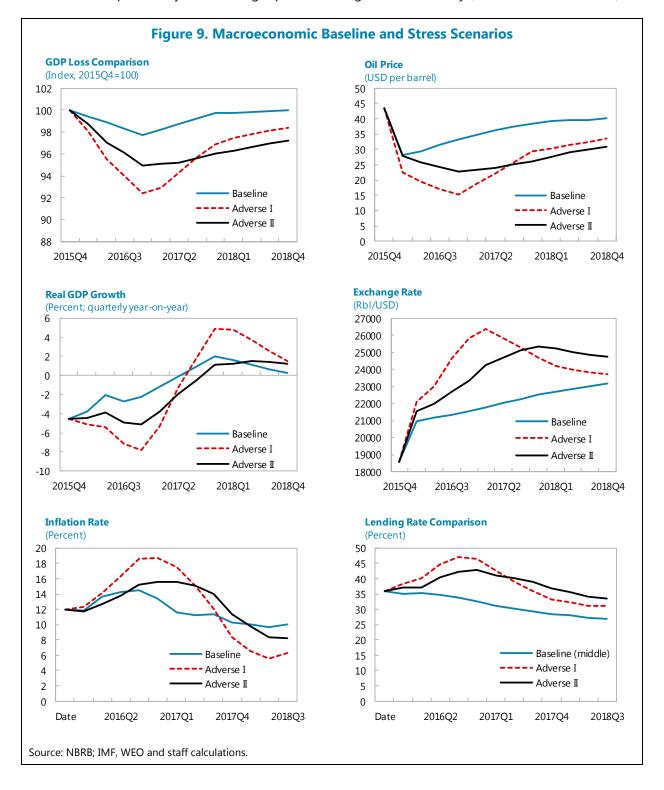
16. The stress testing exercise focused on banks' resilience to solvency, liquidity, and contagion risks (Figure 8 and Appendix Table 6). Solvency stress tests were carried out on both bottom-up (BU) and top-down (TD) basis using dedicated regression-based satellite models or expert judgment over a three-year horizon for the 11 largest banks, accounting for 95 percent of total bank assets, at end-December 2015.⁶ The mission also analyzed banks' exposures to large SOEs to assess their debt servicing capacity. Liquidity stress tests covering all banks were based on liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) proxies as well as a conventional TD liquidity stress test evaluating liquidity mismatches for different buckets of remaining maturity. Contagion risk was analyzed for interbank and cross-border exposures using a network approach.



- 17. The macroeconomic scenarios for banks' stress tests incorporate the risks identified in the RAM (Figure 9, Appendix table 6). These are:
- A baseline scenario based on the IMF World Economic Outlook (WEO) projections as of February 2016, which already implies a certain degree of distress.
- An adverse scenario I (V-shaped) defined by a deep recession in the first year, the result of a sharp decline in the oil price that would affect growth in Russia, followed by a relatively quick recovery (RAM Risks #1 and 3, 4).

⁶ The authorities have carried out TD stress tests semi-annually since 2013 and have conducted BU stress tests on the two largest banks once previously.

 An adverse scenario II (L-shaped) defined by a somewhat milder but longer-lasting shock in combination with a slower recovery, leading to a larger loss in output. The protracted recovery could be explained by continued geopolitical and global uncertainty (RAM Risks #1, 2, 3, 4, 5).



Solvency Tests

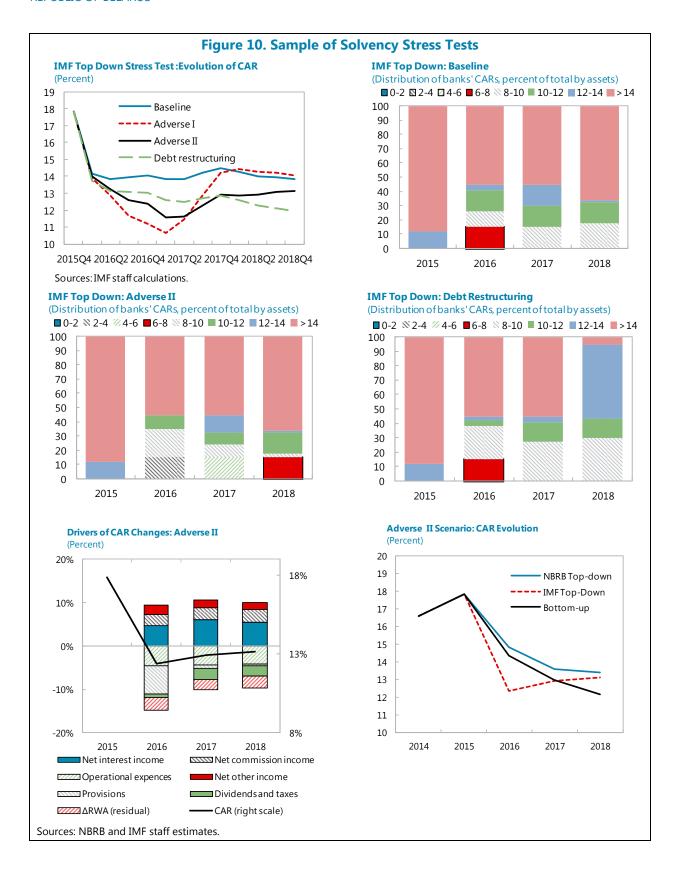
- 18. Credit risk is very high as recent developments and the solvency stress tests confirm.⁷ In the baseline scenario of the mission's TD stress test two large banks likely have an immediate need for recapitalization. Under both adverse scenarios, although the aggregated CAR remains just above the minimum requirement given the recapitalization of three major banks in 2015, five banks (two state-owned) with a combined market share of 42 percent fall below the regulatory minimum rate of 10 percent with a projected capital shortfall at 2017Q1 of 1.1 percent of projected 2017 GDP (Figure 10).⁸ The results of the authorities' TD and BU tests conducted by the banks broadly corroborate these results.
- 19. Hidden losses associated with the lack of recognition of restructured loans are sizable. Corporate stress testing was carried out to adjust for evergreening practices (Box 1). While it is difficult to quantify the impact of these practices, the mission estimated the level of sustainable interest payments for a sample of large SOEs and compared to an earnings measure (EBIT),⁹ leading to the haircut on payments deemed necessary to restore debt service sustainability. This debt service restructuring scenario predicts a projected combined capital shortfall at 2017Q1 of 0.4 percent of projected 2017 GDP. While the same banks fail this test at some point over the projection horizon as under the stress scenarios, more banks see a considerable decline in capital ratios.
- **20. Banks also carry high credit concentration risk.** With regulatory large exposure limits not fully enforced at present due to legacy cases of forbearance, the impact of deteriorating creditworthiness of large clients has a considerable impact on bank solvency (Figure 12). A stress test downgrading the largest 53 state-owned borrowers¹⁰ by one classification category led to a drop in the CAR by 1.7 ppt. A second test assessing a hypothetical outright default of the 5 largest SOEs produced even larger losses with one large bank failing the 10-percent hurdle rate in both tests, and another large, while remaining solvent, experiencing a drop in its CAR of 7½ ppt.

⁷ As a correction to the starting point, the mission subtracted from end-2015 capital of each bank the regulatory deductions under Basel III for that went into effect in February 2016. These deductions lowered the overall CAR by 0.1 percentage point, to 17.8 percent.

⁸ Two other small banks would fall below the minimum required rate plus the capital conservation buffer being phased in, which, at that point, would add another 1.125 percent of RWA to the regulatory minimum.

⁹ EBIT stands for earnings before taxes and interest. For interest payments to be sustainable, EBIT should be at least 1.5 times interest payments—the so-called Interest Coverage Ratio—to safeguard debt service without compromising the performance of the firm. The amount of interest payment reductions was scaled up by the factor 1.9 which results from the share of bank debt of the SOEs in the sample in total SOE bank debt (52.6 percent).

¹⁰ Detailed information on large borrowers, including the classification of the exposures, was made available to the mission only for the 53 of the 106 largest SOEs. According to the NBRB, there is only one private firm among the top 30 corporates in Belarus so that the SOE sample captures the majority of large firms in Belarus quite well.



Box 1. Dealing with Forbearance and Evergreening

The authorities have adjusted the regulatory framework repeatedly with a view to supporting the banking sector in difficult times. Over the past two years, this form of forbearance has included (i) a reduction in the provisioning floor for loans in risk Category II from 10 to 5 percent and Category I from 1 to 0.50 percent; (ii) a reduction in the risk weight of foreign currency government and national bank securities from 20 to 10 percent and for foreign currency loans from 150 to 100 percent; (iii) and suspension until 2019 of the amortization of intangibles from capital to aid banks in capitalizing technological upgrades.

The NBRB imposes prudential loan provisioning requirements, but there are currently no detailed standards establishing when an amendment to a loan agreement must be recognized as a loan restructuring. For example, such standards would address extensions, interest rate reductions and other changes to the terms of a loan. These would also address nonaccrual status, restoring a loan to accrual status or upgrading after being subject to provisioning. The lack of well-defined standards has resulted in uneven treatment across banks and undisclosed restructurings (evergreening), and there is anecdotal evidence that refinancing of problem exposures is preferred to a formal restructuring, particularly since refinancing not resulting in a 10 percent reduction in present value is not considered impaired.

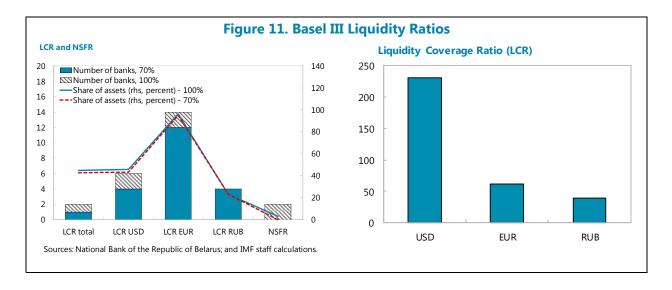
To estimate hidden losses presently masked by evergreening practices, the mission used a sample of large state-owned enterprises to assess how much interest payments would have to be reduced in relation to firms' earnings. This hypothetical exercise led to significant reductions in banks' capital buffers, particularly for those exposed to unprofitable SOEs. Aside from the issue of loan classification most of the 10 largest banks in the system had a provisioning shortfall at end-2014 when compared to loan loss reserves under international accounting standards. In the solvency stress test, the actual provisions were increased by the amount of the individual shortfalls even before applying stress. Moreover, in view of anecdotal evidence of sharply-falling property, and hence, collateral values, the mission also assumed that the coverage ratio (specific provisions-to-NPLs) would need to increase by 10 ppt for every year of assumed stress (i.e., 10 ppt in the Adverse I and 20 ppt in the Adverse II scenario). It should be noted, however, that under local regulation, the value of collateral does not reduce the base for provisioning.

Liquidity Tests

21. Liquidity stress testing reveals significant pockets of vulnerability in foreign currency positions. Both the overall LCR and NSFR suggest ample buffers of 170 and 130 percent respectively. However, there is a short-term liquidity shortfall in individual foreign currencies, which is particularly pronounced in Euro and Russian Ruble positions, where about half the banks reporting such foreign currency exposures show ratios below 100 percent (Figure 11).¹¹ The rising

¹¹ In Russian Ruble, individual LCRs are as low as 3 percent, since some foreign banks invest their funding—largely wholesale financing, including from parent banks—mostly in other currencies or at longer maturities. Given that liquidity reserves in other currencies cannot be easily converted to meet a foreign currency specific funding outflow in a crisis, a systemic liquidity shortage in Russian Rubles cannot be ruled out.

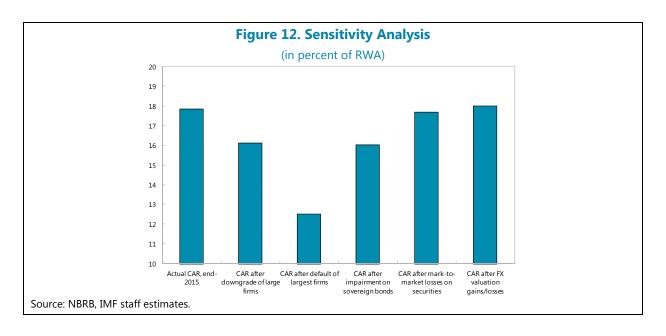
share of foreign currency-denominated domestic government bonds (close to 90 percent of all domestic government issuance) also poses a concern. In an alternative liquidity stress test—assessing mismatches within maturity buckets—the inflow rate on maturing short- and longer-term government bonds was lowered to 50 percent. The results showed that one small and one medium-sized bank did not pass the test. The negative impact would be larger if term deposits were considered revocable.



Other Risks

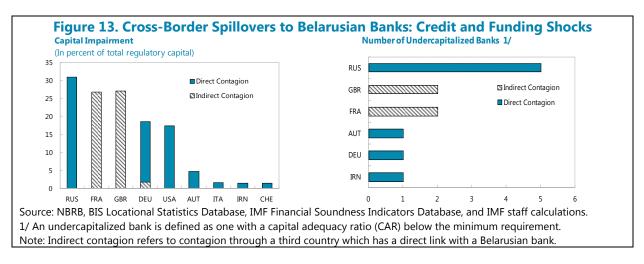
22. Sovereign risk is non-negligible in Belarus. Banks are linked to the government through ownership and exposure to SOEs, but also through rising holdings of Belarusian government bonds, particularly in foreign currency. Banks perceive government bonds increasingly as an attractive alternative to lending in view of falling creditworthiness of borrowers during the ongoing recession, thereby reinforcing the bank-sovereign nexus. To assess banks' exposure in government securities, the average 1-year ahead probability of default associated with Belarus' sovereign rating was applied to banks' sovereign bond positions other than those held for trading.¹² The associated writedowns lowered the system CAR by 1.8 pp (Figure 12).

¹² Belarus is currently rated B- by two international rating agencies and CCC+ by a third one. The mission team therefore obtained the PD corresponding to the rating of each agency and used the average of the three PDs which turned out to be 8.9 percent.



Contagion Analysis

23. Domestic interbank contagion risks appear limited, but direct cross-border contagion risks, particularly from Russia, are large.¹³ The domestic interbank market is small, with loans making up 1.8 percent of banking system liabilities. Network analysis using bilateral exposures of Belarusian banks suggests that the effects (both direct and indirect) on capital adequacy could be sizeable in case of credit and funding shocks from abroad (Figure 13).



B. Insurance Sector Risks

24. The insurance sector is exposed to contagion risk through investments and credit default insurance products. Assets are mainly invested in government bonds and bank deposits

¹³ See "Cross-Border Financial Surveillance: A Network Perspective," Marco A. Espinosa-Vega and Juan Solé, IMF, 2010 (IMF WP 10/105) for the methodology. It analyzes the capital impact on a banking system from its asset and funding exposure to a foreign banking system in the extreme case of default or funding withdrawal.

with state-owned banks. Geographically undiversified credit default insurance could lead to important losses for the sector in an economic downturn. The state monopoly in reinsurance concentrates underwriting risk. Direct foreign currency risks are currently hedged. Under the adverse scenarios of the stress tests, losses averaged over the whole insurance sector appear low, at about 10 percent of market capital. However, some individual life insurance companies could lose over 100 percent of their capital and some individual nonlife companies up to 65 percent.¹⁴

C. Payments System Risks

25. There are legal, liquidity, and operational risks in the interbank payment system.

Although settlement finality and irrevocability of interbank payments is currently protected under an act of secondary legislation, there may be potential legal risks from 'zero-hour rules' in insolvency. In the real-time gross settlement system, the effect could be to reverse payments that have apparently already been settled and were thought to be final. In a deferred net settlement system, such a rule could cause the netting of all transactions to be unwound. Moreover, liquidity needs in the payment system have not been tested against potential stress scenarios, particularly the default of the largest participant and its affiliates. Operational risks following disruptive events can be prolonged with existing recovery time objectives.

D. Prudential and Supervisory Response

- **26.** The authorities took a number of prudential steps to reduce financial sector vulnerabilities in **2015**, but also relaxed some standards. These include: (i) an increase in the minimum capital requirement for all banks to EUR 25 million from EUR 15 million; (ii) tighter limit on banks' net open foreign currency position to 10 percent from 20 percent; (iii) a new class of term deposits, which may not be withdrawn prior to maturity; and (iv) the elimination of a tax exemption on interest income from short-term deposits. On the other hand, some measures related to provisioning, regulatory capital, and risk weightings have relaxed the prudential regulatory framework (Box 1).
- **27. A number of weak banks were closed in recent years.** Four very small banks are in the process of liquidation; two received deposit payouts from the Deposit Insurance Agency (DIA). Eleven other very small banks were in breach of the new minimum capital requirement and the authorities are assessing further steps based on banks' capital plans. Three large state-owned banks were recapitalized in 2015.
- **28.** In May 2016, the supervisory mandate of the NBRB was extended beyond commercial banks to include the Development Bank (DB). The NBRB had been planning to become the sole regulator for banks, insurance companies, securities markets, and the DB in 2016. However, Presidential Decree No. 184 grants additional powers only for DB supervision while the decision on

¹⁴ Haircuts of 50 percent and 25 percent were applied on insurers' deposits with banks, whose CAR were below 10 percent or between 10 and 12 percent respectively.

other sectors has been postponed for a year. The Ministry of Finance remains the supervisor for the insurance sector and securities markets.

SYSTEMIC LIQUIDITY MANAGEMENT

- 29. The main systemic liquidity risk derives from high dollarization of deposits and limited access to foreign currency liquidity. Deposits in foreign currency are 63 percent of the total, of which only 10 percent belong to corporates. The main sources of liquidity are local currency liquid assets and foreign currency-denominated domestic government and NBRB securities, which could face difficulties in being converted to foreign currency cash in crisis situations. At present, banks are facing elevated liquidity challenges as cashflows from their foreign currency loans assets are falling. Currently, all NBRB mechanisms for supplying liquidity to banks are in local currency. Moreover, term deposits can be pre-canceled by depositors at no penalty within five days. All liquidity regulations assume that these term deposits are held to their contractual residual maturity and no adjustment is made for early termination.
- **30.** The NBRB could increase the average reserve requirement for foreign currency deposits to be held in foreign currency accounts. The reserve requirement for all types of deposits is unified at a rate of 7.5 percent and held in local currency. In such a situation, withdrawals of foreign currency deposits could lead to currency risk for banks as they would have to convert liquid assets in local currency into foreign currency at market rates. A differentiated rate would mitigate the higher risks from foreign currency deposits due to the absence of liquidity windows and emergency liquidity assistance (ELA) in foreign currency, and the higher volatility of inflows from foreign currency loans. It would also act as a tax on the financial intermediation in foreign currency, helping—at the margin—to reduce the dollarization of the financial system. The daily fixed maintenance requirement (currently at 10 percent) should also be raised gradually to reduce risks.
- 31. The authorities should strengthen their supervisory assessment of liquidity needs, particularly in foreign currency. Recent measures to distinguish between revocable and irrevocable term deposits and to extend their maturity are a step in the right direction. The new regulatory treatment could have a significant impact on different liquidity indicators. Banks would need to explain clearly the differences between these two type of deposits to their clients. The four prudential liquidity ratios should be recalibrated by currency and compared with the LCR by currency already monitored by the authorities. The authorities should assess banks' ability to convert

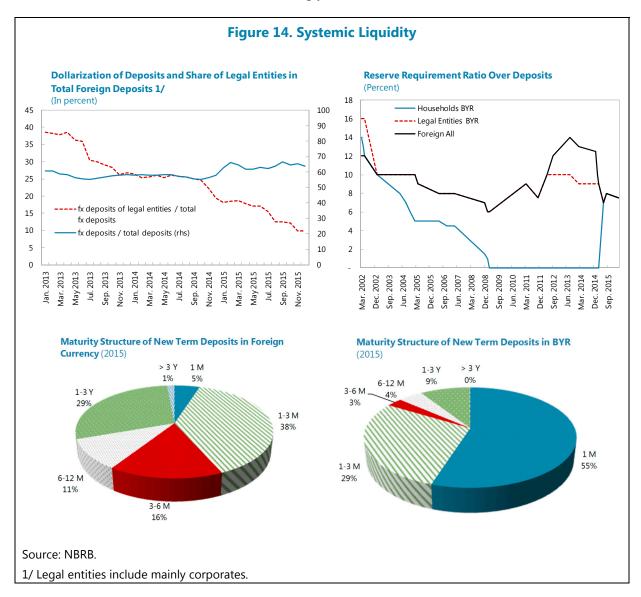
¹⁵ Based on the averaged amount of deposits over the course of December 2015.

¹⁶ The negative capital of the NBRB (5.9 percent of GDP as of December 2014) should not affect its capacity for liquidity sterilization.

¹⁷ Foreign currency term deposits, which represent 84 percent of total foreign currency deposits, have an estimated weighted average maturity of 9 months (Figure 14).

¹⁸ Although these measures have no impact on the level of gross international reserves of the NBRB, they could create some complications on the implementation of the monetary targeting regime of the NBRB, which has the broad money supply as an intermediate target and the RbI monetary base as an operational one. This has to be analyzed in the context of the larger benefits for financial stability from the measures proposed.

foreign currency-denominated domestic government and NBRB securities into foreign currency cash in stress situations and measure needs accordingly.



FINANCIAL OVERSIGHT AND REGULATION

A. Banking Supervision and Regulation: State Dominance

32. Despite significant progress, full implementation of an effective, risk sensitive and intrusive supervisory framework remains a medium term prospect due to state dominance. ¹⁹ A broad framework of regulations, a supervisory process involving offsite and onsite analysis, an

¹⁹ An assessment of the implementation of the 2009 FSAP recommendations is in Appendix II and policy advice of recent Article IV Consultations in Appendix III.

internal capital adequacy assessment process, and an enhanced bank risk assessment grading methodology have been implemented, while the implementation of Basel capital standards is ongoing. Following the recommendation of the 2009 FSAP, the composition of the NBRB Board was modified to remove undue representation of industry or political interests. However, state dominance increases the complexity of achieving risk-based supervision.

- **33.** A system of check-and-balances to ensure NBRB operational independence and accountability needs to be prescribed in law. Banking oversight is constrained by lack of legal and operational independence. The Banking Code states that the NBRB is accountable to the President of the Republic of Belarus who approves and removes the Chair and the statutes of the NBRB. A presidential decree regulates onsite inspections, which require coordination with the State Control Committee, and sets guidelines on the duration and number of annual onsite activities. Another pronouncement sets a limit of 13 regulatory reports to be collected from banks.²⁰ Banking supervision powers are applied for purposes not directly related to banking safety and soundness.²¹
- **34.** The NBRB has the authority and should impose Pillar 2 capital add-ons, and other forward-looking measures, to reinforce capital and prudential requirements. Instead of providing system-wide forbearance by amending regulations, the NBRB could use capital add-ons to address heightened risk due to foreign asset levels at specific banks. Additionally, dividend restrictions could be imposed well before a bank breaches the minimum capital requirement. Currently, the NBRB applies this measure only after breaches of the minimum capital requirement have occurred.
- **35. Risk analysis should be strengthened to include the risks associated with unhedged foreign currency assets.** The current level of risk analysis is deep and will be further enhanced when information technology systems are implemented. However, the high percentage of unhedged foreign currency-denominated assets exposed to credit and liquidity risk reduces the effectiveness of balance sheet liquidity ratios and interest rate GAP analysis. Although banks are required to stress test, a more systematic inclusion of cashflow analysis in balance sheet analysis should supplement the identification of these risks.
- **36. Detailed requirements on restructuring are needed to avoid the understatement of the level of problem loans and evergreening.** Although the NBRB imposes prudential provisioning standards, currently there are neither detailed standards issued by the NBRB for recognition of an amendment to a loan agreement as a restructured loan nor standards for upgrading from a restructured status. Standards should address when extending a loan, re-negotiating interest rates or amending other loan agreement requirements, requires recognition of restructuring. Standards should also address nonaccrual status, restoring a loan to accrual status or upgrading after being

²⁰ Both mandates provide for exceptions, but the hurdles affect efficiency and also result in cumbersome regulatory reporting.

²¹ Approximately 50 percent of onsite special inspections in the past two years were conducted to assist the Prosecutor's Office on criminal cases. Additionally, to enforce a ceiling on lending rates a 30 percent provision is applied to loans exceeding the overnight lending rate.

subject to provisioning. Results of annual external audits disclosed higher IFRS provisions than on NBRB prudential basis in some banks, reinforcing concerns about evergreening and the need of conducting independent asset quality reviews.

37. Although cross-border cooperation with other supervisory authorities is taking place, it should be increased to cover all Belarusian subsidiaries of foreign banks. The NBRB has signed supervisory agreements with 17 countries, including Russia. However, supervisors of EU state members have refused to sign memoranda of understanding, since they can only enter into supervisory cooperation agreements and invite the NBRB to participate in supervisory colleges, after the equivalence of the confidentiality regimes of third-country supervisory authorities has been positively assessed by the European Banking Authority (EBA). In 2015, the EBA finalized a first round of assessments, which did not include Belarus, and announced further assessments within two years.

B. Supervision of the Development Bank

- **38.** The recent transfer of the DB supervision to the NBRB was to achieve more independent oversight. However, the NBRB is not operationally independent. The transfer is regarded by authorities as an improvement over the previous arrangement, in which the DB was supervised by its own board. The current plan is for the NBRB's Banking Supervision Department (BSD) to supervise the DB along with commercial banks with no increase in staffing. The move could expose the NBRB to new and more complex risk to supervise that, if not properly managed, may adversely affect the market perception (reputation risk) of the NBRB.
- 39. The planned institutional arrangements within the NBRB should be revisited to ensure adequate staffing, skills, and functional separation from the BSD. To reduce the negative impact on prudential supervision, training should be provided to prospective DB supervisors on the new type of lending operations to be expected from DB (wholesale lending with credit enhancements, infrastructure financing, export financing, among others), and on the challenges of liquidity management in a bank without customer deposits. Moreover, temporary expertise should be contracted to organize and establish internal procedures. The DB supervision team should report to a different board member (firewalled) than commercial banking supervision.

C. Insurance Supervision and Regulation: Maintaining Stability

40. The insurance supervisor has limited operational independence and suffers from conflicts of interest. There are no explicit procedures regarding the appointment and dismissal of the head of the supervisor and members of its governing body. Moreover, a wide range of supervision decisions go beyond the powers of the Insurance Supervision General Directorate (ISGD) and require the involvement of the Ministry of Finance, which leads to political interference in the performance of supervisory responsibilities. The ISGD has no allocated budget and no discretion in allocating resources in accordance with its mandate and perception of risks. The supervisor faces conflict of interest due to being simultaneously responsible for business development of the insurance sector. When considering changes to the supervisory set-up of the insurance sector, the independence of supervisors and removal of conflicts of interest should guide the decisions.

41. The authorities will need to establish a risk-sensitive capital regime, forward looking supervision, and issue appropriate regulation on governance, internal controls and risk management. Solvency requirements are based on Solvency I. The ISGD has started to assess risk in its supervisory framework, but current offsite supervision is rule-based aiming at compliance with detailed operative regulations rather than risk oversight. This approach to supervision lacks a preventive focus. The ISGD has limited flexibility for onsite inspections, which are regulated at the government level by Presidential Decree. Unscheduled inspections are only allowed under exceptional circumstances. Regulation on minimal requirements on governance and quality and effectiveness of risk management and internal control of insurers is missing.

D. Financial Market Infrastructure: Strengthening Risk Management

- **42. Legal, liquidity, and operational risks need to be managed to prevent potential systemic risks.** Legal risks can be mitigated through the drafting of a new payment services law, which should include provisions for protection of settlement finality, netting, and collateral arrangements. A stress testing program with robust stress scenarios should be established to better monitor potential liquidity risk to the payment system, especially during times of market stress. The business continuity plan should be designed and tested to ensure that critical information technology systems can resume operations within 2 hours following disruptive events. The authorities should consider adopting an integrated approach to cyber resilience.
- **43. Payment systems oversight also needs further enhancement.** The risk management framework should be refined to include all financial market infrastructures, risk-based scenarios, regular testing, material risks from interdependencies, and links with overall central bank governance. There is a need to increase oversight resources. The NBRB should publicly disclose its responses to the CPMI- IOSCO Disclosure Framework and publish an annual report on Financial Infrastructure Oversight.

E. Macroprudential Policy

- 44. The recent creation of a Financial Stability Council (FSC) is a step in the right direction. The FSC will be in charge of monitoring and coordinating measures as well as developing strategies and recommendations aimed at ensuring financial stability. The chairman of the NBRB Board will cochair the FSC with the Deputy Prime Minister, while the Secretary will be in charge of the Financial Stability Department of the NBRB. The participation of the MoF and the Ministry of Economy (MoE) aims to ensure more commitment from these institutions regarding financial stability, considering their roles in state owned firms and insurance companies.
- **45. However, the FSC mandate should be tightly defined**. It is recommended that the NBRB takes full leadership in the FSC and be designated as the macroprudential authority. Given the absence of formalized crisis management coordination framework, a dedicated subcommittee should be established under the FSC to be responsible for crisis coordination arrangements distinct from the macroprudential policy framework. The membership of the crisis management

subcommittee should also include the Deposit Insurance Agency (DIA). This subcommittee could evolve into a separate full-fledged committee over time.

- **46.** While several macroprudential measures have been designed and implemented, they have been modified frequently in recent years. Macroprudential measures that have been implemented include: (i) the capital conservation buffer, (ii) net open foreign currency position limits, (iii) development and monitoring of the LCR, countercyclical capital buffers, and (iv) the identification and classification of systemic banks. However, some measures have been tightened or relaxed frequently, while others have deviated from international standards. No information is collected on foreign currency exposure of borrowers, Loan to Value or Debt to Income ratios of debtors, and no capital surcharge has been set for banks identified as systemically important.
- **47. Specific macroprudential measures could be defined to complement macroeconomic policies for the de-dollarization of the financial system.** Apart from the aforementioned increase in reserve requirements for foreign currency deposits, additional measures could include increases in risk weights of banking sector exposures to unhedged foreign currency debtors, and standardization of the minimum sensitivity analysis for banks on such exposure.²²

F. AML/CFT Regime

48. The Republic of Belarus should address the two remaining issues from the last assessment for compliance with the AML/CFT standard by the Eurasian Group for Combating Money Laundering (EAG) in 2008. It was rated "Non-Compliant" or "Partially Compliant" with 29 of the 49 recommendations, including 8 recommendations considered "core" or "key." In 2014, deficiencies identified in six of the "core/key" recommendations were reported to have been addressed, but two related to (i) the freezing and confiscation of terrorist assets; and (ii) international cooperation in combating terrorist finance were still in place. These latter two deficiencies remain operative to date. The Republic of Belarus is planning for its next assessment in October 2018. The new standard focuses on both the effective implementation of the system and the extent to which it adequately addresses the specific country's ML/FT risks.²³

DIRECTED LENDING AND NPL RESOLUTION

49. State-directed lending should be consolidated in the DB and gradually phased out. This would happen by not extending new loans and allowing the existing stock to mature. The DB should become the principal agent of directed lending, while state banks should increasingly

²² See also Staff Guidance Note on "Macroprudential Policy—Detailed Guidance on Instruments," E. Nier et al, International Monetary Fund, November 2014 (paragraphs 104-111).

²³ Proving effective implementation usually requires the presentation of comprehensive statistics that show that ML/FT intelligence reporting, investigations, prosecutions, convictions, and confiscations are all occurring at an appropriate level for the country. Demonstrating that the authorities are aware of and are addressing their country-specific Money Laundering (ML)/Financing of Terrorism (FT) risks is usually based on a national-level AML/CFT risk assessment.

operate on commercial terms to reduce fiscal costs and increase their public value and competitiveness. The DB should focus on a viable development finance agenda not served by commercial banks and strengthen its governance, risk management, and supervision. Its increased role in development finance warrants no more NPL transfers to the DB.

- **50.** There is a need to take a holistic view for handling the NPLs in Belarus. The resolution of public sector NPLs, either within the banks or outside, should go together with comprehensive restructuring policies for SOEs. Fragmented initiatives in the absence of a comprehensive vision on the future of the SOEs as a part of the economic restructuring policy may result in high fiscal cost and delayed transformational impact.
- **51.** There are strong merits for delegating NPL resolution to a single entity with powers for comprehensive SOE restructuring and privatization efforts. This entity should also have access to a broad range of instruments (including asset divestment, change management, debt/equity swaps) under clear time bound qualitative and quantitative objectives. Involving external private sector expertise on debt resolution and corporate restructuring, including by outsourcing the workout and restructuring tasks to experienced professional assets managers and consulting firms, would be a welcome step. These efforts should be complemented by drastic changes in incentive structures by removing blanket government guarantees and improving credit risk management and governance in all state-owned banks. Resolution of private sector NPLs should rely on private sector solutions through enhanced framework for bankruptcy and enterprise restructuring, and debt foreclosure.

FINANCIAL SAFETY NETS

A. Institutional Arrangement, Coordination, and Contingency Planning

52. The NBRB should be designated as the bank resolution authority. While the NBRB is the de facto resolution authority, it has no explicit responsibility for that function. It will need to be adequately staffed and held accountable in the exercise of its powers. A small, dedicated, full-time unit responsible for resolution planning should be established within the NBRB. The law should also address legal protection for professionals involved in bank resolution.

B. Corrective Action Arrangements

53. The NBRB may impose a variety of early intervention measures on banks under a range of circumstances, but the list of corrective actions should be expanded. The available measures include the ability to force a bank to cease certain operations, restrict dividend payouts, require additional reserves for losses, remove executive directors or board members, scale down or cease certain operations, establish adequate reserves for losses, increase capital, among others. The list of measures should also include the powers to force the bank to sell its assets, appoint (and not only remove) high-level managers, and require changes to bank operations and structure in order to facilitate pre-positioning for resolution. When the solvency or liquidity of a bank is jeopardized, the temporary administrator should be able to assume the powers of the shareholders' assembly.

54. The NBRB should require banks to prepare recovery plans and undertake periodic testing. Recovery plans should start with the development of early warning triggers and cover liquidity and capital management during the times of financial stress. Banks' contingency plans should be evaluated as part of individual bank supervision, for which the NBRB can provide written quidance.

C. Emergency Liquidity Assistance

- **55.** The NBRB is empowered to act as lender of last resort, but the rules for doing so are insufficient. The NBRB provide temporary liquidity to banks in local currency at its discretion. There are currently two separate regulations which allow the NBRB to go beyond the maturity and collateral pool accepted for standard liquidity operations. Nevertheless, the regulatory framework for ELA is insufficient because it does not set as conditions the solvency of a bank or charge excessive rates compared with standard liquidity facilities and its collateral requirements are inadequate.
- **56. The existing facilities need to be reformed.** Banks that receive ELA should be solvent but have exhausted their eligible collateral for interbank and central bank liquidity providing operations. ELA could be provided against a broad range of collateral at penalty rates and subject to ongoing conditionality of solvency, capital adequacy and viability as well as further restrictions on business activities.²⁴ The existing long-term non-standard liquidity facilities for banks should be abolished. Strong policy measures should be introduced to reduce the risk of banks' foreign currency liquidity needs before considering ELA in foreign exchange, given the limited international reserves.

D. Resolution Regime

- **57. The legal framework provides few options for bank resolution and liquidation.** The NBRB can appoint a temporary administrator, declare a bank insolvent, and commence liquidation procedures. In recent bank failures, the authorities have had to rely on liquidation as the only available resolution method. The DIA has been appointed as liquidator in some of these cases. The NBRB has also participated in the acquisition of an insolvent bank and carries a stake in another. These stakes should be divested to avoid conflict of interest with the NBRB's role as supervisor.
- 58. The NBRB needs an effective set of resolution tools to act as a resolution authority. The NBRB does not possess important resolution tools, including powers for purchase and assumption (P&A) transactions, to create a bridge bank and to recapitalize and temporarily fund a systematically important bank. Moreover, the Law on Bankruptcy only allows the NBRB to file for bankruptcy of a failed bank at court when it is the creditor of the bank. Powers for allocating banks' losses to shareholders and creditors are missing. The NBRB as the de facto resolution authority has

²⁴ The authorities have made some progress in drafting a new regulation along these lines, but further improvements are needed.

yet to initiate institution-specific resolution planning, at least for all the systemic banks. The NBRB has no specific crisis resolution related arrangements with their respective foreign counterparts.

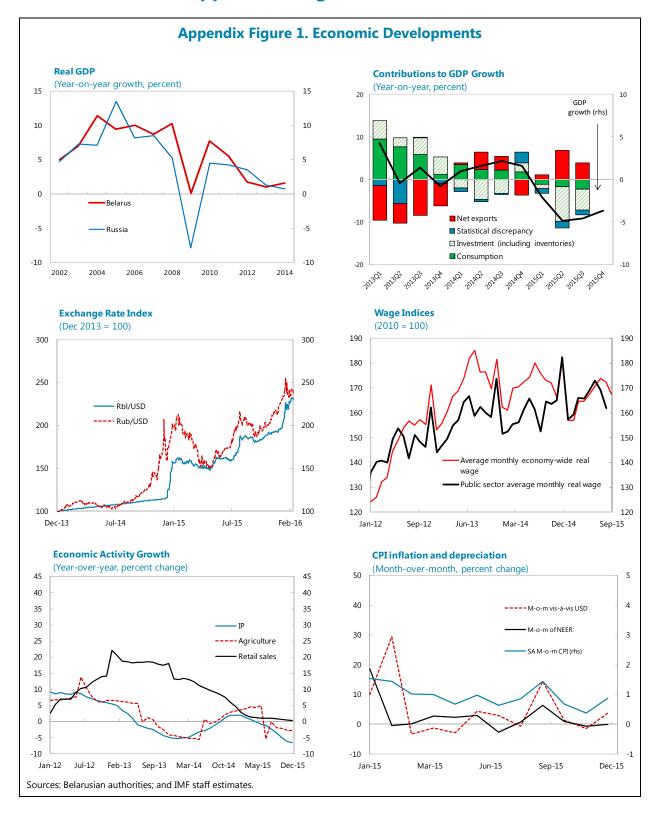
59. There is no resolution funding institutionalized in the government finances. There are no contingent lines of credit with international banks or other financial institutions to draw on during financial crisis. The FSC should discuss options for resolution and propose contingency plans for crisis situations. The DIA should be able to provide funding for P&A transactions based on a least cost rule and ensure that depositors keep access to their funds. Over time, the financial safety net could be broadened by establishing a resolution fund, financed by the banks, for open bank assistance.

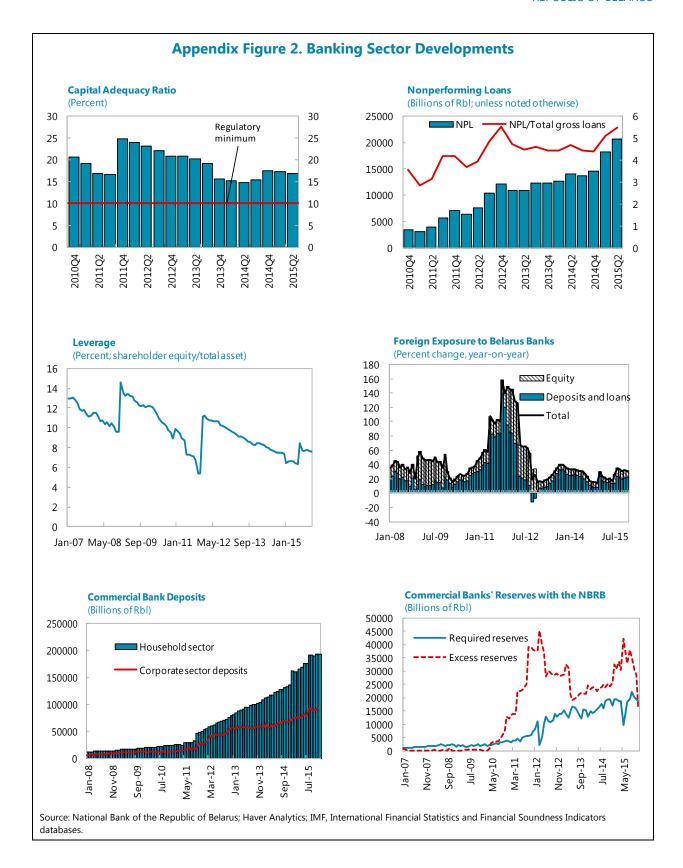
E. Deposit Insurance Scheme

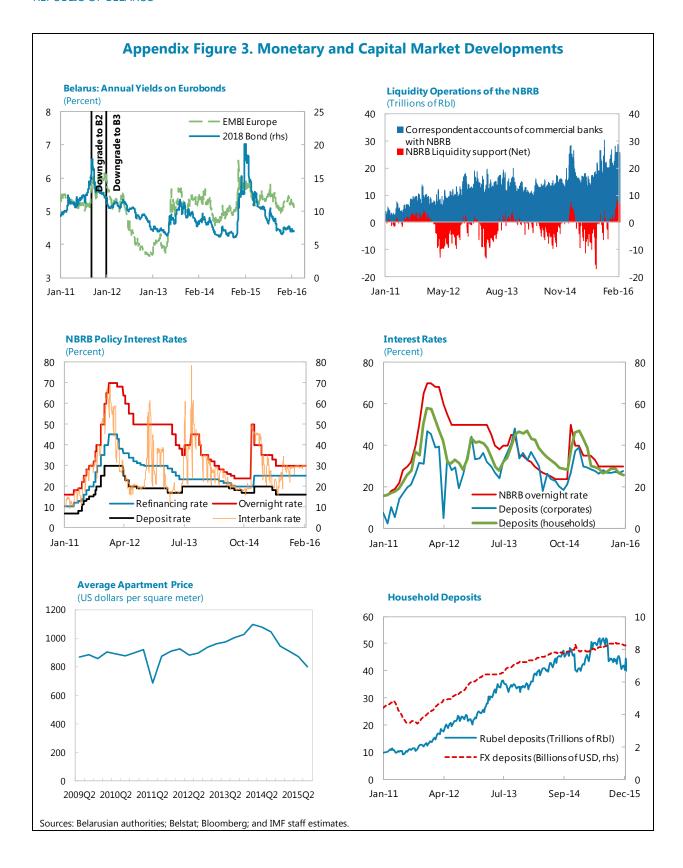
60. The DIA is a relatively well-developed deposit insurance system, but should limit the coverage and shorten the payout period in line with international standards over time. It fully covers all deposits of individuals (not corporates) regardless of currency. A transition task force should determine a credible level of coverage and develop a transition strategy and timeline. A recent payout served as a test case showing that the DIA is able to fulfill its functions. The agency regularly conducts stress tests of its own systems and performs on-site visits of member banks together with NBRB. Other recommendations include the following: (i) the use of NBRB's profits to strengthen the DIA's reserve should be abolished; (ii) the payout period should be reduced to seven working days over time; (iii) the DIA and its staff should have legal protection when carrying out their activities; and (iv) the DIA should seek membership in the International Association of Deposit Insurers (IADI) in order to ensure compliance with international best practice.

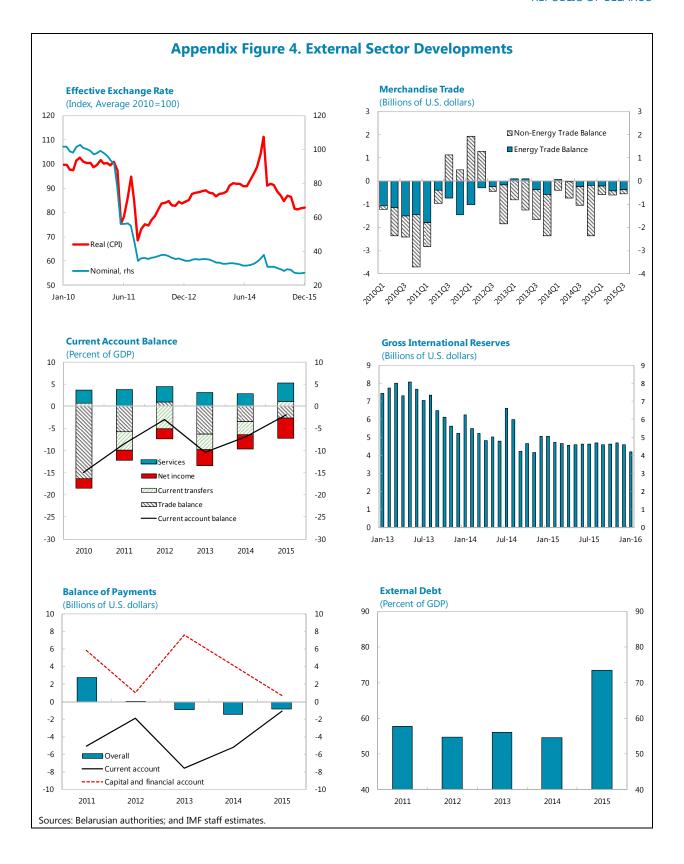
²⁵ Correspondingly, the DIA will need to inform the public regarding its move to the future level of coverage.

Appendix I. Figures and Tables









	2013	2014	2015	2016	2017	2018
			Prel.		Proj.	
		(1	Percentage	e change)		
National accounts						
Real GDP	1.0	1.6	-3.9	-2.7	0.4	0.9
Total domestic demand	8.6	-0.7	-7.6	-3.0	0.0	0.7
Consumption	8.3	3.3	-4.3	-1.9	0.6	1.2
Nongovernment	10.8	4.4	-4.8	-2.1	0.8	1.5
Government	-2.1	-1.9	-1.5	-1.0	-0.6	-0.3
Investment	9.3	-8.4	-14.5	-5.7	-1.4	-0.5
Of which: fixed	9.6	-8.9	-15.2	-6.0	-1.5	-0.5
Net exports 1/	-6.6	1.3	5.0	0.8	0.4	0.0
Consumer prices						
End of period	16.5	16.2	12.0	14.5	11.3	10.1
Average	18.3	18.1	13.5	13.6	12.1	9.9
GDP deflator	21.2	18.1	16.2	14.6	11.5	9.6
Monetary accounts						
Reserve money	13.4	13.8	14.9	15.7	12.4	12.2
Rubel broad money	15.5	14.5	-0.4	19.0	14.7	12.3
	(Pe	ercent of G	iDP, unless	otherwise	indicated)	
External debt and balance of payments						
Current account balance	-10.4	-6.9	-3.8	-3.5	-3.1	-3.2
Trade balance	-6.3	-3.5	-2.7	-4.5	-3.9	-3.9
Exports of goods	50.0	46.5	47.5	38.7	40.5	41.7
Imports of goods	-56.3	-50.0	-50.2	-43.2	-44.4	-45.6
Gross external debt	54.2	52.6	70.1	85.2	78.8	73.9
Public 2/	22.5	23.1	31.9	35.8	34.2	32.5
Private (incl. state-owned-enterprises)	31.7	29.5	38.1	49.4	44.6	41.3
Net IP	-53.5	-58.1	-82.6	-97.5	-92.5	-90.1
Savings and investment						
Gross domestic investment	39.3	33.5	34.0	35.2	34.5	34.5
Government	6.5	5.1	4.0	5.8	6.7	7.0
Nongovernment (incl. SOEs)	32.8	28.4	30.1	29.3	27.8	27.4
National saving	28.9	26.6	32.1	31.7	31.5	31.3
Government 3/	1.0	2.4	2.5	-0.6	-0.4	3.9
Nongovernment 3/	27.9	24.2	29.5	32.3	31.9	27.4
Public sector finance						
General government balance (incl. SPF)	0.1	1.6	1.7	-0.8	-2.0	-2.7
Augmented general government balance 4/	-7.7	-3.9	-0.2	-0.6	-1.2	-1.5
Overall balance (program def.) 5/	-0.6	1.3	-2.8	-6.5	-7.1	-3.1
Gross public debt and government guaranteed debt 6/	38.7	40.4	59.9	69.5	68.9	66.8
Of which: Public guarantees	11.4	11.2	18.2	17.3	14.0	13.0
Memorandum items:	73	70		40	40	F2
Nominal GDP (billions of U.S. dollars) Nominal GDP (trillions of rubels)	73 649	76 778	55 870	46 970	49 1,086	52 1,200
Terms of trade, percentage change	1.0	-1.4	1.1	-4.9	0.0	-0.1
Real Effective Exchange Rate ("-" denotes a depreciation)	8.0	-1.4 8.6	-10.8		0.0	
Nominal Effective Exchange Rate ("-" denotes a depreciation)	-5.2	-3.8		-6.0 -12.8	-6.6	0.0 -5.7
			-12.4			
Official reserves (billions of U.S. dollars)	6.7	5.1	4.2	3.7	3.2	3.0
Months of imports of goods and services	1.8	1.9	1.7	1.7	1.4	1.2
Percent of short-term debt	44.3	37.2	35.4	31.4	27.2	24.9
Quota (2010): SDR 386.4 million (589.7 million U.S. dollars)						

Sources: Belarusian authorities; and IMF staff estimates.

^{1/} Contribution to growth.

^{2/} Gross consolidated external debt of the public sector (central bank and general government debt including publicly guaranteed debt).

^{3/} The reduction in government saving and a corresponding increase in nongovernment saving include bank recapitalization and layouts

^{4/} The augmented balance adds to the balance of the general government outlays for called guarantees of publicly guaranteed debt.

Includes new net directed lending (incl. val. effect), excludes oil export duties from Russia; and external interest payments.

^{5/} Includes general government and off balance sheet operations.

^{6/} Consolidated debt of the public sector (central bank and general government debt including publicly guaranteed debt).

Appendix Table 2. Financial System Structure, 2005-2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of entities											
Banks	30	28	27	31	32	31	31	32	31	31	26
Domestic state-owned	6	5	5	5	4	4	4	4	4	5	5
Foreign-owned	18	16	17	20	23	23	23	23	22	20	16
Domestic private-owned	6	7	5	6	5	4	4	5	5	6	5
Development Bank							1	1	1	1	1
Insurance companies	26	23	23	24	24	24	25	25	25	24	24
Life	5	4	4	4	4	4	4	4	4	4	4
Non-life	21	19	19	20	20	20	21	21	21	20	20
Microcredit organizations											106
Stock exchanges	1	1	1	1	1	1	1	1	1	1	1
Licensed brokers	106	67	58	63	72	70	73	75	73	69	63
Financial system assets (in billions of rubels)											
Banks	20519.8	28994.4	41690.2	63379.8	83275.4	127537.2	259406.4	321240.2	395163.5	481530.8	630463.3
Domestic state-owned		23037.7	31909.4	49154.1	60028.3	91481.5	168350.5	209831.8	254086.4	313630.9	410198.7
Foreign-owned		4168.8	9221.9	13248.1	22275.6	34758.0	88103.6	108151.7	137177.2	161766.2	207032.4
Domestic private-owned		1787.9	558.9	977.6	971.5	1297.7	2952.3	3256.8	3899.8	6133.7	13232.2
Development Bank							15909.1	25664.1	33790.1	40365.5	53826.1
Insurance sector	450.7	614.5	829.6	2131.3	2897.9	3215.6	5115.6	14332.7	18359.4	21119.1	25178.1
Life	54.3	79.3	112.2	166.6	230.4	325.9	554.8	909.7	1487.5	2091.4	3232.6
Non-life	396.4	535.2	717.4	1964.7	2667.5	2889.8	4560.7	13423.1	16871.9	19027.7	21945.6
Leasing companies										24532.6	37911.9
Microcredit organizations											195.4
Employment (in thousands)											
Banks	45.8	47.0	48.7	52.2	52.1	52.7	53.2	53.5	53.4	54.2	53.1
Development Bank							0.0	0.0	0.1	0.2	0.3
Insurance companies (life and nonlife)	4.4	4.5	4.8	8.0	8.4	8.7	8.9	9.0	9.1	9.3	9.2
Leasing companies										1.8	1.9
Microcredit organizations Stock exchanges		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
•		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Assets as percent of GDP	0	00.5	40.5	40.0	00.0		07.0	00.0	00.5	04.5	70 -
Banks	31.5	36.6	42.9	48.8	60.6	77.5	87.3	60.6	60.9	61.9	72.5
Development Bank							5.4	4.8	5.2	5.2	6.2
Insurance companies (life and nonlife)	0.7	8.0	0.9	1.6	2.1	2.0	1.7	2.7	2.8	2.7	2.9
Leasing companies Microcredit organizations										3.2	4.4 0.0
WIGOGIEGII OLYANIZALIONS			***				***	•••			0.0

Sources: National authorities.

Appendix Table 3. Financial Soundness Indicators of the Banking System

	2010	2011	2012	2013	2014		2015Q4		201
	Dec.	Dec.	Dec.	Dec.	Dec.	Domestic state- owned	Foreign- owned	Domestic private- owned	Dec
Capital adequacy									
Regulatory capital to risk-weighted assets	20.5	24.7	20.8	15.5	17.4	19.7	16.7	25.4	18.
Regulatory Tier 1 capital to risk-weighted assets	16.4	20.4	16.2	11.5	12.9	17.4	10.0	18.1	14.
Asset composition and quality									
Nonperforming loans net of provisions to capital	12.4	11.8	17.6	14.0	14.6	19.2	24.9	23.0	21.
Nonperforming loans to total gross loans	3.5	4.2	5.5	4.4	4.4	5.5	9.6	10.5	6.
Provisions to nonperforming loans						35.9	45.2	35.6	39.
Sectoral distribution of loans									
Total gross loans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
Residents	99.8	98.4	99.6	100.0	99.6	99.5	99.6	99.8	99.
Deposit-takers	2.4	3.4	1.9	1.6	2.2	1.4	1.4	8.3	1.
Central bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Other financial corporations	1.3	1.6	1.4	1.1	1.1	2.1	1.2	0.9	1
General government	1.1	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.
Nonfinancial corporations	70.8	72.7	77.2	77.3	77.5	75.4	87.7	58.4	79
Other domestic sectors	24.2	20.0	19.0	19.9	18.8	20.6	9.3	32.3	17
Nonresidents	0.2	1.6	0.4	0.0	0.4	0.5	0.4	0.2	0
Profitability									
Return on assets	2.1	2.1	2.2	2.3	2.1	0.6	2.6	3.4	1
Return on equity	14.6	19.1	14.8	16.2	15.3	4.9	21.6	11.9	10
Interest margin to gross income	41.9	10.7	14.8	11.2	9.9	8.8	13.2	16.0	10
Noninterest expenses to gross income	78.5	94.2	92.0	92.9	94.5	98.1	92.9	95.6	96
Liquidity									
Liquid assets to total assets	30.3	40.5	33.2	30.0	29.7	21.8	33.5	46.3	26
Liquid assets to short-term liabilities	97.5	127.8	96.3	89.6	89.9	60.7	109.4	99.9	75
Market risks									
Net open position in foreign exchange to capital	-1.2	5.5	9.2	11.3	9.1	4.0	5.0	6.7	4
Other indicators									
Capital to assets	13.6	14.0	14.4	14.0	13.3	13.1	11.9	19.7	12
Large exposures to capital	119.9	153.4	109.6	127.6	140.7	186.7	217.9	95.6	193
Foreign exchange loans to total loans	•••			51.3	52.3	49.5	76.4	45.5	58
Foreign exchange liabilities to total liabilities				63.5	63.3	68.2	86.4	64.8	74
Personnel expenses to noninterest expenses					6.1	5.1	5.7	10.0	5
Customer deposits to total (noninterbank) loans					81.1	91.9	78.3	95.7	87
Gross asset position in financial derivatives to cap						8.8	4.1	0.4	7
Gross liability position in financial derivatives to ca						0.0	1.5	0.0	0
Residential real estate loans to total gross loans						18.8	1.3	0.1	12
Commercial real estate loans to total gross						1.8	3.3	1.5	2.

Appendix Table 4. Financial Soundness Indicators of the Non-Banking System

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	201
					(In perce	nt, unless o	therwise sta	ited)			
Insurance sector											
Non-life											
Capital adequacy	262.4	200.4	206.0	645	565	647	040	20.2	547	56.0	
Net premium as percent of capital	362.4	266.4	206.8	64.5	56.5	64.7	84.8	38.3	54.7	56.8	57.
Capital as percent of total assets	30.3	35.4	41.2	69.5	69.2	67.1	57.3	78.7	66.8	62.1	59.
Asset quality											
Debtors as percent of gross premium and reinsurance recoveries	5.2	7.1	6.0	4.3	5.1	5.8	5.7	5.6	24.6	27.0	30.
Securities as percent of total assets	36.4	29.3	31.0	15.2	8.9	57.9	40.4	67.8	55.5	49.4	45.
Yield of investments	8.1	7.7	7.5	7.7	11.1	10.8	10.0	13.7	14.9	12.2	12.
Reinsurance and actuarial issues Risk retention ratio (net premium as percent of gross premium)	93.5	93.5	94.5	94.4	92.7	92.6	92.3	91.5	88.8	93.2	91
Net technical reserves as percent of average of net claims paid in last three years	131.7	122.0	117.0	112.8	104.9	89.8	144.5	138.0	178.0	192.2	171
Net technical reserves as percent of average of net premium received in last three years	51.5	52.6	54.8	55.2	55.3	50.4	81.6	71.7	82.6	85.5	82.
Claims performance ratio	31.3	32.0	34.0	33.2	33.3	30.4	01.0	71.7	02.0	05.5	02.
Claims outstanding as percent of total claims paid	15.8	12.7	13.0	14.0	15.2	10.3	18.4	18.5	20.0	25.3	18.
Management soundness											
Gross premium as percent of number of employees (millions of rubels)	108.7	122.6	137.2	118.4	137.3	158.5	277.1	504.5	786.0	795.5	914.
Assets per employee (total assets/number of employees) (millions of rubels)	92.5	121.5	152.1	249.3	325.4	338.2	526.5	1,529.9	1,909.9	2,364.6	2,447
Liquidity											
Liquid assets as percent of current liabilities	108.7	119.6	140.5	139.3	133.9	299.8	232.3	131.2	123.2	177.0	131.
<u>Life</u>											
Capital adequacy											
Capital as percent of total assets	17.6	11.4	6.5	10.9	10.1	12.6	15.8	32.5	35.4	15.4	14.
Capital as percent of technical reserves	22.1	13.1	7.4	12.8	11.9	15.5	24.0	53.2	60.8	18.9	17.
Asset quality	2 425 4	470.0	1 477 5	7.420.5	4010.6	2 505 4	1.572.2	10100	2.525.6	7.562.1	25.552
Debtors as percent of gross premium and reinsurance recoveries)	3,425.4	470.2	1,477.5	7,430.5	4,019.6	3,505.4	1,573.3	1,010.0	3,525.6	7,563.1	25,553.
Securities as percent of total assets	72.4	51.2	43.4	39.0	36.7	4.8	10.1	13.2	23.6	40.8	50.
Yield of investments	9.7	7.9	8.1	9.4	9.8	11.0	18.3	25.8	24.3	16.2	18.
Reinsurance and actuarial issues											
Net technical reserves as percent of average of net premium received in last three years	318.0	329.6	364.7	395.3	416.0	424.6	443.0	418.2	375.9	485.2	539.
Coverage ratio (assets as percent of liabilities)	121.8	113.4	107.5	111.7	111.5	114.9	126.8	148.8	155.7	118.6	116.
Management soundness											
Gross premium per employee (millions of rubels)	319.5	347.7	393.7	399.2	387.9	404.9	428.0	838.3	1,510.9	2,121.8	2,840.
Assets per employee (millions of rubels)	848.3	1,016.8	1,352.3	1,388.3	1,467.6	1,671.2	2,201.7	3,609.7	6,046.7	9,420.7	15,768.
Liquidity											
Liquid assets as percent of current liabilities	119.8	108.6	104.3	106.5	108.3	113.4	138.9	136.4	135.7	142.0	80.
Sensitivity to market risk											
Unrealized gains as percent of losses (millions of rubels)	1,740.4	1,362.3	2,581.7	5,000.6	12,023.4	14,528.7	58,718.5	127,724.3	218,311.5	209,647.0	79,326.
Market solvency margin ratio											
Surplus capital as percent of required capital	552.1	326.7	185.6	318.9	296.4	386.4	599.0	1,318.8	1,506.3	461.7	437.
Life and nonlife solvency status (number of institutions)				0-0.0				_,	_,		
Actual solvency margin/minimum : <100 %	2	1	1	0	0	1	0	0	0	0	
Actual solvency margin/minimum : 100-110 %	1	2	1	2	3	0	0	0	0	0	
Actual solvency margin/minimum : 100 110 % Actual solvency margin/minimum : 110-125 %	1	2	2	2	1	4	0	1	1	1	
Actual solvency margin/minimum : 110-123 % Actual solvency margin/minimum : 125-150 %	2	1	5	0	1	0	2	1	0	1	
* *	23	19		20	19	19	23	23	24	20	1
Actual solvency margin/minimum :>150 %	23	19	14	20	19	19	23	23	24	20	1
•											
Corporate sector	20.0	24.2	240	20.5	47 :	40.0				7, -	
Total liabilities as percent of equity	29.8 8.9	31.3 9.2	34.9 8.8	38.5 16.5	47.4 12.3	49.2 13.7	55.7 24.9	54.3 26.9	62.1 11.7	74.6 11.2	
Profitability (Return on equity)	10.8	12.8	11.3	64.0	43.3	35.4	65.4	70.1	36.7	36.2	27.
Debt service coverage Net foreign exchange exposure as a percentage of equity	-5.3	-6.0	-7.9	-7.5	-10.3	-9.4	-15.8	-14.7	-18.2	-21.3	27.
Number of applications for protection from creditors	1,360.0	1,857.0	2,075.0	1,957.0	1,400.0	1,486.0	0.0	1,557.0	1,648.0	1,994.0	
Household sector											
Debt as a precentage of GDP	5.0	6.9	8.2	9.7	11.6	13.8	10.8	7.6	8.3	8.1	
Debt service burden (includes interest and principal) as a percentage of total disposable income	2.0	4.1	5.5	6.1	4.8	5.2	8.9	6.9	6.8	7.5	-
Pool astata sastan											
Real estate sector House price inflation (price per square meter, thousands of rubels)					2457.9	2701.8	7590.8	8026.3	9773.3	11190.3	
riouse price irriation (price per square meter, thousands of rubers)	***		***		2437.9	2/01.8	7390.8	0020.3	3//3.3	11190.3	

	Appendix Table 5. Risk	Assessment Matrix
Nature/Source	Overa	all Level of Concern
of Main	Likelihood of Severe Realization of	Expected Impact on Financial Stability if Threat is
Threats	Threat in the Next 1–3 Years	Realized
	(high, medium, or low)	(high, medium, or low)
1. Protracted slowdown in growth in Russia or globally due partly to low or falling energy prices. 26	 High/Medium Slower growth in Russia would produce negative spillovers through trade, financing, and remittances. Russia is the largest trade partner with 41 percent of all exports and 32 percent of imports; accounts for 59 percent of total FDI; and provides energy subsidies of over 10 percent of GDP. Russian banks' assets in the Republic of Belarus account for over two-thirds of the total for foreign banks, and nearly 25 percent of the overall banking system. Price volatility may increase due to uncertainty about the persistence of the oil supply shock and the underlying drivers of the price decline. Supply factors would reverse only gradually and weaker demand may lead to persistently low prices. Sanctions on Russia could last longer than anticipated. 	 High Reduced exports, especially to Russia, or falling remittances would lead to slower overall growth and could lead to a pickup in banks' NPLs from households and private corporates. In turn, this would require more provisioning by banks, reducing profits and weakening prospects for building capital buffers. Fiscal support from Russia could be adversely affected, which would increase the size of alternative financing required by the government. A related slowdown in Russia could have an adverse banking sector impact on funding, liquidity, asset quality, and solvency (as described above). Profit margins of energy-related companies could also get squeezed. In turn, this could weaken debt-servicing ability and increase NPLs to banks. (In the stress tests, these risks are incorporated through an adverse macroeconomic scenario in the solvency stress testing.)
2. Rapid escalation of Russia/ Ukraine conflict.	Medium Ukraine is an important trade partner. Nearly 150,000 Ukrainians have already moved to the Republic of Belarus since the onset of the conflict. Could depress business confidence and heighten risk aversion, amid disturbances in global financial trade and commodity markets.	Medium Elevated risk of deposit runs at banks Banks could also suffer from a potential funding retrenchment from Russia, which could weaken liquidity conditions further. Over the longer term this could hurt firms' operating conditions and increase banks' NPLs. (In the stress tests, these risks are incorporated through an adverse macroeconomic scenario in the solvency and liquidity stress testing.)

 $^{^{26}}$ In line with Risk #2 and 4 of the December 2015 Global Risk Assessment Matrix (G-RAM).

	Appendix Table 5. Risk Assessment	watik (concluded)
Nature/Source of Main	Overall Level	of Concern
Threats	Likelihood of Severe Realization of Threat in the Next 1–3 Years	Expected Impact on Financial Stability if Threat is Realized
3. Further exchange rate depreciation 4. Corporate-	High Exports fall further, especially to Russia, on lower demand from commodity producers for heavy machinery. Banks demand foreign currency against FX-linked notes issued to them by the central bank. High	High Would make it more difficult for SOEs to service foreign currency debt raising risk of higher NPLs for banks. Loss of confidence could lead to foreign currency deposits being withdrawn from banking system. (In the stress tests, these risks are incorporated through an adverse macroeconomic scenario in the solvency and liquidity stress testing.) High
Banks / Insurance, Sovereign Nexus, directed lending expands further	 Banks continue to extend state-directed loans to loss-making SOEs and the government recapitalizes them frequently. Although state-directed loans were transferred to the development bank with a view to centralizing and reducing such activity, it has nevertheless continued at state-owned banks. The development bank, which is functioning as both an AMC and a lender, is expanding rapidly in terms of assets. Its debt is not reflected in the state budget as a contingent liability, its bonds are eligible for refinancing from the central bank. Insurers are mainly state-owned, provide support to weak SOEs, are linked to banks via deposits, and appear to offer much higher coverage than justified by existing premia. 	 Banks' underwriting of loans without due diligence or adequate assessment of investment return would likely either lead to higher NPLs or higher fiscal losses for the government arising from support provided to borrowers In the former case, this could erode capital cushions of banks and also lead to fiscal losses for the government arising from support to banks. Fiscal losses related to the activities of the development bank could be significant. Potential fiscal losses related to insurer failures are high. (In the stress tests, these risks are incorporated through the corporate stress testing.) Medium
	 Market expectations of a U.S. Fed rate hike during 2016 remain elevated as shown by the pricing of Fed funds futures contracts. Rising expectations of higher global interest rates in future have led to capital outflows, including withdrawal of FDI, from emerging markets. The share of non-resident funds in banks' liabilities is about 18 percent of the total. 	 Borrowing costs would rise, possibly sharply, when the sovereign and corporates regain access to debt markets. Non-resident deposits may be at risk of further withdrawal. Withdrawal of FDI could lead to further exchange rate pressures and thereby weaken the performance of banks' foreign currency loans. (In the stress tests, these risks are incorporated through the liquidity stress testing.)

²⁷ In line with Risk #1 of the G-RAM.

Append	lix Table 6. Stress Test	Matrix (STeM) for the Bankir	ng Sector: Solvency, Liquidity	, and Contagion Risks						
	Domain		Assumptions							
		Bottom-Up by Banks Top-Down by Authorities (if applicable)		Top-down by FSAP Team						
BANKING SECTOR: SOLVENCY RISK										
1. Institutional	Institutions included	• 11 banks.	• 11 banks.	• 11 banks.						
Perimeter	Market share	Percentage of total sector assets: 95 percent.	Percentage of total sector assets: 95 percent.	Percentage of total sector assets: 95 percent.						
	Data and baseline date	Supervisory data.Banks' own data.	Supervisory data.	Supervisory dataPublicly available data.						
2. Channels of Risk Propagation	Methodology	Combination of banks' own internal models and their expert judgment as well as plausibility checks by mission.	NBRB's stress testing models.	IMF balance sheet stress testing framework (customized for the Belarus FSAP).						
	Satellite Models for Macro-Financial linkages	Banks' own models for credit losses, pre- impairment income, credit growth; and expert judgment.	NBRB's models for credit losses, pre-impairment income, credit growth; expert judgment.	IMF's econometric models for credit losses, pre-impairment income, credit and RWA growth; and expert judgment.						
	Stress test horizon	3 years (12 quarters)	3 years (12 quarters)	3 years (12 quarters).						
3. Tail shocks	Scenario analysis	Shocks based on GDP trajectories, and translated in a consistent manner to all other variables in the macro scenarios.	Shocks based on GDP trajectories, and translated in a consistent manner to all other variables in the macro scenarios.	Shocks based on GDP trajectories, and translated in a consistent manner to all other variables in the macro scenarios.						

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Appendix Tab	ole 6. Stress Test Matrix	x (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks (continued)							
	Domain		Assumptions						
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities	Top-down by FSAP Team					
		 Four scenarios: baseline scenario; adverse I external shock scenario; adverse II external shock scenario; and debt service restructuring scenario. The size of the GDP shock in relation to historical episodes for the Adverse I and Adverse II scenarios is 3 and 2.5 standard deviations respectively. 	 Four scenarios: baseline scenario; adverse I external shock scenario; adverse II external shock scenario; and debt service restructuring scenario. The size of the GDP shock in relation to historical episodes for the Adverse I and Adverse II scenarios is 3 and 2.5 standard deviations respectively. 	 Four scenarios: baseline scenario; adverse I external shock scenario; adverse II external shock scenario; and debt service restructuring scenario. The size of the GDP shock in relation to historical episodes for the Adverse I and Adverse II scenarios is 3 and 2.5 standard deviations respectively. 					
	Sensitivity analysis	Single-factor shocks: interest rate; exchange rate; sovereign default.		 Single-factor shocks: interest rate; exchange rate; sovereign default. Credit concentration risk. 					
4. Risks and Buffers	Risks/factors assessed (How each element is derived, assumptions.)	Comprehensive coverage of banking risks.	Comprehensive coverage of banking risks.	Comprehensive coverage of banking risks.					

Appendix Table 6. Stress Test Matrix (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks (continued)

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Domain		Assumptions			
	Bottom-Up by Banks (if applicable)	Top-Down by Authorities	Top-down by FSAP Team		
	 Credit risk: credit risk on loan book; issuer default risk on government and corporate bond and other debt instrument holdings. Market risk: interest rate risk impact on net interest income, government and corporate bond and other debt instrument holdings; FX risk. Operational risk (via RWA). 	 Credit risk: credit risk on loan book. Profitability risk. 	 Credit risk: credit risk on loan book; issuer default risk on government and corporate bond and other debt instrument holdings. Market risk: interest rate risk impact on net interest income, government and corporate bond and other debt instrument holdings; FX risk. Real estate collateral risk (through shocks to loss given default (LGD)). Operational risk (via RWA). 		
Behavioral adjustments	 Evolution of assets and RWAs based on data availability (constant vs. dynamic balance sheet assumption). 	 Evolution of assets and RWAs based on data availability (constant vs. dynamic balance sheet assumption). 	 Evolution of assets and RWAs based on data availability (constant vs. dynamic balance sheet assumption). 		

							,			
	Domain	Assumptions								
		Bottom-Up by Banks (if applicable)		Top-Down by Authorities			Top-down by FSAP Team			
		•	No management actions considered. Other net income items, dividends, and taxes, based on macroeconomic scenarios and pre-	•	No management actions considered. Other net income items, dividends, and taxes, based on macroeconomic scenarios and pre-	•	No management actions considered. Other net income items, dividends, and taxes, based on macroeconomic scenarios and pre-			
5. Regulatory and Market- Based Standards and Parameters	Calibration of risk parameters	•	Loan migration (downgrades) and corresponding changes in provisions based on banks' internal models; and expert judgment. Estimation of expected gains/losses on government and corporate bond holdings, and equity investments based on banks' internal models, and expert judgment.	•	Loan migration (downgrades) and corresponding changes in provisions based on satellite models.	•	Loan migration (downgrades) and corresponding changes in provisions based on satellite models. Estimation of expected gains/losses on government and corporate bond holdings, and equity investments informed by bottom-up analysis (including gap analysis).			

Appendix Table 6. Stress Test Matrix (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks (continued)

REPUBLIC OF BELARUS

	Domain		Assumptions								
			Bottom-Up by Banks (if applicable)	1	Top-Down by Authorities		Top-down by FSAP Team				
	Regulatory/Accounting and Market-Based Standards	•	Hurdle rates based on regulatory minimum for total capital (minimum CAR). Basel II (Standardized Approach)	•	Hurdle rates based on regulatory minimum for total capital (minimum CAR). Basel II (Standardized Approach)	•	Hurdle rates based on regulatory minimum for total capital (minimum CAR). Basel II (Standardized Approach)				
6. Reporting Format for Results	Output presentation		CAR, and buffer changes; system-wide and by entity.	•	CAR, and buffer changes; system-wide and by entity.	•	CAR, shortfall, and buffer changes; system-wide and by entity.				
			Pass or fail; share of failing banks in system assets.	•	Pass or fail; share of failing banks in system assets.	•	Pass or fail; share of failing banks in system assets.				
			Banking Sector: Liqi	JIDIT	y Risk	•					
1. Institutional Perimeter	Institutions included	•	All banks (26 banks)								
	Market share	•	Percentage of total sector a	isset	ts: 100 percent						
	Data and baseline	•	Supervisory data								
	date	•	Banks' own data								
2. Channels of	Methodology	•	Basel III LCR-type and NSFI	R-typ	pe proxies (LCR calculated a	so f	for major currencies).				
Risk Propagation		•	Conventional liquidity test								

Appendix Tabl	e 6. Stress Test Matrix	c (ST	eM) for the Banking Sect	or: Solvency, Liquidity, and C	Contagion Risks (continued)
Domain		Assumptions			
			Bottom-Up by Banks (if applicable)	Top-Down by Authorities	Top-down by FSAP Team
3.Risks and Buffers	Risks	Drying up of market liquidity.Maturity and currency mismatches.			
	Buffers	Counterbalancing capacity (HQLA for LCR; cash and cash-like instruments for conventional liquidity stress test).			ke instruments for
4. Tail shocks	Size of the shock	 Run-off rates on funding, Roll-off rates on inflows from assets, and haircuts on securities as defined in Basel III for LCR and NSFR; rates and haircuts in conventional liquidity stress test defined by FSAP mission. 			
5. Regulatory and Market- Based Standards and Parameters	Regulatory standards	 LCR proxy should exceed 100 percent in general (not a legal/regulatory requirement). NFSR proxy should exceed 100 percent (not a legal/regulatory requirement). 			
6. Reporting Format for Results	Output presentation	Pass rate, remaining buffers, and liquidity shortfall (if applicable); system-wide and by entity.			
BANKING SECTOR: CONTAGION RISK					
1.Institutional	Institutions included	•	N/A	• N/A	All banks (26 banks).
Perimeter	Market share	•	N/A	• N/A	Percentage of total sector assets: 100 percent.

Appendix Table 6. Stress Test Matrix (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks (continued)

Domain		Assumptions			
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities	Top-down by FSAP Team	
	Data and baseline date	• N/A	• N/A	Supervisory data.Banks' own data.Publicly available data.	
2. Channels of Risk Propagation	Methodology	• N/A	• N/A	Network analysis, using the Sole and Espinosa- Vega (2010) methodology.	
				 Interbank contagion analysis ("cascade effects"). 	
3. Tail shocks	Size of the shock	• N/A	• N/A	Stress scenario with a credit shock: a severe stress in a banking system, causing a default on all claims.	
				Stress scenario with a credit shock where a bank or group of banks defaults hypothetically on its debt obligations and a funding shock when a banking system is unable to rollover its funding from another country due to severe stress in other country.	

Appendix Table 6. Stress Test Matrix (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks (concluded)				
Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities	Top-down by FSAP Team
4. Reporting Format for Results	Output presentation	• N/A	• N/A	 Implied losses (banks and country level), remaining buffers, number of affected banks (if cascade effects).

Appendix II. Progress on 2009 FSSA Recommendations

2009 Main Recommendations	Implementing Agency	Status of Implementation		
High Priority				
Carve out government-directed loans from bank balance sheets and concentrate them in a single agency	Ministry of Finance, NBRB, Development Bank	Partially implemented. About 15 percent of total stock of directed loans were transferred to the Development Bank (as of September 2014), with the expectation that most government directed lending programs will expire around 2015-2016. From May 1, 2016, the Development Bank is expected to provide new directed		
		lending, except for housing construction (by Belarusbank) and working capital in agriculture (by Belagroprombank).		
2. Strengthen independence of the NBRB Board and bank supervisory processes	NBRB	Partially implemented. Significant progress has been achieved in developing the supervisory process. There is no longer undue representation of industry or political interests in the Board of the NBNB, but the Chairman could be discharged by the President for loss of confidence.		
		The performance of supervisory tasks is constrained in different ways: the supervisor has not full control to decide the supervisory plan or the prudential reports; the length of on-site visits is determined by a presidential decree.		
3. Revise the loan classification and provisioning requirements to reflect the entire balance of non-performing loans	NBRB	Implemented. The NBRB now requires banks to report as nonperforming loans both the full principal and payments due. But loan classification and provisioning rules have been recently softened to aid banks show a better financial position.		
4. Engage a qualified experienced consultant to assist the Belarusbank privatization working group	Goskomimushche stvo [State Property	Not implemented. A working group has been stablished to develop the terms and conditions for an open		

	Committee], Minister of Finance	competition to select a financial consultant to advise on disposal of a minority take in Belarusbank. An ad for the hiring of the consultant was placed.
5. Move government deposits from banks to the NBRB in line with the schedule for repayment of corresponding loans	NBRB	Partially implemented. However, the government continues to place deposits in commercial banks, e.g., to fund housing construction program by Belarusbank.
6. Document the framework for emergency liquidity assistance	NBRB	Not implemented . The NBRB is in the process of drafting the regulations.
7. Abolish the obligatory reinsurance requirement for local insurance companies	Ministry of Finance	Not implemented . Remains relevant for stability and developmental aspects. It is recommended again.
	Lower Priority	
Adopt a crisis management framework and operational guidelines	NBRB	Not implemented.
Make explicit the legal power of the NBRB to suspend dividend payout	NBRB	Implemented.
3. Establish legal certainty regarding the outcome of license withdrawal	NBRB	Partially implemented. The NBRB has the power to require removal from office of members of the board, executive body or CEO or chief accountant. NBRB officials are involved in the management of SOBs.
4. Provide for more expedient bankruptcy proceedings	NBRB	Partially implemented through legislative amendments to the bankruptcy legislation in 2012/2014. Further amendments regarding procedural terms in bankruptcy are being considered under the Draft Law on Bankruptcy 2016.
5. Strengthen autonomy of the insurance and securities market supervisors	Ministry of Finance, NBRB	Not implemented. No changes made to the supervisory structure since 2009. Remain relevant for stability aspects and it is recommended again.
6. Allow private insurance companies to sell compulsory insurance products	Ministry of Finance	Not implemented. No changes made to the supervisory structure since 2009. Remains relevant for developmental aspects.

Appendix III. Financial Policy Advice in Recent Article IV Reports

Date	Policy Recommendations
2012	 The financial system is inefficient and causes a growing contingent liability for the government. Staff recommends: all directed lending should be channeled through the Development Bank to make it transparent;
	 full independence of NBRB supervision staff and use of risk-based supervision which would make the financial system more robust.
2013	 Banking supervision is improving but rapid FX lending growth bears close watching. Staff recommends: further measures to curb FX lending growth should be considered; the DB should become the sole and transparent provider of directed lending.
2014	 Rising risks in the banking sector require close attention. Staff recommends: directed and subsidized lending should be curtailed and existing and future lending programs should be consolidated through the Development Bank; the NBRB should closely monitor the health of individual banks and decisively address any uncovered problems; the activities of the Development Bank should be contained and proper supervision and regulation of its activities need to be ensured; specifically, external regulation and supervision of the Development Bank should be introduced; as the commercial financial sector develops, the need for a staterun Development Bank should be reconsidered; capital market needs to further develop; specifically, a framework law establishing operational independence of the securities supervisor should be
	adopted; the supervisory framework should migrate from a compliance-based to risk-based supervision of professional market participants; the need to implement rules governing the issuance of corporate bonds in FX by unhedged issuers should be analyzed in coordination with NBRB.
2015	 Risks in the banking sector have further increased and structural evolution of the financial sector remains a source of major concern. Staff recommends: directed lending growth needs to be rapidly further reduced; the NBRB conducts a diagnostic study to assess asset quality in the aftermath of the recent devaluation and interest rate hikes; any detected problems in banks should be addressed decisively, and undercapitalized banks should be either recapitalized or resolved as feasible;
	 the activities of the Development Bank should be contained with proper supervision and regulation; a clear plan for the containment and winding down of the operations of the DB should be devised, consistent with the full phase out of directed lending. the NBRB should swiftly divest Moscow-Minsk Bank.