A BRIEF REVIEW OF THE PUBLIC DEBT OF ARMENIA, BELARUS, KYRGYZSTAN AND TAJIKISTAN

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In 2009–2017, economies of Armenia, Belarus, Kyrgyzstan and Tajikistan lived through periods of adverse external and domestic conditions characterized by weak external demand and falling export prices. Devaluation of domestic currencies following the sharp depreciation of the Russian ruble, led to fast growth of public debt in Armenia, Belarus, Kyrgyzstan, and Tajikistan. This growth of debt was also a consequence of fiscal stimulus, which supported budget expenditures, "compensating" for fall in tax revenues due to economic recession. During this period, government debt not only increased, but its structure changed, which created additional risks to debt sustainability. This article analyzes four risk factors for the public debt of these economies. First, the decrease in the share of concessional loans, and, consequent increase of debt service can put pressure on fiscal situation and macroeconomic stability in the medium term. Second, the high level of accumulated debt, in particular, its foreign currency component, limits the "room for maneuvers" for macroeconomic policy in terms of resistance to external shocks. Third, the growth in domestic currency debt, despite the lowering of currency risk, may have a negative impact on the economy in the form of upward inflationary pressure and crowding out of private investment. Fourth, extra-budgetary public support of state enterprises leads to an increase in contingent liabilities and the risk of them being incurred, especially in economies with a significant government role, such as Belarus and Tajikistan.

Over the past 10 years, there has been a rapid increase in public debt, including emerging and middle-income economies (Fig. 1). Government debt to GDP ratio in these countries reached almost 50% by 2017 against a backdrop of soft monetary conditions in the US and other developed economies. Similar situation was observed in the 1980s. After the 2008–2009 global financial crisis, the main reason behind the debt increase, particularly in middle-income economies, was the fiscal stimulus that were used by the authorities to support sluggish economic growth as a result of lowered export prices and reduced external demand.

* Disclaimer – the article reflects the authors’ personal opinion, which may not coincide with the official position of the Eurasian Development Bank, the manager of the Eurasian Fund for Stabilization and Development.
Four EDB/EFSD countries (Armenia, Belarus, Kyrgyzstan and Tajikistan), experienced a significant reduction in the debt burden before 2008 (with the exception of Belarus). However it exceeded 50% of GDP after the global financial crisis (Fig. 2) against a backdrop of a slowdown in economic growth and widening fiscal deficits. The greatest increase in debt levels was observed in Armenia and Belarus, where, during this period, it grew by 38.8 percent and 32.3 percent of GDP, respectively. In addition, the structure of public borrowings changed significantly. In all countries, in addition to public investment programs that are financed by multilateral donors on concessional terms, the level of more expensive bilateral and commercial foreign borrowings grew substantially. In particular, in recent years, Armenia, Belarus and Tajikistan have issued Eurobonds. Countries also increased the share of domestic borrowing. While in Armenia and Kyrgyzstan the authorities sought to reduce currency risks, in Belarus and Tajikistan the growth of domestic borrowing occurred amid of limited access to preferential external financing. The rapid growth of government debt led to revision of the previously established thresholds for the level of public debt in three of the countries – Kyrgyzstan in 2015, Armenia in 2016 and Tajikistan in 2017.

The main trigger for debt growth in the EDB/EFSD countries in 2009 and 2015 was a sharp weakening of domestic currencies (Fig. 3), which occurred during the 2008–2009 and 2014–2015 crises as a result of a fall in world prices for their exported goods, as well as a sharp reduction in the flow of remittances and the weakening of the Russian ruble. Against a backdrop of large volumes of currency obligations, the depreciation of domestic currency led to an increase in the value of public debt in terms of GDP. Amid high level of dollarization in Armenia, Belarus, Kyrgyzstan and Tajikistan, the devaluation of their domestic currencies led to an increase in the cost of imported goods and expenses for servicing the foreign currency liabilities of households and enterprises. The resulting currency mismatch caused an increase in non-performing loans, which affected the banking system and slowed the process of economic recovery. With a goal to mitigate the impact of the crisis, the authorities

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4 In Belarus in 2017, the national debt was 40.1% of GDP given a threshold of 45% of GDP (excluding guarantees).
used fiscal stimulus, which led to the expansion of budget deficits, especially in a situation of falling revenues. Additional fiscal pressures were exerted by other factors, including the revaluation due to exchange rate changes and quasi-fiscal operations. On the other hand, the subsequent economic recovery positively affected public debt dynamics. The decline in real interest rates also reduced pressure on the level of public debt in Belarus, Kyrgyzstan and Tajikistan.

**Fig. 3. Growth factors in the national debt in 2009-2017. (% of GDP)**

From the figure, we can see the growth factors that contributed to the national debt in different countries over the period 2009-2017. The factors are shown as a percentage of GDP and include:
- Real GDP growth
- Real interest rate
- Primary budget balance
- Depreciation of exchange rate
- Other
- Change in gross public debt

**Source:** national agencies, own calculations

**Fig. 4. Public debt structure in 2017**

From the figure, we can see the structure of public debt in 2017 for different countries. The debt is categorized into:
- Guarantees
- Domestic debt in foreign currency
- Domestic debt in domestic currency
- Other external debt
- Eurobonds
- Medium- and long-term debt
- Level of public debt in 2017

**Source:** national agencies, own calculations

**ARMENIA**

After the weakening of Armenian dram by 23% in 2009 and 17% in 2014, the government increased government spendings to support the economy. It was accompanied by an increase in borrowings, in particular, through a Public Investment Program (PIP). In addition, since 2015, the Armenian Ministry of Finance has been pursuing a policy towards diversification of debt by increasing the share of domestic short-term borrowings. This, on the one hand, reduced vulnerability to currency fluctuations, but on the other, increased the interest rate on issued government bonds. The increase in external and domestic borrowing against the backdrop of weak GDP growth was the reason for the debt level to exceed its 50% of GDP threshold in 2016. This triggered the implementation of the fiscal rule in 2017, which implied a tightening of fiscal expenditures by significantly limiting the maximum level of budget deficit. Against a background of expenditures’ consolidation and the reduction in the fiscal deficit, the level of public debt amounted to 53.7% of GDP in 2017 (Fig. 4). The structure of Armenia’s government debt, in addition to concessional external borrowing, includes eurobonds (7.3% of GDP) and domestic borrowings in national currency (11.1% of GDP).

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5 Under the fiscal rule, exceeding the threshold for public debt of 50% of GDP automatically invoked a mechanism whereby the budget deficit the following year could not be more than 3% of the nominal average size of GDP over the past three years. At the end of 2017, the fiscal rule was revised and the new version entered into force in 2018. The new fiscal rule provides for the phased introduction of spending restrictions starting from the moment when the government’s debt reaches 40% of GDP.
BELARUS

The growth of Belarus’ public debt was mostly caused by the cumulative change in the exchange rate of the national currency against the US dollar, which over nine years amounted to about 800% (the devaluation totaled 89%). The greatest impact was exerted by the 2011 currency crisis, when the Belarusian ruble devalued by 64.1%, leading to an increase in expenses on servicing the foreign-currency liabilities of public enterprises that play a dominant role in the Belarusian economy. The financial weakening of the real sector required government support, which was financed through accumulation of public debt. In addition, the growth of public debt in 2014–2017 was influenced by the need to service the earlier issues of Eurobonds and domestic treasury bonds, which were issued in both domestic and foreign currencies. According to official data, the total level of public debt at the end of 2017 amounted to 47.5% of GDP. Belarus government debt consists of Eurobonds’ issues (4.1% of GDP) and other external debt (27.2% of GDP), domestic borrowing in the rouble (1.5% of GDP) and foreign currency (7.2%), as well as debt of public enterprises guaranteed by the central government (7.4% of GDP). The level of Belarus’ public debt, excluding the guaranteed part, is currently below the legally established threshold of 45% of GDP. However, public debt in broader definition, which includes the debt of state-owned enterprises (which is largely denominated in foreign currency), reached 54.6% of GDP by the end of 2017.

KYRGYZSTAN

In Kyrgyzstan, the level of public debt, which historically has been high, fell to 48.3% of GDP by late 2008 accompanied by restructuring. The devaluation of the som by 19.5% in 2008–2009 and 35.1% in 2014–2015 caused an increase in the nominal value of public debt. Despite the fact that during 2009–2017 part of the debt to Russia was forgiven⁶, and the government sought to attract mainly concessional external borrowings, its level in 2015 exceeded the legally established threshold value, which was revised upwards. The growth of the public debt was due to borrowings for Public Investment Program (PIP). By the end of 2017 Kyrgyzstan experienced the highest level of public debt, which reached 59.9% of GDP. It mostly consisted of external borrowings (53.9% of GDP) under the PIP, which are disbursed by bilateral and multilateral creditors under concessional terms.

TAJIKISTAN

In Tajikistan, the increase in public debt was caused by fiscal deficit and devaluation of the somoni. In 2007–2009, the increase in government debt was accompanied by a high primary budget deficit, which averaged around 5% of GDP. In December 2016, the growth of debt level was intensified by the recapitalization of two large banks, the costs of which was monetized by the National Bank. The devaluation of the somoni, by 21% in 2009 and 24.1% in

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⁶ In 2009, Russia wrote off Kyrgyzstan’s debt in the amount of USD 193.5 million. In 2012, Russia and Kyrgyzstan signed an agreement to write off another USD 188.9 million, and in 2014 an agreement was reached on the gradual write off of the remaining part of the debt in the amount of USD 300 million in equal tranches over a 10-year period. In 2015–2016, USD 60 million was written off. At the end of 2016, the agreement was revised to write off the remaining debt (USD 240 million) in 2017–2018.
2015, led to a sharp increase in nonperforming loans of both enterprises and individuals, which in 2016 amounted to 47.6% of total loans, destabilizing the banking sector. In 2017, the Tajikistan Ministry of Finance announced its first issue of Eurobonds to finance the construction of the Rogun hydroelectric power station. In addition, Tajikistan has continued implementation of large-scale PIP projects in the transport and energy sectors, which are mostly supported by Eximbank of China and international development donors. As a result, by the end of 2017 the level of public and publicly guaranteed debt reached 51.4% of GDP, of which 40.4% of GDP was external debt, and 11% of GDP was domestic debt.

To summarize, there has been important changes in the structure of public debt in four EFSD countries: (1) an increase in the share of more expensive (no concessional) external borrowings; (2) an increase in domestic borrowing in foreign currency; (3) an increase in domestic borrowings with higher interest rates; and (4) an increase in contingent liabilities and quasi-fiscal costs due to support extended for the banking system and state-owned enterprises. These changes may carry the risk of reducing the sustainability of public debt.

The increased volume of principal and interest payments over the next five years raises the risks to macroeconomic stability.

The issuance of five-and seven-year Eurobonds in Armenia, Belarus and Tajikistan, as well as short-term and medium-term domestic borrowings, accompanied by increased debt service on earlier obligations, have generated high levels of principal and interest payments for the next five years. On average, interest and principal payments on public debt on average amounted to 4–5% of GDP in 2017 (Fig. 5). In Belarus, the highest debt service ratio, is explained by relatively high interest rates on debt issues as a result of limited access to concessional financing from international development institutions. In Armenia, the increase in the volume of public debt service was influenced by an increase in domestic borrowing at higher interest rates. In Kyrgyzstan and Tajikistan, volumes of principal and interest payments on broadly concessional borrowings from multilateral development donors have also shown steady growth.

According to EFSD/EDB estimates, during 2018–2022, the governments of these four countries will have to pay out more than half of the current (by the end-2017) public debt level (Fig. 6). The bulk of these payments constitute principal payments on previously issued Eurobonds (Belarus in 2018 and Armenia in 2020), as well as payments on domestic debt, which has a shorter maturity. The domestic foreign currency debts of Belarus and the obligations of the Government of Tajikistan to the National Bank place an especially high burden on their budgets in the next five years. The bulk of the forthcoming payments by the Kyrgyz government are liabilities to bilateral and multilateral creditors.

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7 In September 2017, the Tajikistan Ministry of Finance issued 10-year Eurobonds worth USD 500 million with a current coupon rate of 7.125%.

8 According to the World Bank’s economic survey, the exceeding of the 40 percent threshold for the external debt level of Tajikistan led to a revision of the threshold to 60 percent of GDP.
Because of vulnerability of these economies to external shocks (an unexpected fall in export prices, a sharp reduction in remittances and other capital inflows, a sudden increase in interest rates on external debt) the continuation of the current trend poses additional risks to macroeconomic stability. The growth of sovereign risk premiums may worsen investors’ sentiments, which, given the tightening of monetary conditions in the global economy, may complicate access to external financing and lead to financial disruptions. Empirical studies from the IMF (Gerling and others, 2017) showed that financial meltdowns in the form of debts default often occur as a result of the sharp increase in debt financing requirements and the subsequent loss of investors’ confidence.

A high level of public debt, in particular, its foreign exchange component, reduces the “room for maneuvers” in macroeconomic policy.

Foreign currency borrowings constitute the main share of the public debt in the four considered EFSD countries. These borrowing grew substantially as a result of the crises of 2008 and 2014. Foreign currency liabilities comprised 90% of Kyrgyzstan’s public debt, 81% of Belarus’ public debt, 79% of Armenia’s public debt and 78% of Tajikistan’s public debt by the end of 2017 (Fig. 7). Hence there is a significant currency mismatch in the government balance between the debt service expenses and revenues. This makes the economies vulnerable to currency fluctuations. In the context of high dollarization, the phenomenon of “currency mismatch” has spread to all sectors of the economy. In 2017, the negative net investment position, demonstrating the excess of foreign liabilities over assets, amounted to 76.7% of Armenia’s GDP, 77.9% of Belarus’ GDP and 90.9% of GDP in Kyrgyzstan.”

9 There are no statistics for Tajikistan.
The susceptibility of these economies to external shocks is now forcing their central banks to use a more flexible exchange rate policy as a tool to confront these shocks. The weakening of the Russian ruble in 2014 and the subsequent transition of the Central Bank of Russia to a floating exchange rate policy have motivated other central banks to shift to more flexible exchange rate arrangements. However, despite the increased magnitude of exchange rate fluctuations, central banks continue to conduct foreign exchange interventions, thereby limiting exchange rates’ ability to counteract shocks. One of the reasons for the excessive dampening of currency fluctuations is the high level of foreign currency liabilities in these economies, in particular in the public sector. Kliatskova and Mikkelsen (2015) noted that the situation with currency mismatches in the face of a large foreign exchange debt burden is the main reason for the “fear of exchange rate floating”.

In the context of a “managed float” of the exchange rate, the use of fiscal stimulus is an important tool of macroeconomic policy to steer an economy out of a crisis. However, a high level of public debt also makes it difficult to carry out countercyclical policies. The use of public debt thresholds in the countries against the backdrop of declining budget revenues has led to the consolidation of fiscal expenditures. The issue of non-priority public expenditure cuts was considered in Kyrgyzstan when debt exceeded its threshold level (in 2015). In 2017, Armenia’s consolidation of current expenditures resulted from the enactment of the budget rules.

Thus, in a situation of sudden external shocks, with unstable economic growth due to increased debt burden, countries will have to continue to restrain fiscal expenditures, thereby pursuing pro-cyclical policies and limiting the use of fiscal instruments for anti-crisis regulation, which ultimately can exacerbate the depth and duration of crises’ effects. Romer and Romer (2018) in their study showed that the decline in output in the wake of a financial crisis is less than 1% when the country has space for maneuver in monetary and fiscal policy, but nearly 10% when there is neither one.
The growing level of domestic debt has negative consequences in the form of rising inflation, high dollarization or crowding out of private investment

As of the end of 2017, in reviewed countries, domestic debt remained at a relatively low level, not exceeding 12% of GDP (in 2008, domestic debt did not exceed 5% of GDP). Despite the fact that attracting domestic savings is the preferred form of debt diversification, the accessibility of concessional external financing is considered as the main obstacle for rapid growth of domestic debt. Nevertheless, within the last three years, the level of domestic state borrowings in the countries under consideration has increased on average from 6% of GDP to 10% of GDP. Given the weak development of financial markets, such rapid growth has been accompanied by certain negative factors:

1) In Tajikistan, the growth of domestic debt to 11% of GDP (from 5.5% of GDP in 2015) was due to the need for public support of the banking system. At the same time, the financing of these state expenditures was accompanied by monetization. The recapitalization of problem banks at the end of 2016 led to a sharp increase in the money supply. This triggered the devaluation of the somoni and an acceleration in consumer prices inflation from 6.1% in December 2016 to 9.1% in June 2017.

2) Despite the fact that Belarus’ domestic debt has been decreasing in recent years (from 10.8% of GDP in 2015 to 8.7% of GDP in 2017), more than 80% of it is denominated in foreign currency. In 2017, the foreign exchange component of domestic debt was equal to 7.2% of GDP. Partly this was due to large liabilities on previously taken external loans, as well as the difficult access to external preferential borrowing. Therefore, exchange rate fluctuations largely affect public debt service spendings. The need to accumulate foreign exchange funds has an impact on monetary policy and supports devaluation expectations in the economy.

3) In Armenia, domestic debt in 2011 amounted to 11.1% of GDP. It grew from 6.5% of GDP in 2014 in the course of debt diversification policy. In 2015, shortly after the Central Bank raised the key rate, the Ministry Finance raised its interest rate on its domestic bonds in an effort to finance the widening fiscal deficit. As a result, against a background of low liquidity in 2016, lending to the private sector was crowded out – commercial banks preferred to invest the available financial resources in government bonds. Given this, the effective yield on domestic treasury bonds increased up to 22.2%.

The relatively small increase in domestic debt in Kyrgyzstan, from 4.0% of GDP in 2008 to 5.9% of GDP in 2017, was due to the limited capacity of the authorities to increase its public debt, as well as the underdevelopment of the securities market and undeveloped banking system.

The state’s high share in the economy increases the risk of contingent liabilities and may lead to an increase in quasi-fiscal expenditures

The existence of large contingent liabilities for state enterprises debts in Belarus and Tajikistan, as well as the significant role of the public sector in these economies, suggest the need to consider broader definitions of debt. According to official data, the public debt of Belarus (excluding state guarantees) amounted to 40.1% of GDP in 2017. But taking into account both direct and guaranteed by the government debt of state-owned enterprises, its value exceeded 54% of GDP.
The official level of public debt in Tajikistan, was 51% of GDP in 2017. But according to World Bank estimates, public debt, which includes external borrowings of public enterprises, amounted to 54.7% of GDP. In this context, experience of international organizations’ in assessing quasi-fiscal risks can be useful (Box 1).

Box 1. The impact of contingent liabilities on the sustainability of public debt, international experience

International organizations include government guarantees and debt of state-owned enterprises in their calculations when assessing the sustainability of public debt because of the high likelihood that the government will have to “bail out” debt obligations of state-owned enterprises. Due to the large presence of state-owned enterprises in the economies of some countries, sharp fluctuations (depreciation) in the exchange rates pose risks to debt sustainability and the need to fulfill obligations of state enterprises, which are often in foreign currency. State-owned enterprises, which are usually characterized by low productivity, inefficiency and high debt obligations, are the weakest link of these economies and hinder their development.

Countries with a high share of contingent liabilities are often exposed to unexpected shocks that could disrupt the sustainability of public debt. A number of studies have shown (Jaramillo and others, 2017) that the greatest drivers of debt surges are not budget deficits, recessions or high interest rates, but rather, the realization of contingent liabilities, which cause the growth of public debt and, accordingly, quasi-fiscal expenditures. Moreover, the IMF (2016) believes that this factor is sufficiently strong for fiscal risks to overlap each other, exacerbating the depth of the crisis. If other risk factors are easily assessed and prevented before a crisis by increasing transparency and tightening fiscal reporting, then the implementation of contingent liabilities is often very difficult to foresee.

Analysis of the public debt of Armenia, Belarus, Kyrgyzstan and Tajikistan in 2009–2017 has identified a number of problems that may have certain negative consequences for debt sustainability and the economy. In particular, it is necessary to pay attention to the following aspects of debt dynamics and structure. Firstly, increasing debt, especially short-term and medium-term borrowings, is accompanied by a rise in the cost of its service, and increases the risk of default due to mounting financing needs. International experience shows that a breakdown in debt sustainability, particularly in the face of increased debt refinancing needs, influences investor sentiment, which sharply tightens financing terms or makes difficult access to capital markets. Secondly, a high level of public debt reduces the scope for fiscal maneuvers, which makes it difficult to carry out countercyclical macroeconomic policies. Thirdly, the growth of domestic borrowing can have negative consequences in the form of inflation, higher devaluation expectations and the crowding out of private investments. Fourthly, in the midst of significant contingent liabilities of state enterprises’ debts, the government may face the risk of default in case of a sudden shock and a deteriorating financial condition of state-owned enterprises.
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APPENDIX. METHODOLOGY FOR ESTIMATING PUBLIC DEBT CHANGE FACTORS

Public debt can be considered sustainable if: 1) the size of the primary balance sheet (excluding interest payments) is sufficient to service the current level of debt and stabilize the macroeconomic situation in the event of shocks; 2) the level of debt does not adversely affect the potential growth rate of the economy. The classical approach takes into account the impact of five macroeconomic shocks: real GDP growth, primary balances (state balances minus interest payments on debt), real interest rates, exchange rates and contingent liabilities.

Analysis of the sustainability of public debt begins with the following components:

\[
D_{t+1} = \frac{e_{t+1}}{e_t} \times (1 + i_{t+1}^f) \times D_t^f + (1 + i_{t+1}^d) \times D_t^d - (T_{t+1} + G_{t+1} - S_{t+1}) + O_{t+1}
\]

where \(D_t\) and \(D_{t+1}\) are the levels of debt in the base and forecast periods, respectively; \(e_t\) and \(e_{t+1}\) are the nominal exchange rates of the domestic currency in the base and forecast periods, respectively; \(i_{t+1}^f\) and \(i_{t+1}^d\) are the nominal effective rates of the forecast period for the level of debt in foreign and domestic currency, respectively; \(T_{t+1}, G_{t+1}\) and \(S_{t+1}\) are the volume of taxes, budget expenditures and interest payments in the forecast period; \(O_{t+1}\) are other factors, including privatization, contingent liabilities, revaluation of assets, etc.

The contribution of each factor is estimated as a percentage of GDP. At the same time, the nominal GDP of the forecast period is calculated as the GDP level of the base year multiplied by the real growth rate and GDP deflator of the forecast year:

\[
Y_{t+1} = Y_t \times (1 + g_{t+1}) \times (1 + \pi_{t+1})
\]

Then the contribution of each factor as a percentage of GDP is defined as:

\[
d_{t+1} = d_t \times \frac{i_{t+1}^f - \pi_{t+1} \times (1 + g_{t+1}) + a \times e_{t+1} \times (1 + i_{t+1}^f) - g_{t+1}}{1 + \pi_{t+1} + g_{t+1} + g_{t+1} \pi_{t+1}} - pb_{t+1} + ot_{t+1}
\]

where \(d_t \times [i_{t+1} - \pi_{t+1} \times (1 + g_{t+1})]\) is the contribution from the change in the effective borrowing rate in the forecast period; \(d_t \times [a \times e_{t+1} \times (1 + i_{t+1}^f)]\) is the contribution from the change in the exchange rate of the national currency (a is the share of the national currency debt in its total volume); \(d_t \times [g_{t+1}]\) is the contribution of changes in the real growth rate of the economy; \(pb_{t+1}\) and \(ot_{t+1}\) are the contribution of the primary balance sheet and other factors, respectively.