



საქართველოს ეროვნული ბანკი  
National Bank of Georgia

# Financial Stability Report 2021





# Preface

The Financial Stability Report is an annual publication issued by the National Bank of Georgia (NBG). It presents an assessment of vulnerabilities and risks in the financial system, with a focus on the medium- to long-term structural features of the financial sector and the aspects of the Georgian economy that are of importance for financial stability. It also analyses the resilience of the domestic financial system and reviews the policies and measures undertaken by the Financial Stability Committee (FSC) in order to support financial stability.

The financial system is considered stable when it can provide crucial services to market participants in both good and bad times. It is the cornerstone for the sustainable development of the economy. As per its mandate as defined in the Organic Law of Georgia, the National Bank of Georgia continuously aims to ensure a safe and sound financial system.

This analysis draws on data available up to 30 June 2021 unless otherwise stated.

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## Executive Summary

**Due to the macroprudential and microprudential measures taken by the National Bank of Georgia (NBG) before the pandemic and the financial stability policy implemented since its outbreak, the financial sector has been able to successfully overcome the most severe phase of the shock caused by COVID-19.** The imposition of additional capital requirements in previous years by the National Bank and the profits generated by commercial banks allowed banks to accumulate sufficient capital buffers to cope with the shock. Banks thus faced the COVID-19 pandemic well prepared. The financial sector's readiness was further facilitated by the sustainability of banks' assets' quality, which was greatly supported by the macroprudential measures to reduce household over-indebtedness and loan dollarization that had been initiated in the pre-crisis period. With the onset of the pandemic, the National Bank significantly expanded its GEL liquidity instruments and developed a temporary supervisory plan that released a portion of banks' capital buffers. In addition, the banks had established appropriate loan loss reserves. These measures implemented by the NBG ensured the resilience of the Georgian financial system to the shock caused by the COVID-19 pandemic. As a result, the financial system was able to successfully weather the most severe phase of the shock and has been able to continue lending to the economy without any difficulties.

**Despite a gradual decrease in the risks caused by the pandemic, the risks to financial stability coming from the external sector remain high compared to 2019.** The negative impact of the economic shocks caused by COVID-19 on Georgia's economy and financial system is gradually diminishing, although the economy remains vulnerable to external factors. The structural challenges of the Georgian economy, such as the high level of dollarization, the growing current account deficit, and the increasing dependence on international financial flows, have exacerbated the negative impact of the prolonged external shocks caused by the pandemic. However, with the acceleration of global vaccination programs and a faster-than-expected recovery of the world economy, a gradual improvement in this situation is expected, which will be reflected in increased external demand and rising financial inflows. However, although an increase in inflows will contribute to economic growth, at the same time it will increase Georgia's exposure to balance of payment inflows and may again become a source of risk in the future. Trade and financial inflows are thus important channels through which the deteriorating economic situations of trade-partner countries may affect Georgia's domestic economy and pose risks to financial stability.

**The decline in economic activity in the wake of the COVID-19 pandemic has increased the household debt burden, making them more vulnerable to potential shocks.** The deterioration of households' creditworthiness during the pandemic was reflected in an increase in the share of non-performing loans, but this is expected to decline as the economy recovers. The offer of temporary grace periods for loan payments in the early stages of the pandemic, alongside government assistance programs, provided some relief to households; however, due to the severity of the shock, deteriorating creditworthiness led to an increase in the share<sup>1</sup> of non-performing loans (NPL). Servicing debt was especially difficult for borrowers with foreign currency loans. The realization of these risks due to the pandemic revealed the importance of the responsible lending and larization policies pursued by the NBG. Macroprudential measures and legislative changes have helped reduce the vulnerability of the household sector towards

<sup>1</sup> According to the NBG's methodology, this includes the categories of substandard, doubtful, and loss loans.

exchange rate fluctuations, but loan dollarization remains a major challenge, in spite of it having a declining trend. In overall terms, an analysis of the household sector's vulnerability reveals that the sector remains resilient as a result of the macroprudential policies implemented by the NBG in previous years.

**The increased debt burden during the pandemic poses a significant challenge to the financial soundness of companies.** In the first half of 2021, in the wake of economic recovery, the income of non-financial companies started to increase. However, the pace of that recovery is still weak in small- and medium-sized companies, as well as in the hospitality and real estate sectors. The financial vulnerability of companies is also a consequence of their sizable exposure to foreign funding sources, their significant share of short-term debt, and high liability dollarization. Amid the support measures taken by the National Bank and the government and the temporary grace periods on loans offered by commercial banks, companies were able to maintain access to financial resources. However, in the face of increased uncertainty, the main source of funding for companies during the recovery period will be bank loans. Consequently, the ability of financial institutions to identify those companies whose temporary financial difficulties are only due to the pandemic will be important for their recovery and subsequent economic growth. This will also contribute to employment and financial stability in the medium and long term.





**As demand has increased and market uncertainty has decreased, real estate prices have remained stable. This outcome was fueled by the stable market situation before the recession and by the measures taken by the government.** Unlike in the 2008 financial crisis, no price bubble was observed on the real estate market in the pre-crisis period before the COVID-19 pandemic, and the market capitalization rate was also stable. Due to these factors, the actions taken by the government, and an increase in construction costs, no significant adjustments to real estate prices occurred, despite the severity of the shock. It should also be noted that demand for real estate has remained stable, even after the end of the subsidy program. However, the capitalization index, which measures the attractiveness of real estate as an investment asset, remains lower in the second quarter of 2021 than it had been in 2019, despite showing a slight improvement over the previous quarter. It is expected that demand for rental real estate will rise as university education processes return to normal and there is an increase in tourist inflows. This, in turn, will be reflected in an increase in rental prices and, consequently, an increase in the capitalization index. Despite the crisis caused by the pandemic and the uncertainty in the market, the number of permits issued for the construction of multi-apartment residential real estate has increased, which will contribute to the stability of real estate supply in the medium term. However, as the business cycle enters an upward phase, demand for commercial real estate is expected to increase, albeit to a lesser extent than in the pre-crisis period because of slower tourism, a change in office culture, and the development of online commerce.

**As a result of the financial stability policy measures implemented by the National Bank of Georgia, the financial system maintains stability and continues lending to the economy without any difficulties.** The effects of the economic recession caused by COVID-19 have already been largely reflected in the quality of loans, and commercial banks have made loan loss provisions in advance. The financial stress index, which increased in the first half of 2020 due to COVID-19, stabilized in the second half of 2020 and began to decline in 2021 due to the improvement of asset quality, profitability, capital, and liquidity ratios in the banking system. The credit-to-GDP ratio is significantly higher than its trend and currently exceeds the level of similar countries, which serves as an additional indicator of the high debt burden and vulnerability. However, it is expected that, in the wake of increased economic activity, the growth of loans in 2021 will be consistent with the growth of nominal GDP. It is expected this year that a significant portion of banks will recover the capital buffers that had been released at the beginning of the crisis, while the sector will return to the pre-crisis capital adequacy ratio in 2022.



**The NBG's efforts to improve the resilience of the financial system are a continuous work in progress.** The National Bank is constantly monitoring the country's financial stability and will use all the tools at its disposal to reduce the impact of COVID-19 on the country's economy and ensure financial stability. It should also be noted that although the development and mass production of different vaccine variants offer some optimism for health and economic prospects, high uncertainty remains over the end date of the pandemic and its continued impact on the economic and financial sectors. Nevertheless, the current forecast suggests that the impact of the shock on the financial sector has already largely been materialized, and if the current trend continues, commercial banks will earn solid profits by the end of 2021. The National Bank continues to actively work to promote a sound and stable financial system.

The following table summarizes the major financial stability risks facing the Georgian economy.

The Main Risks to Financial Stability	Magnitude/Change
<p><b>Uncertainty associated with the duration and economic impact of the COVID-19 pandemic.</b> As a result of the spread of new strains of the coronavirus in the region and among trading partners, along with low levels of vaccination, uncertainty about the duration of the pandemic remains. This uncertainty can have a significant impact on investor sentiment, and lead to a reassessment of the country's sovereign risk. In such a case, capital will flow out of the country, which will put depreciation pressure on the local currency. Given the high level of dollarization, materialization of this risk will have a significant impact on both inflation and the quality of the loan portfolio.</p>	
<p><b>Accelerated normalization of monetary policy by leading central banks.</b> In developed countries, especially in the US, unprecedented fiscal stimulus and eased monetary policies to support the economy may lead to higher-than-expected demand and create inflationary pressures. If these pressures continue to persist and are reflected in rising inflation expectations, leading central banks will face the necessity for accelerated monetary policy normalization. This will lead to a reassessment of risks by financial markets and will be reflected in a tightening of financial conditions. As a result, developing and emerging economies will have limited access to sources of external financing and the burden of external debt will increase.</p>	
<p><b>Materialization of insolvency risks of non-financial companies.</b> During the pandemic, various support programs provided liquidity to non-financial companies in the face of reduced revenues. As a result, the increase in insolvency issues and non-performing loans in non-financial companies was much smaller than in the 2008 financial crisis. If companies' revenues are not restored with the phasing out of these support programs, insolvency cases may increase dramatically. This risk is exacerbated by the vulnerability of companies' structural debt characteristics.</p>	
<p><b>Delayed economic recovery.</b> A prolonged pandemic and related uncertainty could lead to a deterioration in the production potential of the economy. Delays in the recovery of labor-intensive sectors, especially tourism, will lead to an increase in long-term unemployment. In the face of deteriorating expectations, the financial sector may tighten credit conditions, further exacerbating economic problems and delaying the start of recovery.</p>	
<p>1 = minor risk and 6 = major risk. The arrow indicates changes in the risk level from the previous year</p>	
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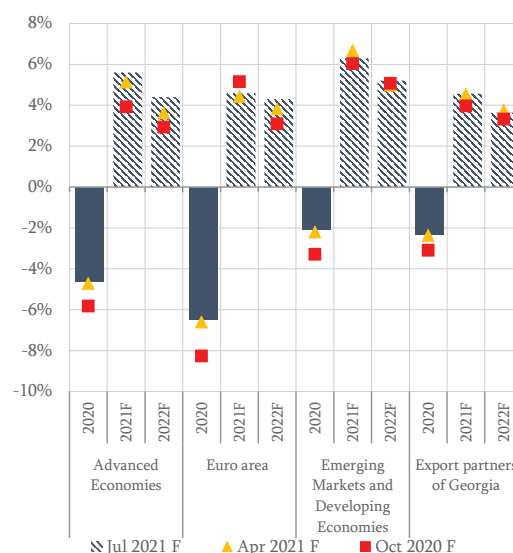
## I. Macro-Financial Environment and Outlook

More than a year has passed since the start of the global recession induced by the COVID-19 pandemic. Amid unprecedented fiscal, monetary and macroprudential policy measures to mitigate the crisis, the global economy has been growing faster than expected since the second half of 2020. However, that economic recovery has been unequal across countries and sectors. The vulnerability of developing and emerging economies remains high due to limited access to COVID-19 vaccines and the significantly increased fiscal deficit and debt burden. Amid the widespread outbreak of the virus, the slow rate of vaccination and ongoing geopolitical tensions, the risks to Georgia's region are even greater. Each of these factors pose risks to the domestic macro-financial environment.

It has been more than a year since the COVID-19 pandemic started and the global economy was plunged into a historically severe recession. The crisis caused by the pandemic is significantly different from previous experiences. The current recession started with a severe crisis in the health sector and turned into a deep economic recession amid measures taken both locally and globally to curb the spread of the virus. As a recession took over the world, the service sector was particularly affected. Developing and emerging economies dependent on international tourism suffered the most. Meanwhile, exports and remittances fell sharply, capital outflows reached record high levels, and countries' risk premia increased significantly. However, in response and in an effort to mitigate the crisis, unprecedented fiscal, monetary and macroprudential policy measures were undertaken. Against the backdrop of these measures, the global economy has begun to recover rapidly.

Since the second half of 2020, the global economy has been growing faster than expected, although that economic recovery has been unequal across countries and sectors. The main driving force of the economic recovery has been domestic consumption. With an increasing pace of vaccinations and an easing of restrictions, consumer spending is rapidly returning to pre-crisis dynamics, which is reflected in increased demand and economic growth rates. At the same time, the contribution of unprecedented fiscal, monetary and macroprudential policies to the rapid recovery of economies has been significant. Although the global economy is slowly approaching its pre-crisis level, the picture varies considerably across countries and sectors. The impact of the pandemic on individual sectors significantly depends on their degree of contact intensity. Due to the spread of the virus and the corresponding containment

Figure I.1. Economic growth in a selected group of economies<sup>2</sup>



Source: WEO database

measures, contact-intensive sectors were most affected. However, the recovery of such sectors – which include tourism, entertainment, sports and hospitality – are highly dependent on the successful control of pandemic and the dynamics of the vaccination programs.

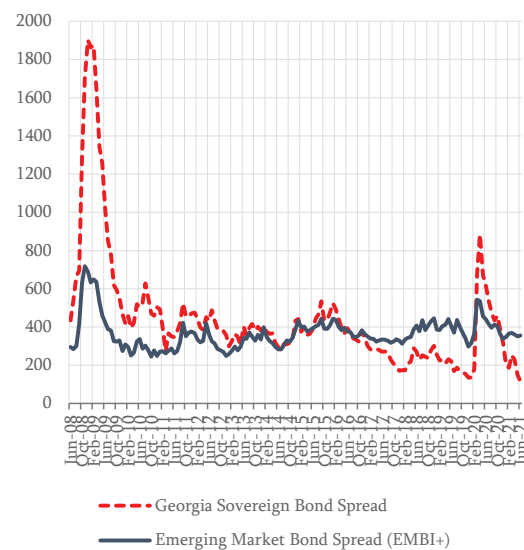
The picture of economic recovery varies from country to country. China's gross domestic product is currently much higher than its pre-crisis level, although the rest of the world is still below the trend. The unequal recovery of economies reflects the dynamics of the pandemic, which have been particularly challenging for small open economies that are heavily depend-

2 The IMF's July forecast has only been updated for some countries. Georgia's export partners include seven main trading partners, but the April forecast was only updated for three of these. For the other four countries, the same forecasts have been used.

ent on tourism. Despite these differences, the global picture has improved significantly. The International Monetary Fund (IMF) estimated global growth of -3.2 percent in 2020 and projects a rate of 6 percent in 2021, which is 0.8 percentage points (pp) higher than the forecast of October 2020. For 2022, the IMF forecasts global growth of 4.9 percent. Amid the enactment of large-scale support measures, the real economy shrunk less in 2020 than had been predicted in the previous period (see Figure I.1). The current global growth forecast saw no change as of the July 2021 projections, although the outlook for emerging and developing economies for 2021, especially for emerging Asia, were revised in a negative direction. In contrast, the prospects for advanced economies became more optimistic, which was reflected in the improvement of the global growth forecast for 2022.

**The uncertainty surrounding economic forecasts remains higher than usual, and significantly depends on the timely availability and effectiveness of the COVID-19 vaccines.** The creation of different versions of the vaccine and the increase in their production and availability have offered some optimism from health and economic perspectives. With increased vaccination, it is likely that containment measures will decrease, and economic activity will stabilize and gradually improve. However, uncertainty surrounding the economic forecasts remains high, due to issues such as potential virus mutations, the vaccine efficacy against new variants of the virus, and the different levels of availability of vaccines in developed and developing economies. However, in light of current events, the present tendencies of economic recovery are likely to be maintained. In particular, the pandemic will slowly be brought under control, consumption will continue to rise, and inflation will converge to its target. The tightening of financial conditions will also be moderate. The different pace of economic recovery across countries and sectors nonetheless remains a significant challenge. Furthermore, economies may recover faster than is currently expected. In such a case, higher inflation and tighter financial conditions are expected. In contrast, the risk of the pandemic getting out of control once again and thus hindering economic growth remains present. In this situation, business losses will increase even more, which in turn will pose further risks to financial stability. Such risks have made the margin of uncertainty around the forecasts even more apparent. High uncertainty also exists regarding the long-term consequences of the unprecedented policies that have been pursued during the COVID-19 crisis.

Figure I.2. Sovereign bond spread<sup>3</sup> (basis points)



Source: Bloomberg database

**Global financial conditions remain supportive, although vulnerabilities are high in those developing and emerging economies that have limited access to COVID-19 vaccinations.** The sharply tightened financial conditions at the beginning of the pandemic were significantly eased in the second half of 2020 and have remained supportive since then (see Figure I.2). However, the unequal pace of economic recovery across regions, countries, and individual economic sectors each pose risks of a tightening of financial conditions in emerging economies. In particular, in the light of the rapid economic recovery of developing countries, a normalization of policies and an increase in interest rates are expected. This may lead to capital outflows from developing and emerging economies at a time when these countries are in greatest need of refinancing. On the other hand, maintaining eased financial conditions for an extended period may lead to an unsustainable increase in asset valuation, which will worsen financial vulnerability and put economic growth at risk. Apart from that, in light of lower interest rates in developed countries and the optimism related towards economic prospects, investors' risk appetites have increased, which, in turn, is reflected in stretched asset valuations. Consequently, if expectations on the financial markets are revised and investors' appetites are reduced once more, the recovery of the global economy may be jeopardized.

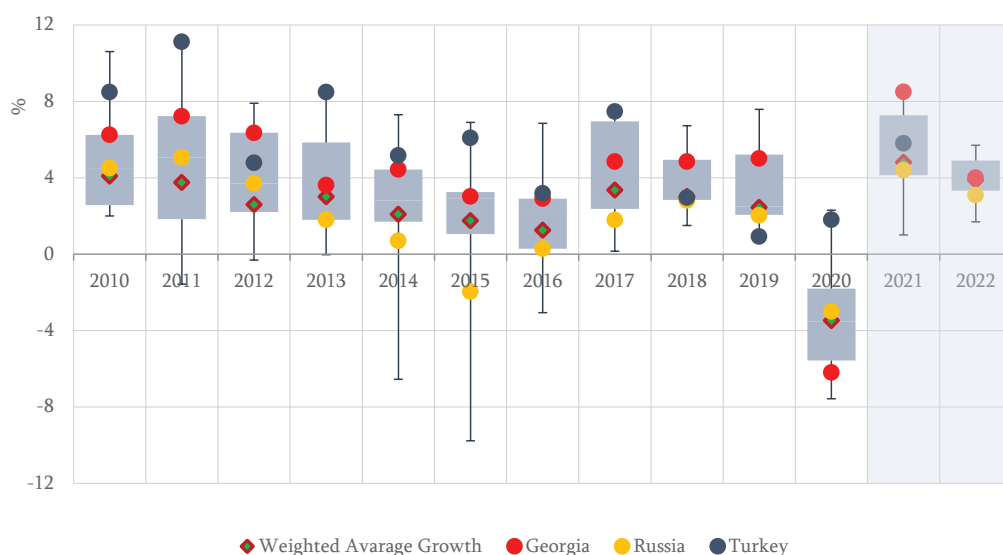
<sup>3</sup> This takes into account not only the yields on government bonds, but also the yields on securities issued by state corporations (railways, oil and gas companies). The latter, in addition, may be characterized by individual risks that can change the sovereign risk assessment.

**Fiscal support has played a major role in the recovery of the global economy, but it has also significantly increased the fiscal deficit and, consequently, the debt burden in many countries.** The level of government debt has reached an all-time high. Although loose financial conditions have eased the debt burden, there is a risk that, in the absence of robust economic recovery, many countries will be left with a high post-pandemic fiscal deficit and an increased debt burden. Moreover, emerging market economies could face significant challenges in servicing such debt, especially if sovereign risk premia rise. During the pandemic, apart from government debt, corporate debt also increased significantly to reach record-high levels in many countries.

**The effects of the COVID-19 pandemic have been quite severe for developing and emerging economies. At the regional level, the economic situation has further deteriorated due to the rapid spread of the virus, limited access to vaccinations, and various geopolitical tensions.** The situation in Georgia’s trading partners deteriorated significantly in the second half of 2020 and, partially, in the first quarter of 2021. Slightly improved activity has been observed in some trading partners in the second quarter of 2021, although this remains weak amid the significant reductions of trade, investment and production resulting from the pandemic.

In Russia, the economy started to recover in the second quarter of 2021, which was a result of eased containment measures and increased consumer spending amid the global vaccination progress. At the same time, the expectations of the external sector improved in light of increasing oil prices. The latter trend has also positively contributed to the economic recovery of Azerbaijan. Oil production and refining increased, which led to slight stabilization of the external sector. Azerbaijan’s non-oil sector has also begun to recover. On the other hand, business sentiment deteriorated in Armenia due the military conflict and politically unstable environment. Armenia’s external sector saw a significant reduction in the volume of exports and an increased volume of imports. However, in the second quarter of 2021, the economic growth rate of Armenia picked up against the backdrop of increased consumer spending. Meanwhile, economic activity in Turkey continued to improve, which was reflected in the economic recovery observed in the second quarter of 2021. However, in light of the pandemic-related restrictions, foreign investment declined and the tourism sector remains weak. Moreover, due to the depreciation of the Turkish lira, inflationary pressures remain high (see Figure I.3).

Figure I.3. Growth distribution of the main trading partners of Georgia

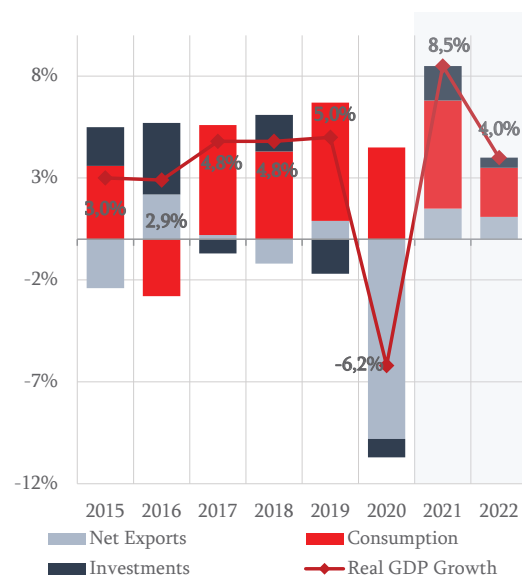


Source: WEO; NBG staff calculations

According to the NBG's economic forecasts, the Georgian economy will continue to recover this year and real GDP will grow by 8.5 percent. The main driving force of Georgia's economic growth is domestic consumption (see Figure I.4). The latter, in turn, is the result of fiscal stimulus and a growing credit portfolio. At the same time, it is expected that both the volume of investments and net exports will make a positive contribution to the economic recovery. Mobility between countries will gradually increase alongside the rollout of vaccination programs. Given the latter assumption, tourism revenues are expected to recover in the second half of the year but will remain significantly lower than 2019 levels. It should be noted that, as is the case with the global forecast, Georgia's economic forecasts are characterized by a high level of uncertainty.

Interest in environmental, social and governance (ESG) issues had been growing even before the outbreak of the pandemic, but COVID-19 made the importance of such issues even clearer, accelerating the integration of ESG considerations into the decision making of the financial sector and capital markets. In the light of the recovery of the global economy, there has been a significant increase in asset markets that meet environmental, social and governance standards. The growing interest in sustainable finance has resulted in the Green Recovery Initiative<sup>4</sup>, which aims to shift fiscal support toward green and sustainable activities designed to mitigate the pandemic-related recession in developed economies. A growing number of central banks are integrating climate change and other ESG risks into their financial stability risk frameworks. The steps taken serve to mitigate such risks and support long-term financial stability.

Figure I.4. Decomposition of real GDP growth by expenditure, YoY



Source: NBG

4 See <https://www.imf.org/en/Topics/climate-change/green-recovery>



## II. Vulnerabilities and Risks Affecting Financial Stability

### External Vulnerabilities

*Georgia is a small open economy characterized by a high level of dollarization, a current account deficit and increasing dependence on international financial inflows, all of which make it vulnerable to external developments. As a result, the prolonged external shocks caused by the COVID-19 pandemic had a negative effect on the financial and economic state of Georgia. However, with ongoing global vaccination and a faster-than-expected economic recovery, this situation is expected to gradually improve, which will translate into increased external demand and financial inflows. A rise in inflows will support economic growth; however, it will also increase Georgia's dependence on balance of payment inflows and could become a source of future risk in the event of a sudden outflow. Trade and financial inflows are thus one of the channels through which a worsened economic situation in trading partner countries may affect the Georgian economy and thereby create risks for financial stability.*

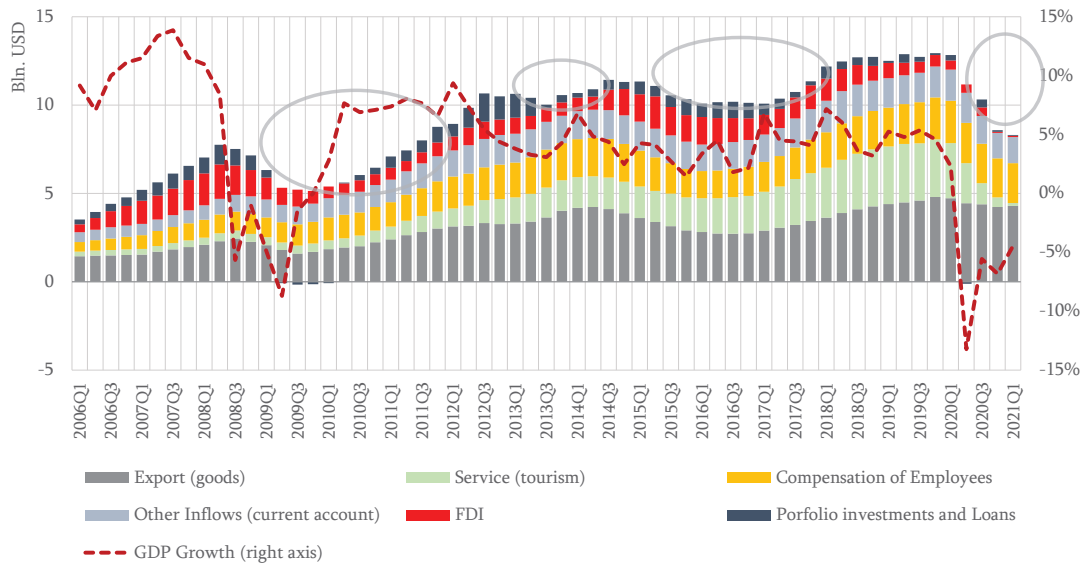
**The negative effects of the COVID-19-related economic shocks are gradually starting to decrease; however, the Georgian economy remains vulnerable to external factors.** In the pre-pandemic period, the Georgian economy was characterized by a high level of vulnerability to the external sector, which was reflected in the high level of dollarization, a current account deficit and rising dependence on international financial inflows. These structural vulnerabilities amplified the negative effects of the COVID-19-related external shocks on the financial and economic state of Georgia. However, an improvement in the global epidemiological situation and a faster-than-expected economic recovery will gradually decrease the risks emerging from Georgia's external sector, which will translate into higher external demand and greater financial inflows. Despite the gradual decrease in COVID-19-related risks, the current level of external sector risks is elevated compared to 2019, which is mainly a result of an increasing current account deficit and a significant rise in external debt. In addition, compared to the pre-pandemic period, the pressure on international reserves has increased and the net international investment position (NIIP) has deteriorated; however, the latter remains at a sustainable level.

**Despite the faster-than-expected recovery of the global economy, the transmission channels of financial stability risks emerging from Georgia's external sector remain significant.** Thanks to the worldwide vaccination progress and unprecedented fiscal and monetary stimulus, the global economy is rapidly returning to the pre-pandemic level. However, this process has been

quite uneven and is mostly driven by the fast recovery of developed countries. Developing countries, especially tourism-dependent economies, remain vulnerable to the pandemic-driven economic crisis. Despite positive expectations, a high level of uncertainty remains, which is related to slower-than-expected vaccination rates and the emergence of new variants of the virus. This poses a threat not only to countries with low vaccination rates, but also to those where the infection rate remains low at this stage. Therefore, the improvement of Georgia's external position will largely depend on the situation in the region and trade partner countries.

In the second quarter of 2021, in parallel with the gradual easing of pandemic-related restrictions, economic activity in the EU, Turkey and Russia continued to improve. With the continued economic recovery of the region and trade partner countries, Georgia's external position is also expected to improve. This will translate into increased external demand and money inflow. Mass vaccination programs and the opening of borders will also support the growth of tourist flows, which will have a positive effect on receipts from exports of services and will support a reduction of the current account deficit. Nevertheless, due to uncertainty related to the pace of vaccination in both Georgia and on a global scale, receipts from tourism will remain subdued in the short run compared to 2019 levels. It should be noted that during the pandemic, the trade balance of goods partially offset the current account deficit, which was mainly driven by large decline in imports of goods. The faster-than-expected recovery in global economic activity and international trade has had a posi-

Figure II.1. Balance of Payment inflows in Georgia



Source: NBG, GeoStat

tive effect on Georgia's foreign trade, which will help bring the current account deficit closer to the pre-pandemic level. In addition, there was a positive trend in money transfers, which was one of the most important and growing sources of current account financing during the pandemic.

These positive developments will partially offset the financial stability risks stemming from Georgia's external sector. However, the transmission channels of global risks remain significant. The pandemic confirmed that the tightening of financial conditions caused by increased risk premia in emerging economies increases the cost of lending in foreign currency from the supply side, which is especially important for countries with a high level of dollarization. A higher-than-expected rise in risk premia also has a negative effect on financial inflows and increases the risk of capital outflows, which became evident during the pandemic. Additionally, a possible tightening of monetary policy in developed countries, especially in the US, could increase the price of imported goods by causing currency depreciation and will create inflationary pressure. On the other hand, existing economic difficulties in trading partner countries, especially in Russia and Turkey, slow down exports of services and money transfers, which has a negative effect on the external balance, as well as on the local currency, and increases exchange rate fluctuations. Overall, despite positive expectations about global economic growth and external inflows, external risks to financial stability remain significant amid the uncertainty surrounding the end of the pandemic.

**While international trade and financial inflows support economic growth, increasing depend-**

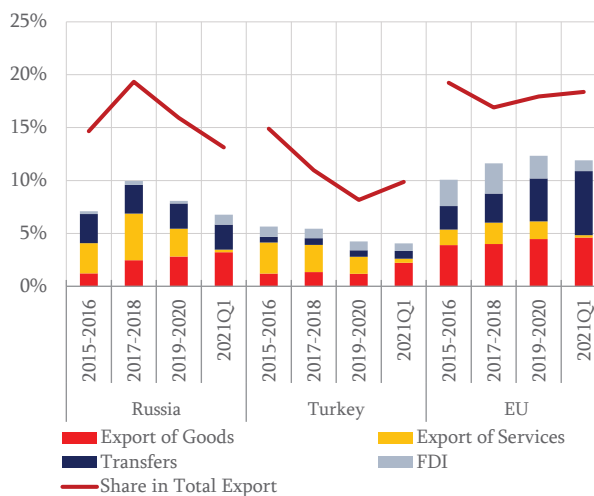
**ence on inflows creates financial stability risks in Georgia.** In recent years, Georgia's dependence on international trade and financial inflows have been increasing (see Figure II.1). Historically, exports of goods have been the main source of financial inflows; however, the share of tourism has been steadily growing. Despite the fact that increasing trade and financial inflows are characteristic of emerging market economies and have a positive effect on economic growth, they also increase a country's dependence on the economic situation in trading partner countries and could become one of important sources of vulnerability, as it was confirmed during the pandemic. Specifically, pandemic-related economic difficulties in region and other partner countries caused a significant decline in Georgia's balance sheet inflows (see Figure II.1), which resulted in a significant decrease in GDP growth in the face of the economic slowdown. As the global economy recovers, inflows are expected to increase once more; however, the volume of inflows, especially receipts from exports of services, will largely depend on vaccination rates and imposed restrictions. A rise in inflows will, on the one hand, support economic growth, but, at the same time, will increase Georgia's vulnerability to balance of payments inflows and could create a risk of sudden outflows in the future. Trade and financial inflows are thus one of the channels through which the worsened economic situations of trade partner countries could be transmitted to Georgia and thereby give rise to financial stability risks. It should be noted that this risk can be partially offset by a diversification of inflows in terms of country of origin, which is also evident in Georgia.

**The Georgian economy is highly exposed to de-**

**developments in the EU, Russia and Turkey.** As of the first quarter of 2021, the aggregate share of these countries in Georgia's total exports and total external inflows was 40 and 43 percent respectively, which is similar to last year's data. However, compared to 2020, the share of Russia in total exports decreased slightly, which was mostly driven by a decrease in receipts from exports of services. Meanwhile, the share of Turkey and the EU in total exports increased. In the first quarter of 2021, the share of total inflows in GDP from these countries decreased compared to previous years; however, this was also mostly driven by a decrease in receipts from exports of services (see Figure II.2). Receipts from exports of goods are expected to grow moderately following the gradual economic recovery in trading partner countries. In addition, despite the increasing trend of nominal imports, high expected imported price will likely decrease real imports, which will have a positive effect on the trade balance. Overall, the dependence on inflows remains at a high level, which makes Georgia especially vulnerable to developments in these markets. The pandemic has demonstrated that dependence on external inflows creates a risk of sudden outflows, which has a negative effect on the country's economy and, therefore, on financial stability.

**Following the historically low-level deficit in 2019, Georgia's current account deficit deteriorated significantly after the start of the pandemic; however, it slightly narrowed in early 2021 and is expected to gradually decline with the recovery of tourism and exports of goods.** Following the economic downturn in Georgia's trading partner countries and the sharp decline in receipts from tourism, the current account deficit saw a sharp deterioration in 2020. During this time, one of the most important and growing sources of current account deficit funding was money transfers. Furthermore, the rise of the current account deficit was partially balanced by the decrease in imports of goods as a result of weakened domestic demand. On the other hand, the worsened economic situation caused a decrease in investors' risk appetite, which was primarily reflected in the rising risk premia of developing and emerging economies and large capital outflows from these countries. The pandemic saw a significant reduction in net foreign direct investment, as well as in portfolio investments, which are both expected to increase with a gradual recovery of the local and international economic situation. The negative risk premia shock during the pandemic was transmitted to Georgia indirectly through the current account channel from trading partner countries. As a result of the risk premia shock, the currencies of Georgia's trad-

Figure II.2. Exposure to major external markets (flows are expressed as a share of GDP)



Source: NBG, Geostat

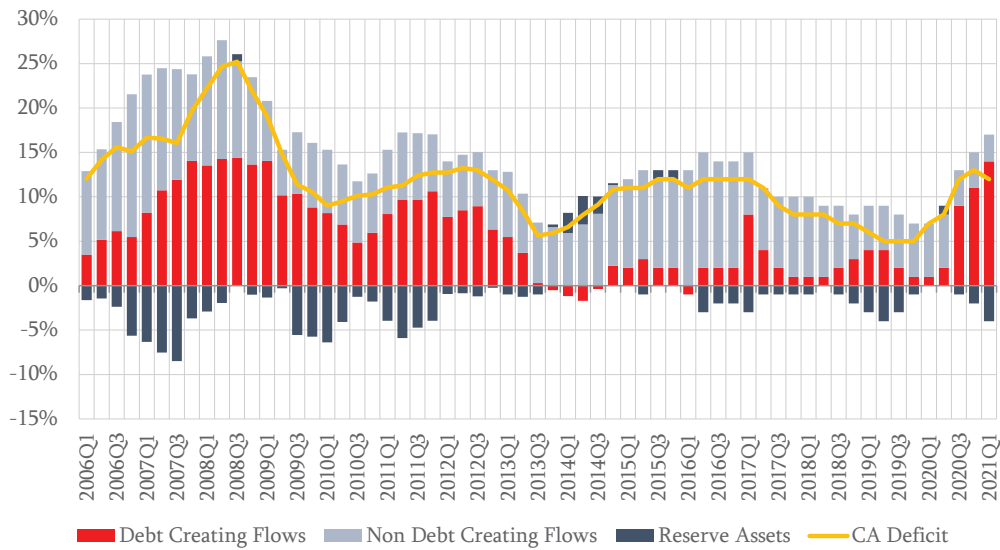
ing partner countries depreciated, which was followed by a worsening of the real sectors of these economies. These developments caused a decrease in receipts from exports in Georgia.

Starting from the second half of 2020, there was a significant decrease in the share of non-debt instruments in financing the current account deficit, while the share of debt-creating inflows increased significantly, which increases external vulnerability (see Figure II.3). In the event of worsening economic conditions in the region, there exists a risk of a repricing of risk premia, which will negatively affect the interest rate of foreign currency denominated funds, increase the debt servicing costs of external debt, and create refinancing risk. Moreover, in the event of a greater-than-expected rise in sovereign risk premia in the region, the risk of capital outflow increases, which can have a negative effect on business sentiment and investment and cause lower-than-expected economic activity. The risk of a repricing of risk premia is especially noteworthy in the face of inflationary pressure in the region and the earlier-than-expected rise in interest rates in the US. However, the fact that Georgia's share of short-run debt is low, decreases the above-mentioned risks.

Despite the widening of the current account deficit, a recovery in tourism inflows and external demand will support a narrowing of the deficit in the medium term. The process of returning to the 2019 deficit level will significantly depend on the pace of the recovery of tourism. With an improvement in local and global expectations, a gradual increase in foreign direct investment and other inflows is expected. These will reduce the need for debt-creating inflows in financing the current account deficit.



Figure II.3. CA deficit and sources of financing (% of GDP)

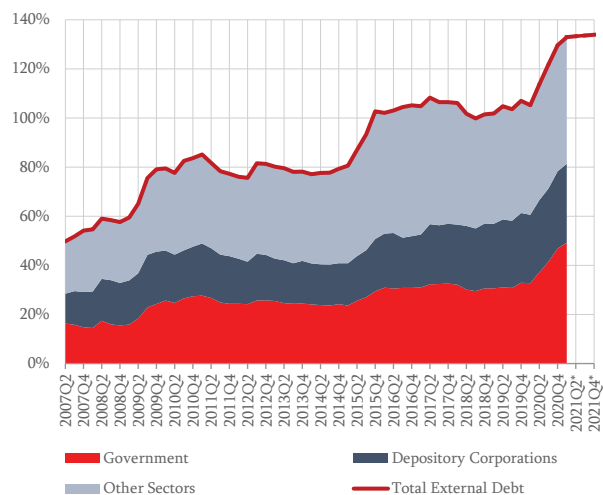


Source: NBG

**The pandemic caused an increase in external debt and debt servicing costs; however, government debt remains at a sustainable level.** The financial funds mobilized to mitigate the effects of recession and fund the balance sheet deficit significantly increased the external debt of Georgia (see Figure II.4). While Georgia’s total debt is not particularly high compared to other emerging economies, public debt increased significantly in 2020; however, it remains at a sustainable level. According to the IMF’s projections, Georgia’s external debt will reach 134 percent of GDP by the end of 2021 and will start gradually decreasing after that.<sup>5</sup> It should be noted that Georgia’s external debt is mainly denominated in foreign currency and is thus highly vulnerable to exchange rate fluctuations. This risk became more evident during the pandemic, when a repricing of risk premia increased the debt servicing costs of external debt. However, the share of short-term debt in Georgia is low and comprises 20 percent of total debt, while part of the long-term debt is from related companies (quasi-capital), which decreases the risks of a risk premia repricing and refinancing.

**During the pandemic, foreign and local currency denominated external debt increased in almost all countries comparable to Georgia.** However, the share of foreign currency debt for almost all types of borrowers in Georgia is one of the highest among selected peer countries (see Figure II.5). In the event of currency de-

Figure II.4. External debt (% of GDP)

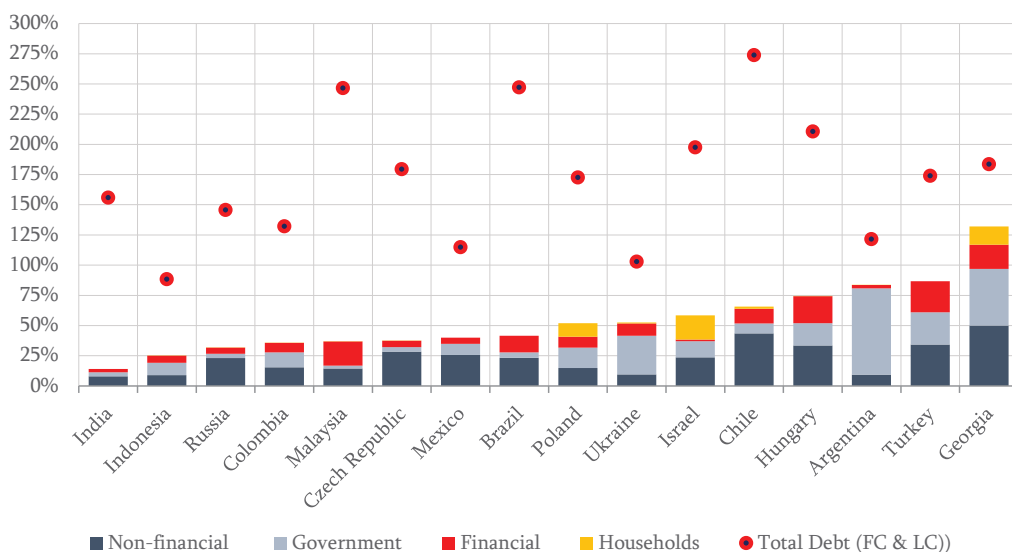


Source: NBG

preciation, this could increase debt servicing costs. Nevertheless, the slight decrease in dollarization of loans in the second half of 2020 will alleviate the effects caused by a depreciation of foreign currency denominated loans. Moreover, a sizable share of Georgia’s external debt is borrowed from international financial institutions on concessional terms, which implies a lower debt burden compared to the baseline. It should also be noted that Georgia managed to issue a USD 500 million Eurobond in 2021 at a historically low 2.75 percent coupon rate. This was the result of high investor interest and an improvement in the country’s sovereign rating in recent years.

5 See <https://www.imf.org/en/Publications/CR/Issues/2021/04/16/Georgia-Eighth-Review-Under-the-Extended-Fund-Facility-Arrangement-Press-Release-and-Staff-50358>

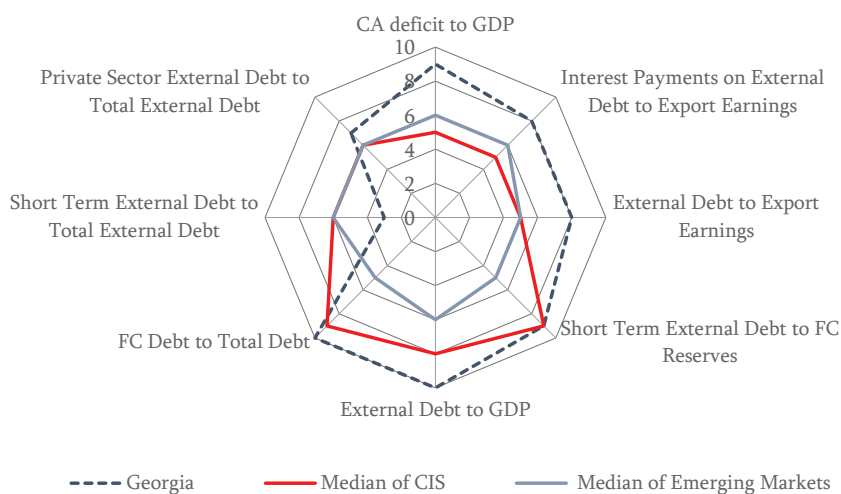
Figure II.5. Foreign currency debt by type of borrower: Cross-country comparison (% of GDP, as of 2020Q4)



Source: NBG, Institution of International Finance; Statistical data of selected countries

Overall, the external vulnerability in emerging markets (EMEs), CIS countries and Georgia has increased compared to previous year. Moreover, Georgia’s external vulnerability is comparable to that of CIS countries in some components, but it is higher compared to the median values of EMEs (see Figure II.6). Although Georgia’s current account deficit has been decreasing in recent years, it has deteriorated due to the COVID-19 pandemic and remains at a high level compared to similar countries. Compared to CIS and emerging market countries, the shares of interest payments and external debt to export earnings are high in Georgia, which constitutes an external vulnerability. Moreover, the high share of foreign currency debt in Georgia and CIS countries creates the risk of a rapid rise in debt servicing costs in the event of a sudden depreciation of the exchange rate. However, compared to CIS and EME countries, the favorable maturity structure of external debt in Georgia indicates a low risk of rollover should financial conditions tighten.

Figure II.6. External vulnerability indicators relative to emerging markets and CIS countries<sup>6</sup>, as of 2020Q4



Source: NBG, IMF, WB

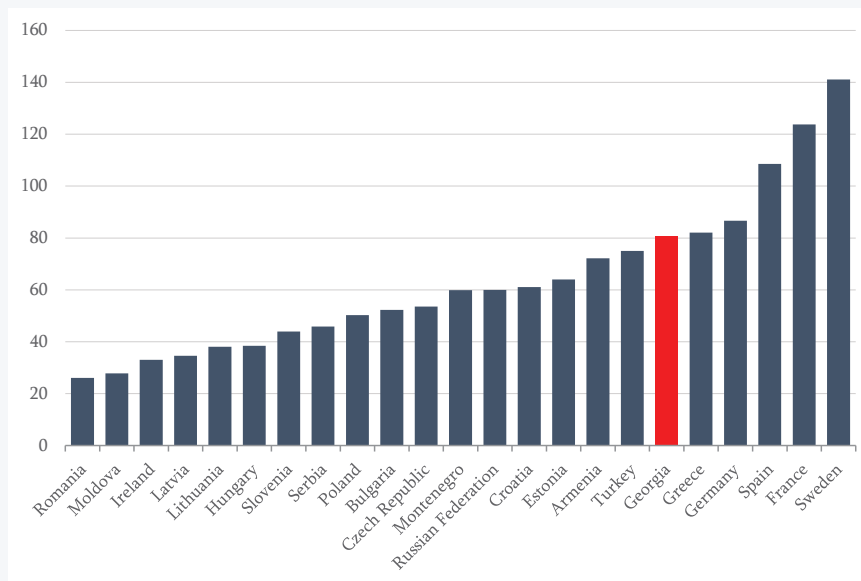
6 The rankings are based on global distributions of the corresponding indicators. A higher rank corresponds to higher vulnerabilities.

## Box 1. A comparative analysis of the Georgian debt burden

The debt burden is one of the key determinants of financial stability and is measured in terms of the ratio of credit to nominal gross domestic product (GDP). As a high level of debt burden can hinder economic growth<sup>7</sup>, getting an understanding of the purpose of the debt gains increased significance. Credits directed towards more productive sectors of the economy create more value added, whereas less productive sectors have negligible impact on economic growth. Moreover, an excessive growth of the debt burden aggravates risks of borrowers' insolvency and increases the likelihood of a financial crisis.

The proposed analysis uses two definitions of private sector credit: a narrow definition of credit that incorporates loans issued by domestic banks and other financial institutions to resident households and non-financial corporations, and a broad definition that encompasses loans, as well as bonds and foreign financing.

Figure B1.1. Domestic credit to the private sector (% of GDP), 2020



Source: The World Bank and the National Bank of Georgia.

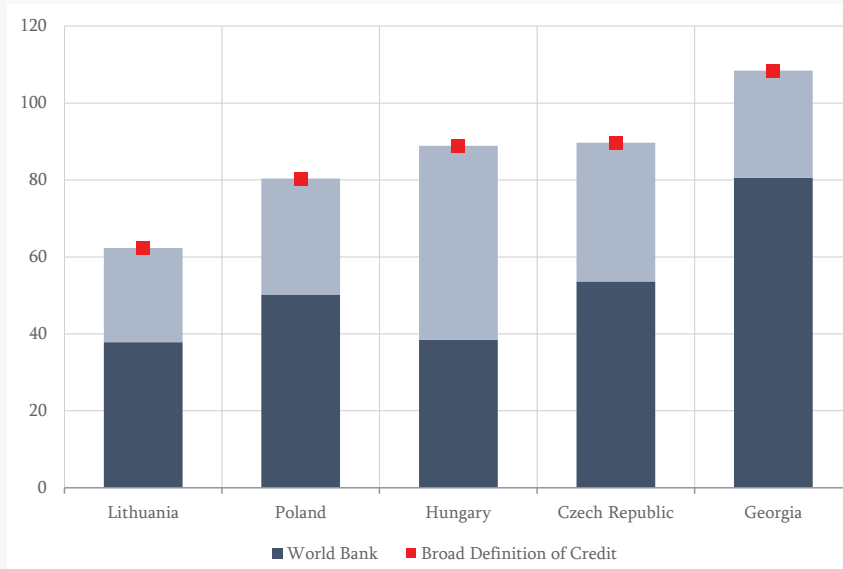
According to the latest data from the World Bank (see Figure B1.1), based on lending from bank and non-bank financial institutions, Georgia has a higher credit-to-GDP ratio than similar developing countries. The World Bank uses the narrow definition of credit, whereas in many cases countries employ the broad definition when assessing financial stability risks. This creates a different picture when evaluating a country's debt burden and, subsequently, its riskiness.

The inclusion of bonds and foreign financing in the credit definition results in rather different level of debt burden. Based on official data of selected comparable countries from 2020, the difference in the broad definition of the credit-to-GDP ratios between these countries and Georgia has seen a considerable reduction (see Figure B1.2). However, the debt burden of Georgia is growing substantially faster compared to the selected countries, which makes the current high level of debt burden noteworthy.

There are several reasons for the high level of debt burden in Georgia. One of such reasons is Georgia's consumption-based economy. Over the last five years, final consumption, a significant part of which was comprised of imports, accounted for 85 percent of GDP. Consequently, financing consumption with credit causes debt to grow faster than GDP. The relative ease of accessing credit

<sup>7</sup> See <https://www.imf.org/~media/Files/Publications/GFSR/2017/October/chapter-2/Documents/C2.ashx>

Figure B1.2. Cross-country comparison of credit-to-GDP ratio (%), 2020



Source: The World Bank and the central banks of selected countries.

is another reason for the high level of debt burden in Georgia. According to the Credit Information Bureau, 85 percent of adults had a loan from a formal credit institution in the last five years. Out of 1,000 adults, 641 have current loans from commercial banks, which reflects one of the highest rates in the world based on the IMF's Financial Access Survey.<sup>8</sup> According to the same survey, the level of financial inclusion in Georgia is also high in terms of bank deposits and accounts; Georgia has high rates for cashless payments and remote financial services. Along with the effective operation of financial institutions, such a level of development of financial intermediation is built on a supportive legislative environment and well-established infrastructure. Based on the World Bank's getting credit score from its Doing Business report<sup>9</sup>, which encompasses the strength of the legal framework and the depth of credit information, Georgia is ranked in 15th place. Moreover, Georgia shares the best position with several other countries because of the 100 percent coverage of the Credit Bureau.<sup>10</sup> Furthermore, under reasonable and forward-looking supervisory approaches, the growth of financial sector assets was sound and sustainable, prudential ratios were adequate and transparent, and profits were solid. These circumstances helped financial institutions to attract resources from abroad, including international stock exchanges, without which such an increase in financial depth would have been impossible. It is also noteworthy that there are no state-owned banks in the market, which is essential for an efficient and competitive financial system. Moreover, average interest rates in Georgia are considerably higher than in comparable countries, while the maturity is low; because of this, the debt service burden is also higher.

It is worth mentioning that over the last two years, since the initiation of the responsible lending regulations in 2019<sup>11</sup>, the growth rate of the household debt burden has decreased, whereas the corporate debt burden increased. This implies the reallocation of credit funds to more productive sectors. As a result, a stronger link was established between credit growth and economic growth. The growth rate of the debt burden is the primary focus of the macroprudential policy of the National Bank of Georgia. The National Bank closely monitors its dynamics, and in the event of excessive growth, it will employ the relevant regulatory instruments.

8 See IMF [Financial Access Survey](#).

9 See <https://www.doingbusiness.org/en/data/exploreeconomies/georgia>

10 The Credit Information Bureau covers all credit issued by licensed credit institutions.

11 See Box 3 in the [Financial Stability Report](#) of the National Bank of Georgia.

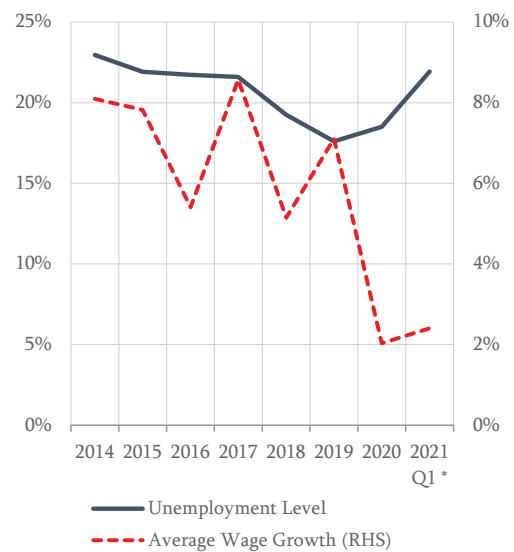
## Household Sector Analysis

*A relaxation of the restrictive measures designed to limit the pandemic and an intensification of the vaccination process will help households improve their economic conditions. The deterioration of households' solvency during the pandemic was reflected in the rise of the non-performing loan ratio; however, this ratio is expected to subsequently decline in line with the broader economic recovery. It should be noted that the household debt burden increased during the pandemic, which makes households more vulnerable to potential shocks. In addition, the exchange rate risk of non-hedged borrowers remains a significant challenge for the household sector. The realization of these risks as a result of the pandemic highlighted the importance and relevance of the responsible lending and larization policies.*

**A relaxation of the restrictive measures taken to protect against the pandemic and an intensification of the vaccination process will both contribute to an improvement of households' economic conditions.** In the first quarter of 2021, compared to the same period of the previous year, the unemployment level increased by 3.6 percentage points and amounted to 21.9 percent<sup>12</sup>. It should be noted that the increase in the unemployment rate occurred while the labor force fell by 6.3 percent<sup>13</sup>. If this had not happened, the rise in unemployment would have been higher. The drop in employment was mainly driven by a decrease in the workforce in the construction, hotel and restaurants. In spite of that, the average wage still increased, which can be explained by the job loss rate being higher among the low-income labor force. However, it should be noted that, in light of a relaxation of restrictions, positive dynamics in terms of economic activity were evident in the first quarter of 2021, which should reflect positively on employment dynamics. As the economic recovery largely depends on the vaccination process, its intensification is expected to contribute to the improvement of households' economic conditions.

**The household debt burden increased during the pandemic, making them more vulnerable to potential shocks.** Household loan growth was around 10 percent in 2020, excluding the exchange rate effect, which stimulated the country's economic activity. On the other hand, credit growth and a depreciation of the national currency against the US dollar in a period of economic recession increased the household debt burden. As a result, the household debt to GDP ratio amounted to 41.3 percent in the second quarter of 2021, which was 3.7 percentage points higher than in the same quarter of the previous year. However, it should be noted that

Figure II.7. Labor market indicators: unemployment level and growth of the average wage (YoY)



\* The growth of average wage in the first quarter of 2021 is compared to the average wage in 2020.

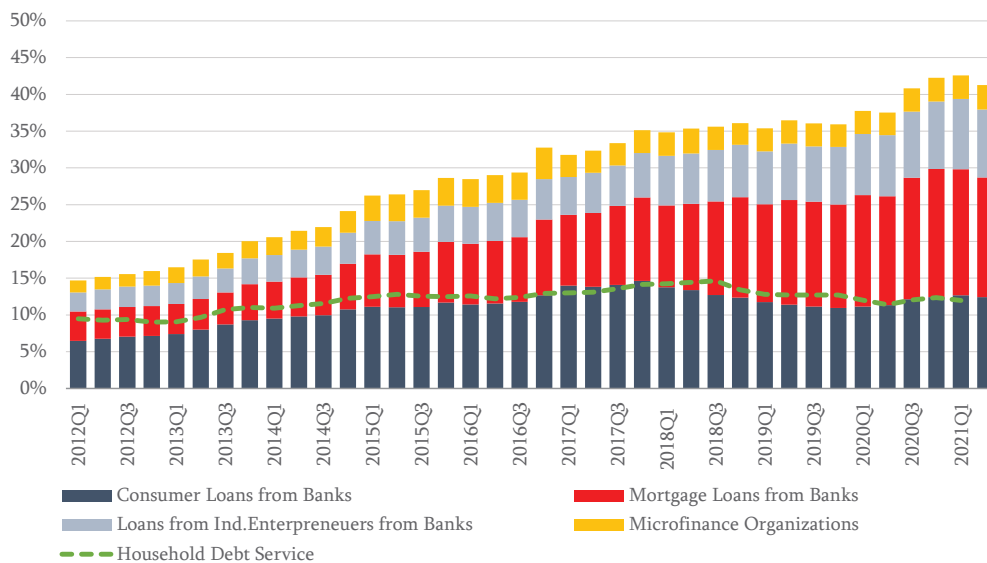
Source: GeoStat

an increase in loan maturity helped maintain a stable debt service ratio.

<sup>12</sup> This indicator is not comparable to the level given in the Financial Stability Report of 2020 because of changes made to the methodology of calculating labor force statistics.

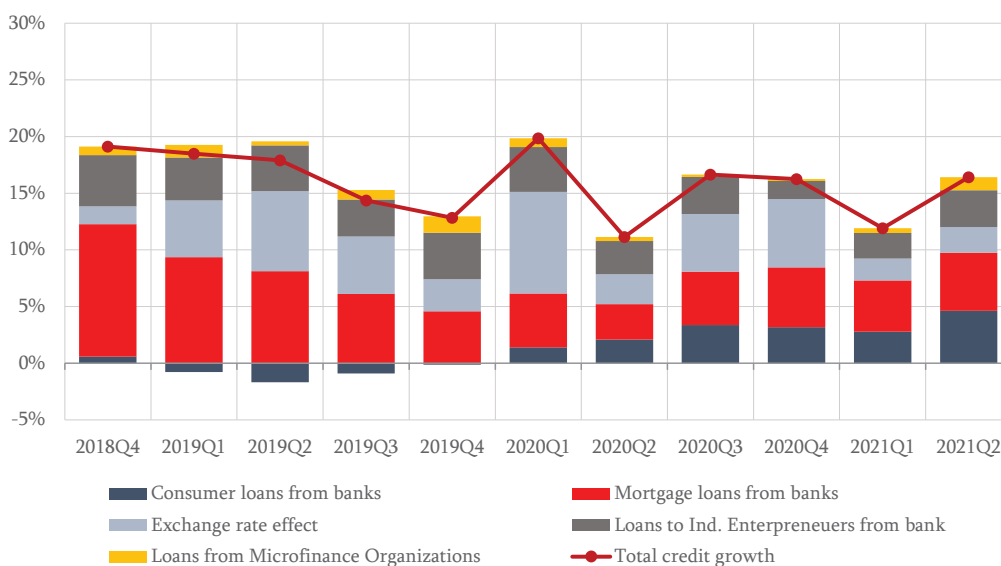
<sup>13</sup> Source: GeoStat, [Indicators of the labor force](#).

Figure II.8. Household debt to GDP ratio



Source: NBG

Figure II.9. Decomposition of households' annual credit growth



Source: NBG

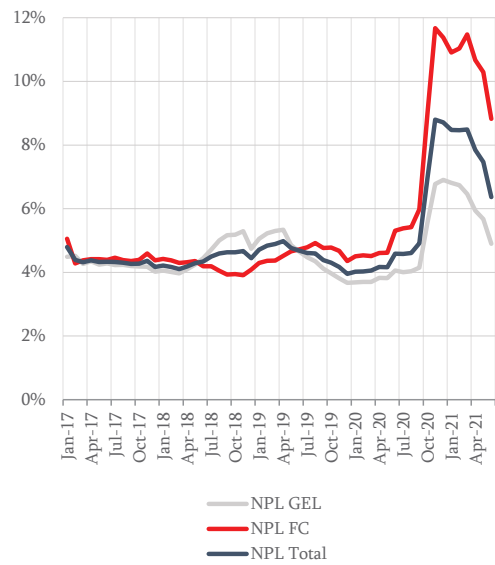
**The deterioration of the creditworthiness of households during the pandemic was reflected in a rise of non-performing loans; however, these are expected to decrease in light of the economic recovery.** During the pandemic, government support programs and loan moratoria periods helped ease households' financial conditions; however, after those programs ended, the deterioration of creditworthiness was reflected in a rise of non-performing loans. It should be noted that servicing debt was harder for foreign currency borrowers. In June 2021, the share of non-performing loans in foreign currency increased by 4.3 percentage points compared to the beginning of the pandemic and reached 8.8 percent, while for national cur-

rency loans, the share rose by 2.3 percentage points and amounted 6.4 percent. As of June 2021, only 6 percent of households continue to use moratoria programs, so the non-performing loan ratio is not expected to rise further. Meanwhile, it is expected that a gradual economic recovery will positively affect borrowers' creditworthiness, which will promote the improvement of loan quality. Indeed, the share of non-performing household loans has already decreased in the second quarter of 2021.

**The exchange rate risk of non-hedged borrowers remains an important challenge for the household sector.** Macroprudential policy and the legislative changes implemented in previous years have contributed to the decrease of household vulnerability. Household loan dollarization has a downward trend, but it remains at a high level, amounting to 37.6 percent in June 2021. During periods of exchange rate volatility, non-hedged borrowers face significant financial distress, which increases credit risks for banks. In response, banks are required to hold additional buffers in accordance with the existing macroprudential policy.

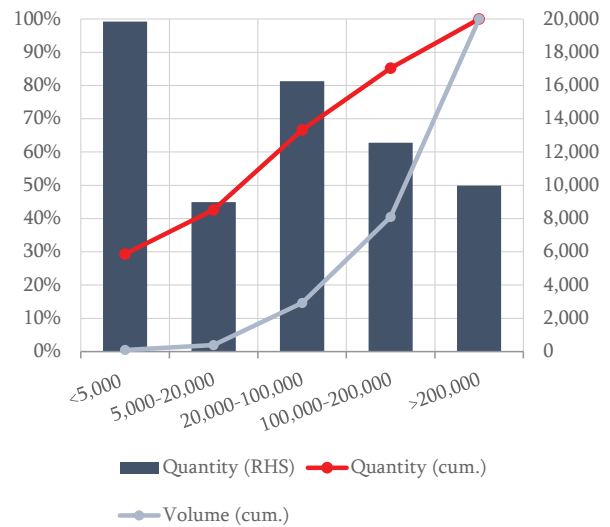
**Despite the declining levels of loan dollarization, various foreign currency loan contracts issued in previous years have not yet been terminated, and such borrowers are still exposed to currency risk.** There are 66,000 active foreign currency loans in the banking system portfolio, amounting to GEL 7.5 billion. However, a significant number of such loans are already largely amortized, and the borrowers are left with only small debts. In volume terms, 85% of these loans are above GEL 100,000, which are usually issued to high-income borrowers and are considered less risky. In addition, loans issued since 2019 satisfy the healthy limits of the PTI and LTV ratios, further ensuring a reduction of risk.

Figure II.10. Household non-performing loan ratio



Source: NBG

Figure II.11. Distribution of the foreign currency loan portfolio, June 2021

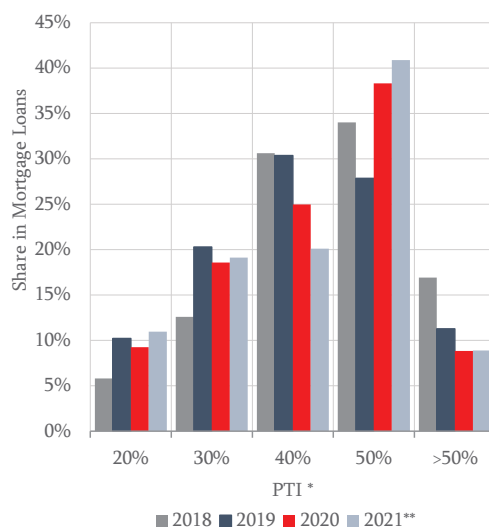


Source: NBG



The financial losses stemming from the pandemic served to outline the relevance and significance of the responsible lending regulations implemented by the National Bank of Georgia. The introduction of PTI and LTV limits in 2019 significantly decreased the vulnerability of the household sector (see Box 2). As a result of these restrictions, households faced the financial difficulties caused by the pandemic in a better financial condition than they would have otherwise. In addition, the distribution of PTI indicates that the number of high-risk loans (PTI>50%), which are mainly restructured or refinanced loans, is decreasing. Distribution of the LTV ratio is healthy, and the ratio is below 80 percent for 75 percent of the loans in the banking system, which decreases the riskiness of the mortgage loan portfolio.

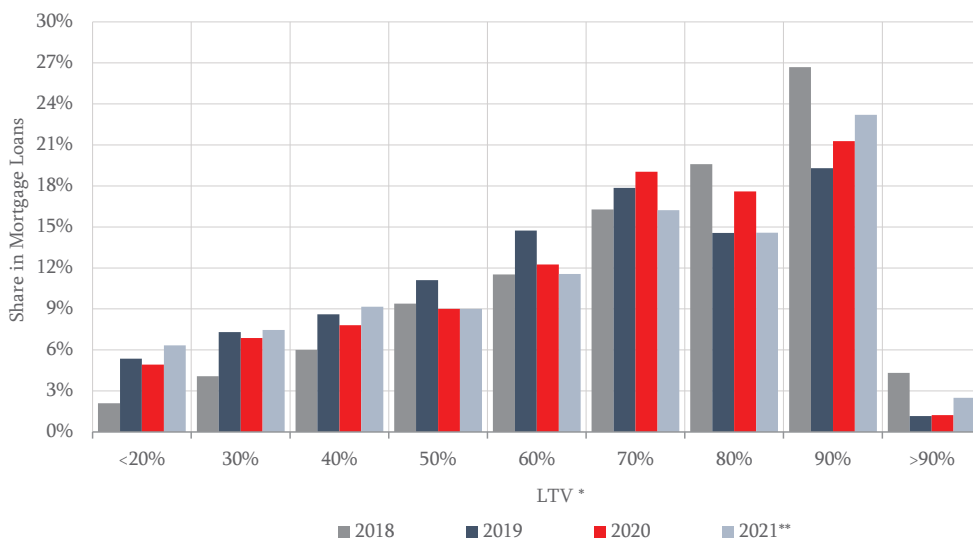
Figure II.12. Distribution of the PTI ratio



\* Distribution of PTI ratio is constructed based on the quantity of loans issued during the year.  
 \*\* The value in 2021 includes mortgage loans issued in the first and second quarters.

Source: NBG

Figure II.13. Distribution of the LTV ratio



\* Distribution of LTV ratio is constructed based on the quantity of loans issued during the year.  
 \*\* The value in 2021 includes mortgage loans issued in the first and second quarters.

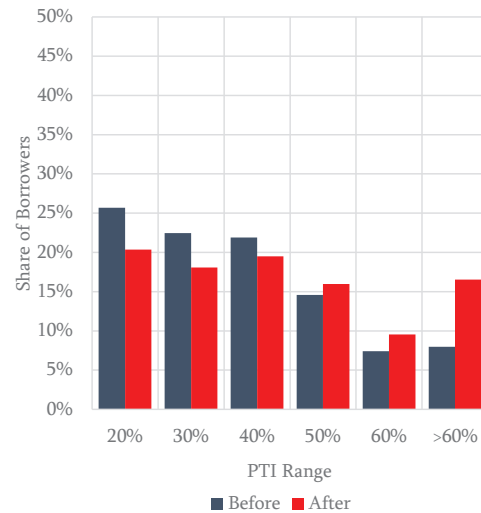
Source: NBG



## Sensitivity Analysis of the Household Sector

**As a result of the macroprudential policies implemented by the NBG in previous years, households' financial conditions are more stable. After servicing their debts, households are left with more resources to overcome financial difficulties.** An analysis of the household sector's vulnerabilities shows that in the moderate risk scenario (see the Macro-Financial Risk Scenarios section of this report), which assumes an exchange rate depreciation of 10 percent and a decrease in the employment and average wage by 3 and 10 percent, respectively, low-income borrowers are particularly vulnerable; in the event of such an economic shock, these borrowers are left with less buffers to combat financial difficulties. High-income borrowers are characterized by a healthier distribution of the PTI ratio, but under the stress scenario their buffers also decrease significantly and the share of households whose PTI is above 50 percent sharply increases. It should be noted that loan restructuring was more frequently required for borrowers whose PTI was above 50 percent. Sensitivity analysis confirms that households remain vulnerable to exchange rate depreciation. Sensitivity towards interest rates increased, however, since monetary policy is already strict, no material increase of interest rates in domestic currency is expected. Taking into account increasing inflation pressure globally and historically low interest rates on the US dollar and euro, interest rate risk is more noteworthy for foreign currency loans.

Figure II.14. Sensitivity of household PTI to macroeconomic stress



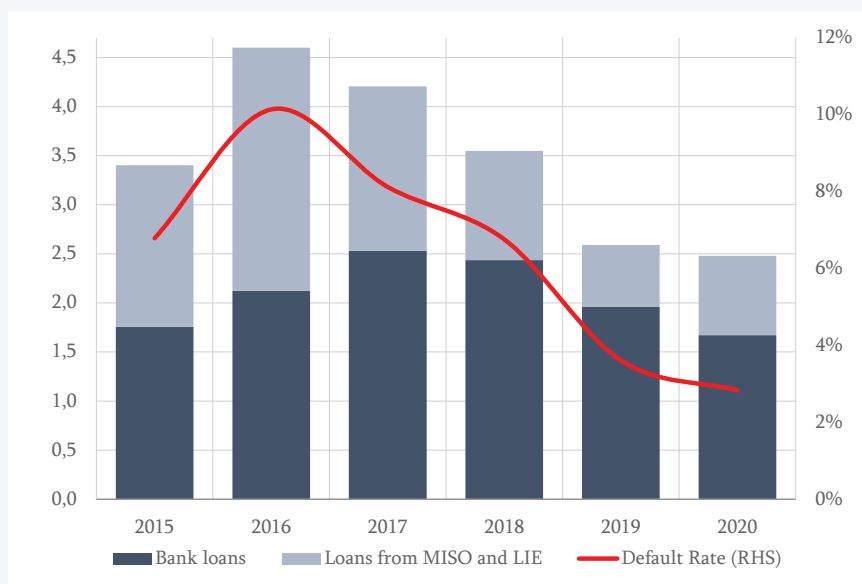
Source: NBG

## Box 2. Impact assessment of the responsible lending regulation

One of the factors determining financial stability is private sector debt burden, which is measured as the ratio of credit to nominal GDP. High debt burden might be an obstacle for economic growth<sup>14</sup>; In this perspective, it is important to observe the purpose of loan. Credit towards the high productive sectors creates more value while credit issued to low productive sectors have less impact on economic growth. Besides, excessive growth of debt burden intensify the insolvency risks and increases the probability of financial crisis.

**In January 2019, the National Bank of Georgia implemented a responsible lending regulation designed to promote the stability of the Georgian financial system and healthy lending standards.** In accordance with the regulation, financial institutions should not issue loans without proper investigation of borrowers' creditworthiness. In addition, the NBG set limits on the payment-to-income (PTI) and loan-to-value (LTV) ratios. As a result of further changes introduced in March 2020, this regulation became principle based and easier to implement.

Figure B2.1. Annual quantity of retail loans issued and their default rates



Source: Creditinfo Georgia, NBG.

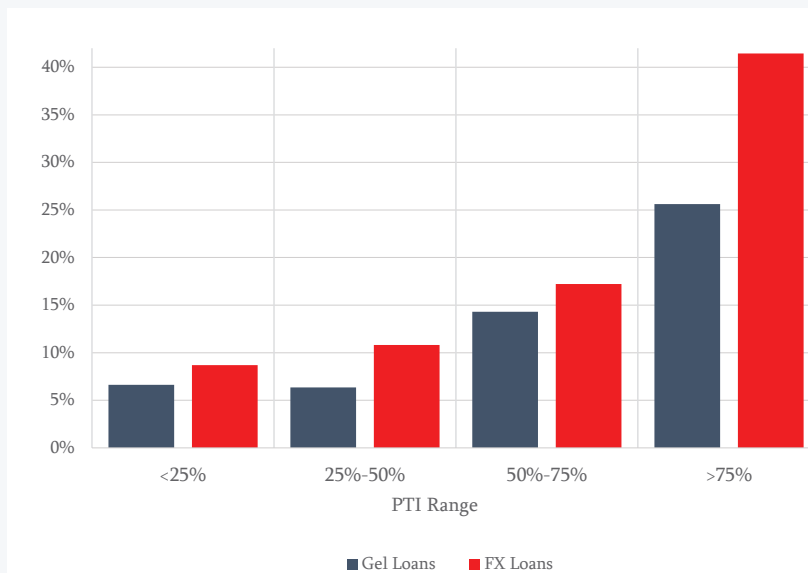
**Based on the available data, it is evident that the responsible lending regulation has promoted a decline of household over-indebtedness and an improvement of asset quality.** Following the implementation of the requirements, the excessive growth of the household debt burden has decreased, and credit activity has been maintained at a sustainable level. It is also noteworthy that the default rates for loans issued under the new standards have decreased materially and are in an acceptable range. In particular, while the default rate for household loans (those more than 30 days overdue) reached 10 percent<sup>15</sup> before enacting the regulation, it stands at around 3 percent for loans issued after 2019 (see Figure B2.1). It should be noted that the regulation mainly restricted the issuance of high-risk loans, so called “fast” or “online” loans granted “without the proof of income” and, after a further simplification of the rules in 2020, it cre-

14 See <https://www.imf.org/~media/Files/Publications/GFSR/2017/October/chapter-2/Documents/C2.ashx>

15 It should be noted here that, according to the Civil Code of Georgia, the effective interest rate was restricted to 100 percent from 2017, falling to 50% from September 2018. In addition, the NBG prohibited the issuance of loans without proof of income from May 2018. These factors also contributed to some improvement of default rates in the respective periods. Besides, although time is needed for a loan default to occur, because of the short maturity of the portfolio, the material share of defaults have already been manifested. The indicator of 2020 is thus valid and will see no significant change.

ates even less obstacles for healthy credit growth. On average, 2.5 million retail loans are issued during the year, which, considering the size of the population (3 million people), outlines the high degree of credit accessibility for households. It should be noted that lending to households was not hindered even in the peak of the pandemic.

Figure B2.2. Share of restructured loans for mortgage borrowers by PTI range<sup>16</sup>



Source: Creditinfo Georgia, NBG.

**During the shock caused by COVID-19, it became evident that the PTI limit set by the NBG served as a sensible standard to avoid the accumulation of excessive risks.** The pandemic caused financial difficulties for a significant segment of borrowers. However, its negative impact was especially hard for those borrowers with a high loan servicing burden in relation to their incomes. In particular, if we assume that clients applying to banks for a loan restructuring is a good indicator for assessing vulnerability<sup>17</sup>, according to the distribution of mortgage loans, by June 2021 the share of households having financial difficulties is disproportionately higher for borrowers with a PTI above 50 percent (see Figure B2.2). According to the responsible lending regulation, the PTI limit for mortgage borrowers with a monthly income above GEL 1,000 is 50 percent of their monthly income. This limit is in line with international practice and currently, in the period of the COVID-19 shock, can be assessed as a sensible standard based on local experience. It should be noted that, in order to decrease vulnerability against exchange rate risks, the PTI limit for foreign currency loans is 30 percent. Considering the high volatility of the US dollar and euro exchange rates against the GEL, the 20 percentage point buffer can also be assessed as being sensible. It is noteworthy that during the pandemic, the share of loan restructuring has been significantly higher in the dollarized portfolio for each PTI range. This indicates that, despite the initial PTI, an unplanned increase of loan servicing expenses can also become a challenge for a borrower. This reflects the need for setting the above-mentioned buffer for currency-induced risks.

**The National Bank of Georgia will continue to assess the impact of the regulation, calibrate quantitative requirements and enhance analytical data.** When using macroprudential instruments, it should always be considered that the macro-financial environment can change rapidly and, based on new challenges,

<sup>16</sup> The column on the figure shows the percentage of borrowers within the given PTI range who applied for loan restructuring.

<sup>17</sup> In the period of the pandemic, creditors were proactively offering borrowers loan restructuring, temporary moratoria and other grace opportunities. As a result, standard measures for assessing riskiness, such as defaults and arrears, were less observed in this period.

certain quantitative requirements might need some adjustments. It is necessary to hold a reasonable balance on standards such as PTI in order to maintain the accessibility of loans and to prevent the accumulation of excessive risks. Therefore, the assessment of the effects of the regulation and its recalibration is a continuous process. From this perspective, it is important to develop analytical capabilities, such as enhancing databases. For instance, the current PTI ratio of a borrower is used in the assessments provided above, but it would not be less informative if such an analysis were based on the PTI ratio at the time of loan issuance or at the moment of loan restructuring. In addition, for complex analysis and monitoring, data enhancements regarding the dynamics of other characteristics of a borrower or loan (such as interest rate, maturity or date of issuance) are important. For exactly this purpose, a credit registry is being established that will substantially improve the NBG's analytical capabilities.

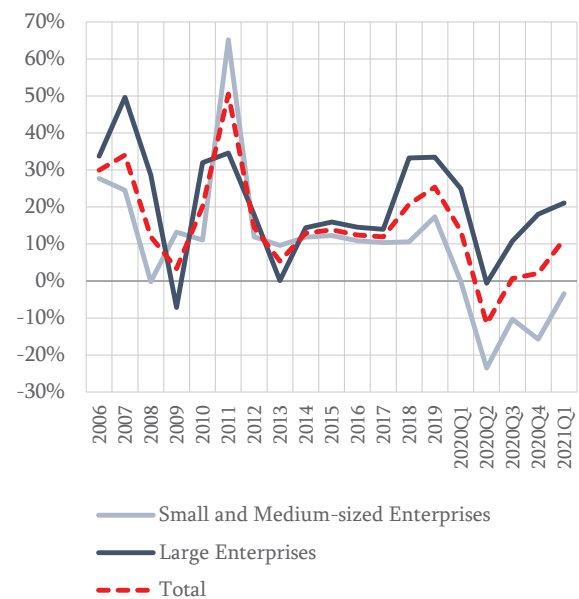
## Non-financial Companies

*In the first half of 2021, as market sentiment improved, revenues in non-financial companies tended to improve. However, the pace of the recovery in small- and medium-sized enterprises, as well as in the hospitality and real estate industries, is still slow. The elevated burden of corporate debt during the COVID-19 pandemic poses risks to companies' financial resilience. The vulnerability of non-financial companies towards existing risks are driven by a sizable exposure to foreign funding sources, a significant share of short-term debt, and highly dollarized liabilities. Throughout the pandemic, despite the increase in credit risk among companies, they maintained uninterrupted access to funding. This was predominantly due to the supportive measures implemented by the NBG and the Government of Georgia, as well as the loan repayment moratoria offered by commercial banks. During the recovery, bank lending is expected to be the main source of funding for companies. In this environment, the main challenge for banks is their being able to identify financially viable companies that may only be suffering from pandemic-related transitory issues. Banks need to satisfy the needs of such companies for funding. Consequently, these companies will facilitate the economic recovery and a growth in employment without accumulating medium- and long-term vulnerabilities to their financial resilience.*

**After a significant drop in revenues during the pandemic, non-financial companies have shown initial signs of recovery. However, the rates of such improvements differ depending on company size and sector.** In the first half of 2021, as virus containment measures were gradually lifted and vaccination efforts stepped up, consumer sentiment improved, and demand increased. A rise in demand has been registered on both domestic and foreign markets. Moreover, in order to operate efficiently in the current environment, companies have adapted their business models to satisfy existing safety requirements. As a result, the turnover in non-financial companies has started to increase, particularly in large enterprises, whereas the pace of recovery has been relatively weak in small- and medium-sized enterprises (see Figure II.15). This is due to there being a higher concentration of small- and medium-sized companies in those industries that were most adversely affected by the pandemic. Moreover, these companies also suffer from lower market diversification and limited risk management capacity.

The recovery of corporate revenues varies across industries that have suffered the direct or indirect impacts of the pandemic (see Figure II.16). In the first half of the current year, improvements in revenues were pronounced in the services, trade, construction and manufacturing sectors. However, the hospitality and real estate industries have not yet shown consistent signs of recovery. Assuming that the epidemiological situation stabilizes, market sentiment will improve further and international tourism will gradually recover. Under these circumstances, company revenues will continue to improve, which, in turn, will facilitate investment and employment growth. In this

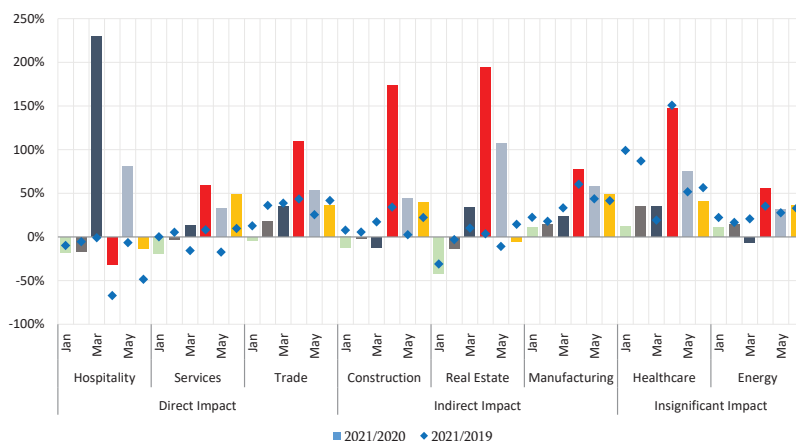
Figure II.15. Annual growth in turnover by company size



Source: GeoStat

way, the favorable developments will spill over to households, which will further speed up the economic recovery.

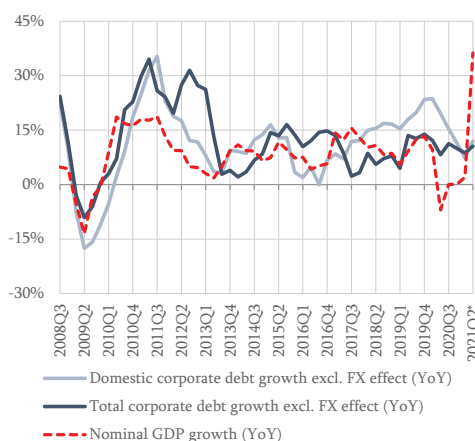
Figure II.16. Change in turnover in selected industries



Source: Revenue Service of Georgia

During the COVID-19 pandemic, the burden of debt has significantly increased in non-financial companies, which poses threats to their financial resilience. Since the beginning of 2020, companies have slowed down the issuance of debt. The growth of both domestic and total company debt has decelerated (see Figure II.17). Nonetheless, the growth of company debt has considerably exceeded the growth of nominal GDP, which has led to the increased burden of debt during this period. As a result, the total company debt to GDP ratio, which is a common measure of company debt burden, increased above its long-term trend (see Figure II.18). The increased burden of debt poses challenges for the financial resilience of companies. In particular, if revenues do not recover in time, companies will face debt servicing difficulties, which, in some cases, may lead to insolvencies.

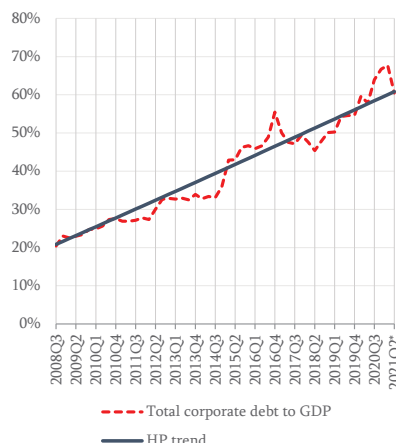
Figure II.17. Annual growth rates of nominal GDP and corporate debt



Source: NBG, GeoStat

Over the course of 2020, given the modest growth in company borrowings, the heightened debt burden was predominantly driven by the close-to-zero growth of nominal GDP and by the GEL depreciation against hard currencies (see Figure II.19). The significant impact of exchange rate movements on the debt burden is caused by the high dollarization of company borrowings. This clearly indicates the risks related to foreign currency denominated debt among non-hedged corporate borrowers. In the second quarter of 2021, the burden of debt was eased to some extent due to strong GDP growth and the GEL appreciation. The total company debt to GDP ratio thus returned back to its long-term trend. However, given the looming uncertainty regarding the economic recovery, in the case of lower-than-anticipated economic growth in upcoming periods, the burden of company debt may rise further. Thus, as long as uncertainty regarding the economic recovery remains, the risks to financial resilience

Figure II.18. Total corporate debt to GDP ratio and its long-term trend<sup>18</sup>



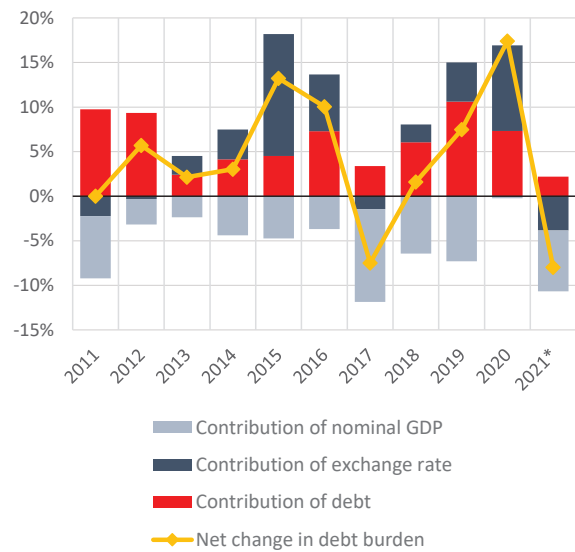
Source: NBG staff estimates

stemming from the increased burden of company debt are still considerable.

18 The long-term trend of the total corporate debt to GDP ratio is estimated using a two-sided HP filter with a smoothing parameter 400,000.

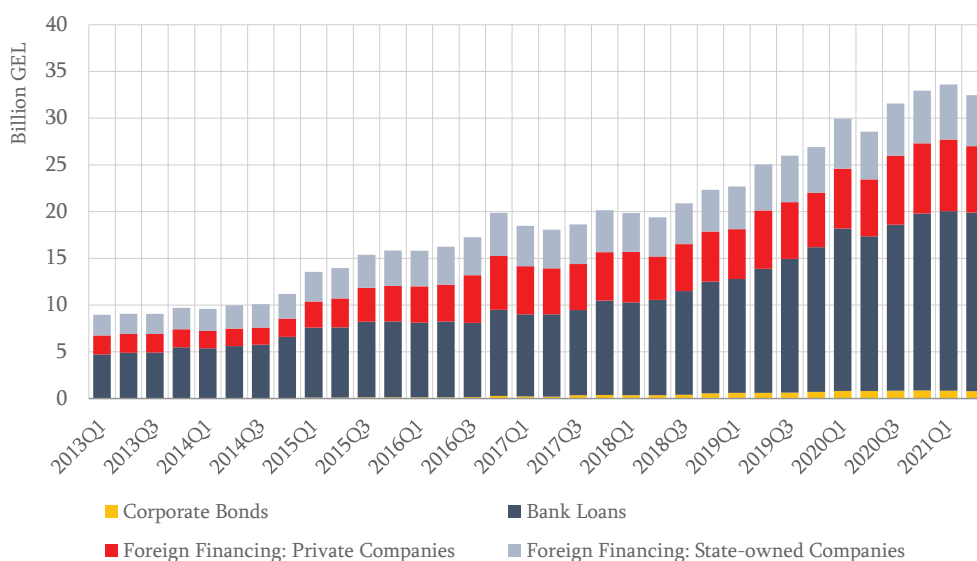
Against the backdrop of the increased burden of debt among companies, vulnerabilities caused by a sizable exposure to foreign funding sources and a significant share of short-term debt are particularly apparent. In recent years, as access to global financial markets has improved, there has been a considerable increase in the share of foreign financing in the funding structure of companies (see Figure II.20). Although foreign financing provides benefits in terms of diversification and lower cost of funds, it comes at the expense of higher exposure to global financial conditions. Currently, developing countries and emerging markets are faced with elevated risks of tightening financial conditions. This risk is nurtured by the uneven recovery of the global economy and the possibility of faster-than-anticipated monetary policy normalization in advanced economies.<sup>19</sup> Although a proportion of foreign financing reflects intercompany loans, which are offered at favorable terms, in the event of tightening financial conditions, companies' access to foreign funding will deteriorate markedly. This, in turn, can create debt rollover risks given the significant share of short-term debt on corporate balance sheets. The share of short-term debt in corporate liabilities is particularly high among large enterprises (see Figure II.21). This group of companies also exhibit large exposure to foreign sources of financing. Debt rollover risks among companies are particularly acute because of the pandemic. In the face of temporary reductions of revenue, it is essential that viable companies maintain uninterrupted access to credit.

Figure II.19. Decomposition of the annual change in the total company debt to GDP ratio (percent of nominal GDP)



Source: NBG; GeoStat

Figure II.20. Debt structure of non-financial companies



Source: NBG

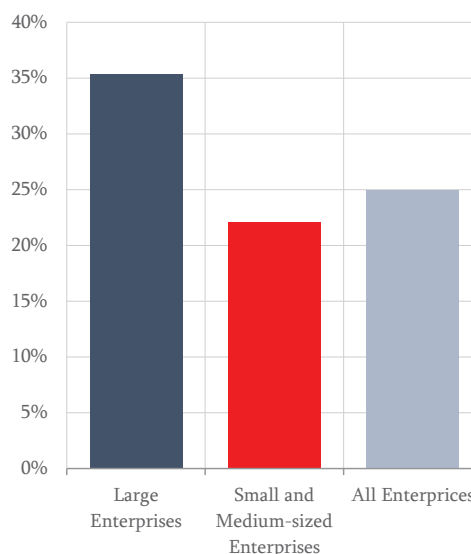
19 See Global Financial Stability Report, April 2021 <https://www.imf.org/en/Publications/GFSR/Issues/2021/04/06/global-financial-stability-report-april-2021>



**During the COVID-19 pandemic, due to the high share of foreign currency denominated debt in corporate liabilities, an enhanced vulnerability to exchange rate risk was revealed among companies.** The share of foreign currency denominated debt remains high in companies' funding. As of the first half of 2021, dollarization of total corporate debt was approximately 75 percent. Therefore, in the absence of proper hedging facilities, the burden of company debt is highly sensitive to foreign exchange rate movements. During the pandemic, which was accompanied by a depreciation of the GEL against hard currencies, companies were faced with markedly increased servicing costs on foreign currency debt. As a result, a proportion of these companies suffered from debt servicing difficulties and eventually restructured their outstanding debt. Unsurprisingly, given the pandemic-induced economic crisis, debt restructuring also increased among GEL borrowing companies. However, the much higher amount of restructured foreign currency debt among companies indicates an extensive vulnerability to exchange rate risk (see Figure II.22).

**Given the vulnerabilities associated with the structural characteristics of corporate debt, the deteriorated macroeconomic environment caused by the pandemic led to an increase in credit risk among corporate borrowers.** During 2020, companies registered upswings in debt restructuring as well as in non-performing loans (see Figures II.22 and II.23). The surge in credit risk was particularly pronounced in certain highly vulnerable industries, which had been identified in the analysis presented in the 2020 Financial Stability Report.<sup>21</sup> These industries include hospitality, trade in consumer durables, and real estate operations (see Figure II.23). The increased credit risk had serious repercussions for companies' access to funding and on market interest rates. Given the adversity caused by the pandemic, in order for financially viable companies to maintain productive capacity and levels of employment, it is vital that they have uninterrupted access to funding. This was the main objective of the liquidity provision measures implemented by the NBG, the loan repayment moratoria offered by commercial banks and the targeted support programs executed by the Government of Georgia.

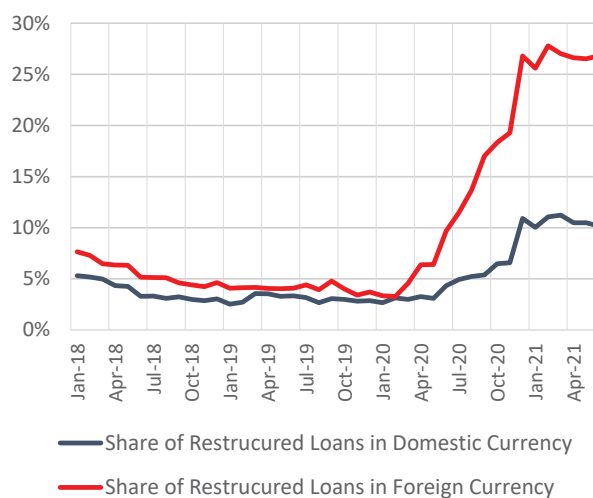
Figure II.21. Median share of short-term debt in total debt by company size (averaged over 2017-2019)\*



\* Short-term debt consists of corporate borrowings with maturities of less than a year.

Source: SARAS,<sup>20</sup> authors' calculations

Figure II.22. Share of restructured loans in total company loans issued by banks by currency



Source: NBG

20 Service for Accounting, Reporting and Auditing Supervision of Georgia.

21 See <https://nbg.gov.ge/en/publications/financial-stability-reports>



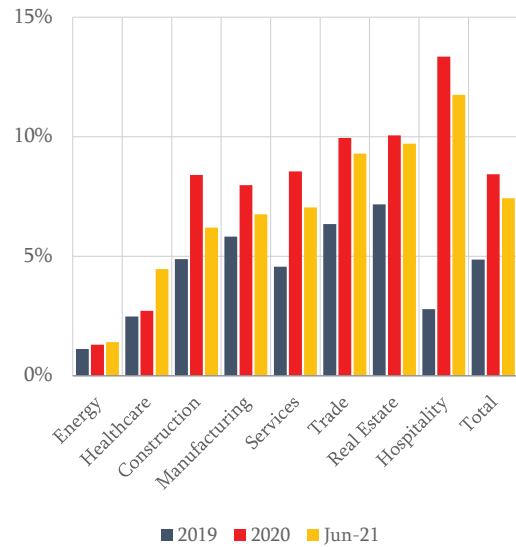
As the initial signs of economic recovery appeared, revenues began to improve in the majority of non-financial companies. Subsequently, they started to exit from the loan repayment moratorium regime. A significant share of companies that utilized the loan moratoria at least once have since resumed loan repayments (see Figure II.24). Meanwhile, those companies that still make use of the moratoria are thoroughly scrutinized by commercial banks before such relief is granted. This approach minimizes the risks of creating so-called zombie companies.<sup>22</sup> In general, the risk of such companies being formed increases during crisis periods. These companies prevent new prospective businesses from accessing loanable funds, and therefore risk interrupting the economic recovery. Thorough scrutiny by commercial banks before extending loan repayment moratoria allows them to identify and exclude possible zombie companies, and thereby facilitate an efficient allocation of loanable funds.

Since the beginning of the current year, bank lending conditions for corporate borrowers have stabilized. During the economic recovery, bank lending is expected to be the main source of funding for companies. During the COVID-19 pandemic, companies' access to market-based funding has deteriorated. The issuance of corporate bonds has decreased on the domestic market of debt securities, which has been growing markedly in recent years (see Figure II.25). This reversal echoes the current situation in global capital markets and reflects the increased risk aversion among investors as driven by lingering uncertainty, especially in developing and emerging market economies. In this environment, bank lending is seen as the main source of corporate funding. The domestic banking system has successfully dealt with the pandemic-induced stress and continues to provide lending to companies. The average maturity of corporate loans issued by banks has not changed significantly, while interest rates have stabilized after an initial increase (see Figure II.26). Furthermore, the share of rejected loan applications has decreased after the surge seen in 2020, especially for small- and medium-sized enterprises (see Figure II.27). As the lending conditions survey<sup>23</sup> indicates, the tightening of bank credit conditions to corporate borrowers throughout 2020 was predominant-

22 Zombie companies are loss-making commercial entities with unsustainable business models that manage to survive due to receipt of various reliefs and state support programs. The risks of creating zombie companies in the post-pandemic period are discussed in the ECB's Financial Stability Review of May 2021 (pp. 92-99).

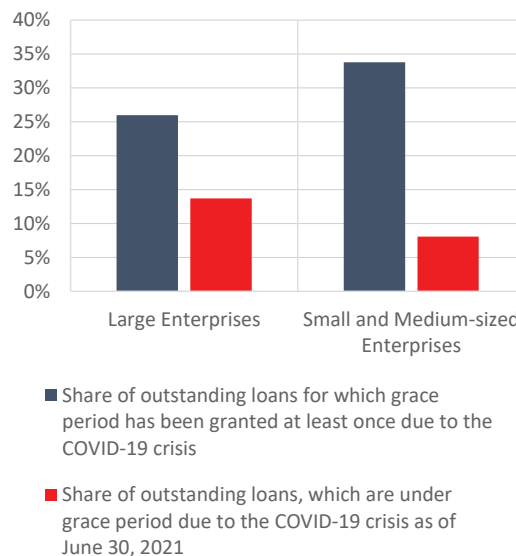
23 See <https://nbg.gov.ge/en/financial-stability/credit-conditions-survey>

Figure II.23. Share of non-performing loans in total bank loans by selected industries (end of period)



Source: NBG

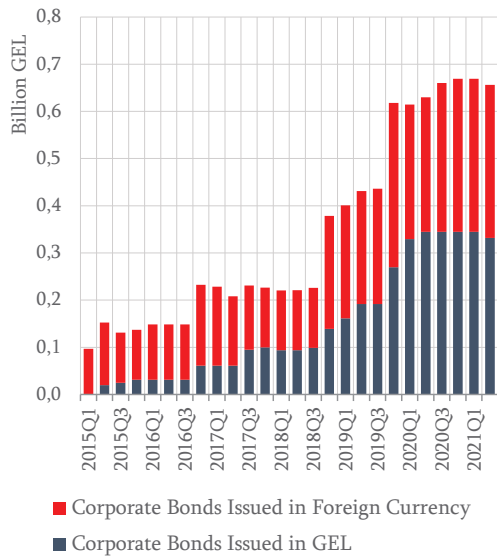
Figure II.24. Share of company loans under repayment moratoria (as of 30 June 2021)



Source: NBG

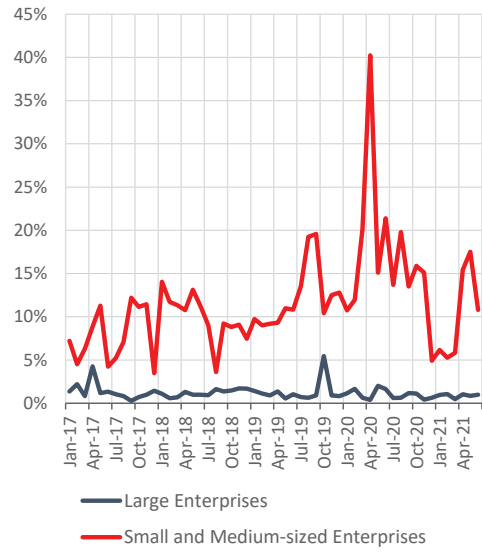
ly driven by the quality of the loan portfolio, economic trends and risk perceptions. Starting from the current year, as uncertainty recedes and the economic recovery gains momentum, the share of bank lending in corporate funding is expected to increase. In this environment, the main challenge for banks is to be able to identify financially viable companies that may be suffering from pandemic-related transitory issues. Banks need to satisfy the needs of such companies for funding. Consequently, these companies will facilitate the economic recovery and a growth in employment without accumulating medium-term vulnerabilities to their financial resilience.

Figure II.25 Outstanding corporate bonds issued in the domestic market (public offering)



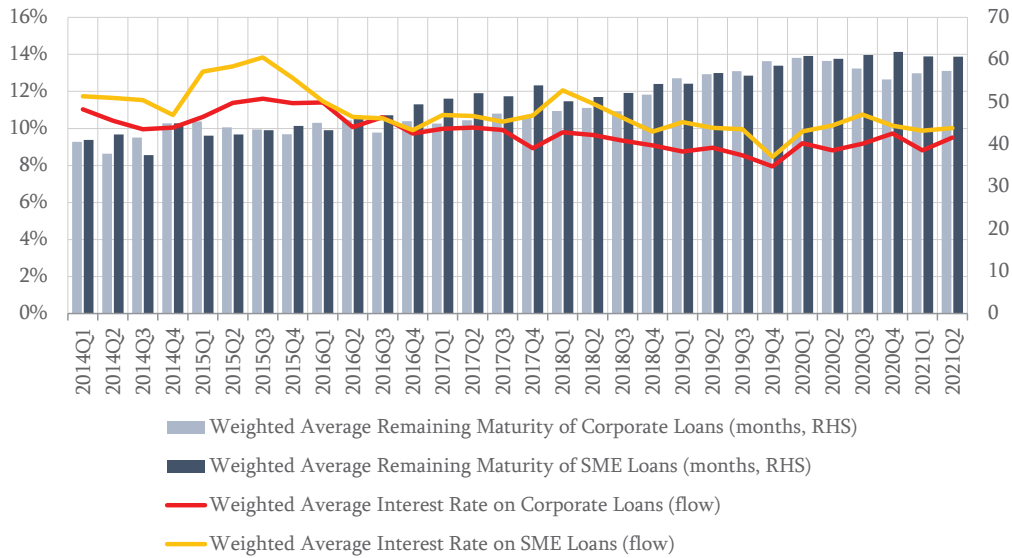
Source: NBG

Figure II.27 Share of rejected company loan applications



Source: NBG

Figure II.26. Weighted average interest rates and remaining maturity of company loans



Source: NBG

## Sensitivity Analysis of Non-financial Companies

**In the event of a possible deterioration of the macro-financial environment, non-financial companies will face a weakened ability to service debts. Nonetheless, no material increase of risks to their financial resilience is shown.** The impact of the macro-financial shocks induced by the COVID-19 pandemic has been already absorbed by companies to some extent. At this stage, it is of the utmost importance to assess the financial resilience of companies against risks of a further deterioration of macroeconomic conditions. The impact of selected shocks on corporate debt-servicing capacity was examined using a simple sensitivity analysis. The scale of the shocks was calibrated to be consistent with the moderate risk scenario as discussed in the Macro-financial Risk Scenarios section of this report (see Table II.1).

der each selected shock, as well as under the combined impact of the three shocks. The median interest coverage ratio, as of 2020, was estimated at 2.6, which is within the medium-risk zone according to Standard & Poor’s Corporate Methodology.<sup>25</sup> Among the selected individual shocks, the increase in the market interest rate was found to have the largest adverse impact on companies’ debt-servicing abilities. Given the various supportive measures provided at the beginning of the pandemic, the size of this shock was not material. However, in the event of further stress, and given the limited resources for additional support, companies’ debt-servicing capacities may deteriorate significantly. Finally, it should be noted that the median interest coverage ratio remains within the medium-risk zone, even under the combined shock.

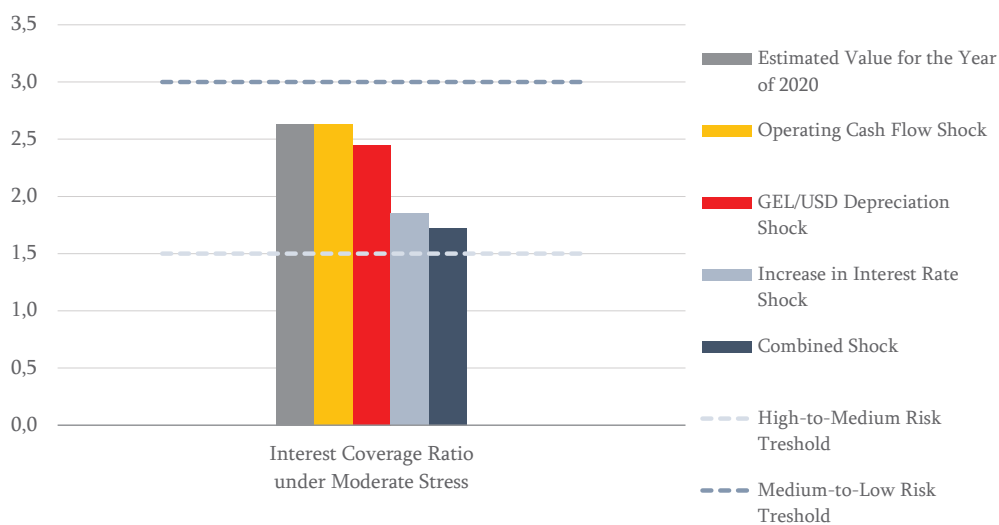
Figure II.28 shows an estimate of the median interest coverage ratio<sup>24</sup> (ICR) for non-financial companies for 2020 and the stressed ratios un-

Table II.1. Macro-financial shocks used in the sensitivity analysis of non-financial companies

	Increase in market interest rate shock	GEL/USD exchange rate depreciation shock	Drop in operating cash flows shock*
Moderate Stress	4%	10%	0%

\* In the sensitivity analysis, operating cash flows are proxied by EBITDA

Figure II.28. Sensitivity analysis: impact of selected shocks on the median interest coverage ratio



Source: SARAS; NBS staff calculations

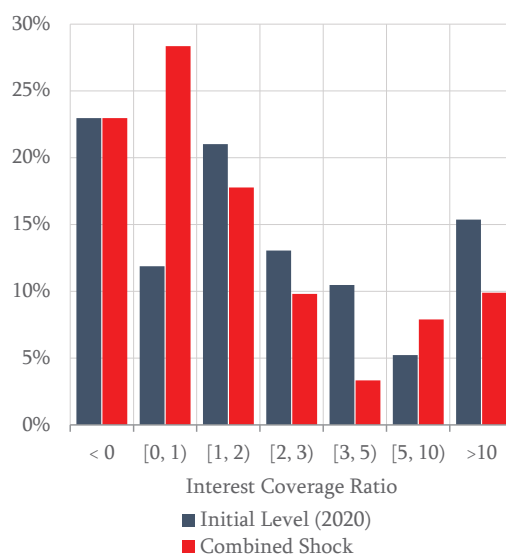
24 The interest coverage ratio is calculated as the ratio of EBITDA to gross interest expense.

25 Standard & Poor’s. (2013). RatingsDirect®: Corporate Methodology.

**Apart from the central tendency, it is also important to consider the distributional effects that the selected shocks cause on companies' interest coverage ratios under the moderate risk scenario.** As a result of the selected combined shock being realized, when companies migrate from higher to lower interest coverage ratio ranges, their debt-servicing abilities deteriorate. If the coverage ratio falls below one, companies can no longer service their debt using the cash inflows generated from their operating activities – a situation commonly known as debt at risk. When companies enter this zone, their credit risk surges. This can induce systemic issues since commercial banks have sizable exposure to non-financial companies' liabilities. Under the moderate risk scenario, the combined shock causes a substantial increase in the debt at risk category: the asset-weighted share of companies with an ICR of below one increases from 35 percent (as of 2020) to 50 percent (see Figure II.29). It should be noted that a proportion of corporate debts are in the form of intercompany loans, which are borrowed under favorable terms. In some cases, these loans can be considered as quasi equity. Accordingly, the results of the sensitivity analysis may exaggerate the impact of the stress. However, given data limitations, a more reliable assessment is not feasible.

To sum up, under the moderate risk scenario, due to the assumed deterioration in macro-financial conditions and a materialization of corporate debt-related vulnerabilities, the share of companies with debt at risk goes up by 15 percentage points and reaches 50 percent.<sup>26</sup> Realization of a credit risk of such magnitude can result in severe stress with grave repercussions for the financial system and the economy as a whole. In order to alleviate the adverse consequences of possible stress, companies should more actively engage in market risk and liquidity risk management, which is essential for their financial resilience.

Figure II.29. Asset-weighted distribution of companies' interest coverage ratios



Source: SARAS, NBG staff calculations

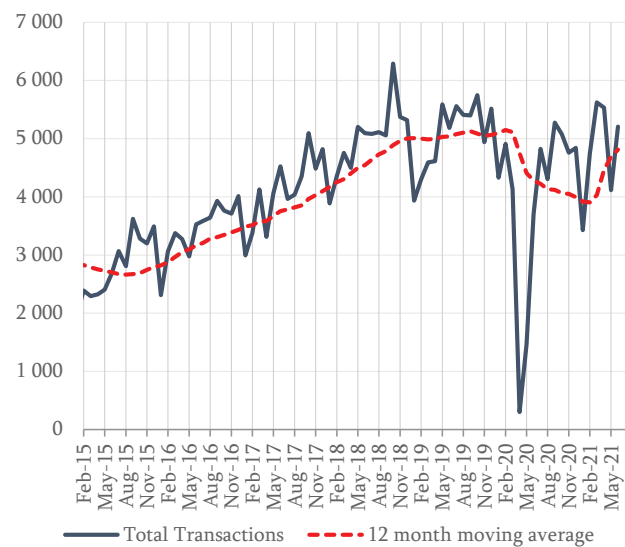
<sup>26</sup> Asset-weighted share.

## Real Estate

*Despite the increased risks caused by the COVID-19 pandemic, there is a trend towards a recovery of the real estate market. Following the recovery of economic activity, an increase in demand for real estate has been observed. Moreover, as a result of increased demand and reduced uncertainty on the market, real estate prices remain stable – something that was supported by a resilient market in the pre-crisis period and by measures taken by the government. Furthermore, despite the crisis and the uncertainty caused by the pandemic in the real estate market, the number of construction permits issued has increased, which will contribute to the stability of real estate supply.*

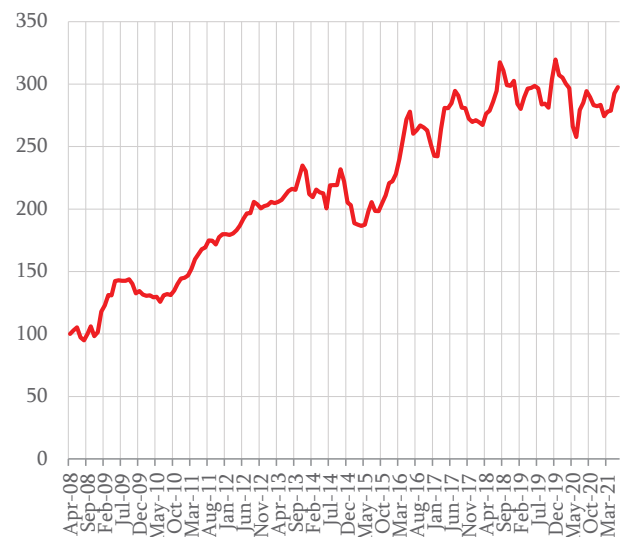
**Demand for real estate is increasing following the recovery of economic activity.** There has been a high growth of demand for real estate in 2021. In particular, in the first half of the year, the number of residential real estate transactions in Tbilisi increased by 55 percent compared to the corresponding period of the previous year, while the number of real estate transactions is one percent lower than in the same period of 2019 (see Figure II.30). It is important to indicate that the measures taken by the government in 2020, especially the mortgage interest rate subsidy program, encouraged demand for newly built real estate. In the second half of 2020, the share of primary sales in total transactions equaled 40 percent. Meanwhile, more than 50 percent of the total value of transactions was financed by mortgage loans. It should be noted that after the end of the subsidy program, demand for real estate has remained stable, which has been supported by the increased affordability of real estate in the second quarter of 2021 (see Figure II.31). Moreover, the consumer confidence index<sup>27</sup> also increased, which has a positive effect on demand for real estate. However, in the second quarter of 2021, the capitalization index, which is a measure of the attractiveness of real estate as an investment asset, remains lower than over the same period of 2019, despite a slight increase compared to the second quarter of 2020. This, in turn, is due to a reduction in demand for rental properties. In particular, as a result of the sharp decline in tourist inflows and the transition to the online learning process, demand for rental real estate has decreased, which has been reflected in a reduction of rental prices. Consequently, the capitalization ratio has decreased (see Figure II.32). It is expected that as tourist inflows increase and the university education process returns to normal, demand for rental real estate will increase, which, in turn, will be reflected in an increase in rental prices and, consequently, in

Figure II.30. Number of housing transactions



Source: National Agency of Public Registry

Figure II.31 House affordability index (2008=100)<sup>28</sup>



Source: NBG

an increase of the capitalization ratio.

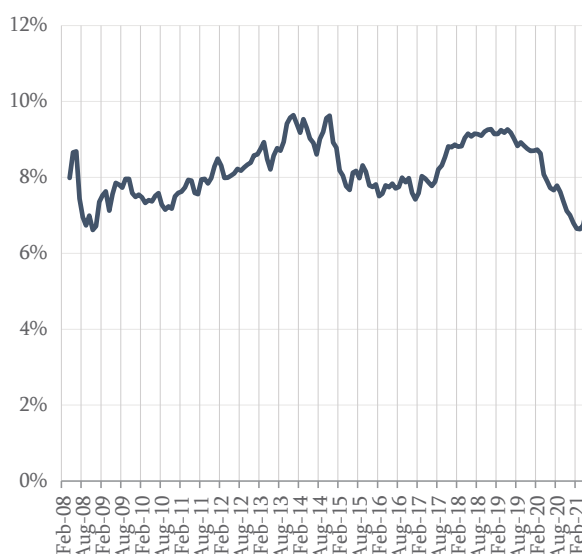
28 The house affordability index is based on the wage-to-payment ratio, which takes into account property prices, the maturity of mortgage loans, interest rates and average wages.

27 See <https://iset-pi.ge/en/indexes/5-consumer-confidence-index/3003-may-2021-cci-a-significant-perhaps-fragile-rebound-in-confidence>

**In 2020, the decline in the investment attractiveness of real estate reduced the demand for residential real estate, especially in Batumi; however, from 2021 the trend has been improving.** A significant part of the demand for residential real estate in Batumi is of an investment nature, which is largely determined by tourist inflows. The Adjara region is thus particularly vulnerable to a reduction of tourist flows, which decreased sharply as a result of the restrictions on air and land travel during the pandemic. As a result, the demand for real estate in Batumi fell significantly, which was reflected in a decline of real estate prices. However, in 2021, with the growth of tourist inflows and the reduction of restrictions, an increase in demand for real estate has been observed. It is important to note that non-residents, who own a third of the mortgages issued in Batumi, are more likely to default than residents, especially at a time when neighboring countries have experienced economic recessions caused by the pandemic. With the aim of reducing risks to financial stability imposed by non-residents, since 2019 the National Bank of Georgia has set LTV requirements for non-residents at 70 percent.

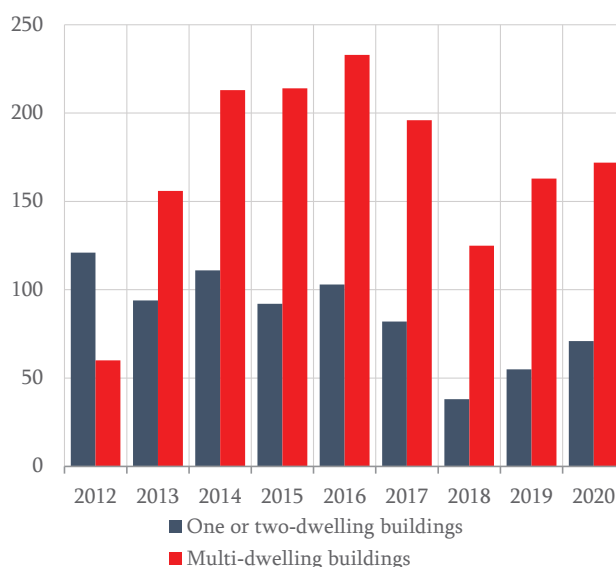
**Despite the crisis and uncertainty caused by the pandemic, the number of construction permits issued has increased, which will contribute to the stability of real estate supply.** Since 2012, the number of construction permits issued had been substantially increasing. However, as a result of regulations adopted in 2018, the number of permits issued in 2018-2020 decreased compared to previous years. In particular, the number of permits issued in 2019 decreased by 30 percent compared to 2017. In 2020, despite increased uncertainty, the amount of permits issued increased once more, rising by 11 percent compared to 2019 (see Figure II.33). It is expected that this trend will help the sale of both apartments built in recent years and those under construction and encourage a stable supply of real estate.

Figure II.32 Capitalization index (rent-to-price ratio)



Source: NBG

Figure II.33. Number of construction permits issued



Source: NBG



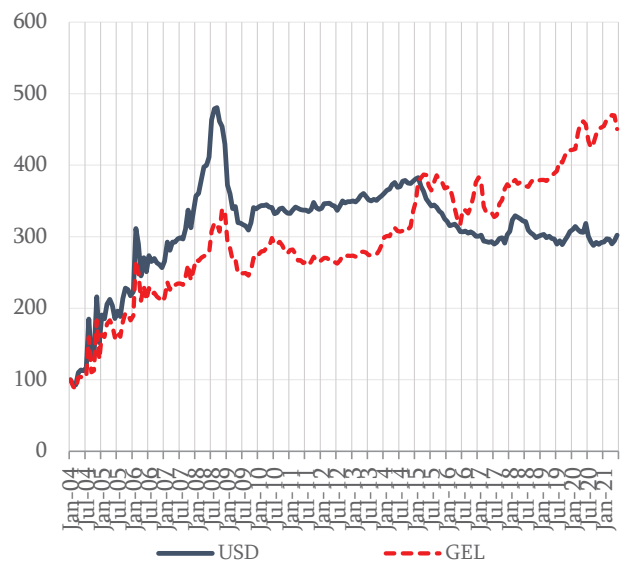
**As demand increases and uncertainty on the market decreases, real estate prices will remain stable.** Unlike in the 2008 financial crisis, no “price bubble” was observed in the real estate market in period prior to the COVID-19 crisis, and the market capitalization rate was also stable (see Figure II.34). Despite the severity of the shock, as a result of the above-mentioned factors, increased construction costs, and the measures taken by the government, no significant adjustment of real estate prices took place. In the second quarter of 2021, compared to the corresponding period of 2020, the price of real estate increased on average by 1 percent in GEL, while falling by 5 percent on average in USD.

**With the transition to an upward phase of the business cycle, demand for commercial real estate is expected to increase, albeit to a lesser extent than in the pre-crisis period.** Due to the scarcity of data, it is difficult to assess the trend of commercial real estate prices. However, during the crisis, the sharp decline in economic activity, the shift to remote work and the intensification of online sales have reduced rental and sale prices of commercial real estate. Demand for commercial real estate will increase as economic activity grows. However, as the pandemic has altered office culture to some extent and facilitated the development of online commerce, it is expected that demand for commercial real estate will recover at a slower pace compared to other sectors.

**The share of loans to the construction and real estate sectors in the banking portfolio is higher than the level before the 2008 crisis. However, a decomposition of the banking portfolio reveals a change in favor of less risky loans.** In June 2021, the share of mortgage loans in the total banking portfolio was 9 percentage points higher than in 2008, while the share of loans to the construction sector was 2 percentage points lower (see Figure II.35). It is important to indicate that mortgages, which are more granular<sup>29</sup>, carry lower risk than loans made to the construction sector. Moreover, the high dollarization of loans to the construction and real estate sectors poses risks to financial stability.

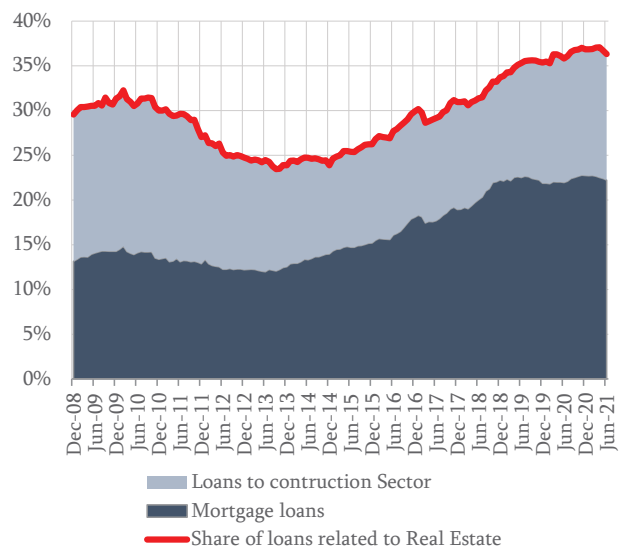
In June 2021, the share of non-performing mortgage loans in USD increased by 3 percentage points up to 8 percent compared to the corresponding period of 2020, while the share of non-performing mortgage loans in euros increased by 6 percentage points up to 8 percent. For mortgages issued in GEL, the share of non-performing loans increased by 2 percentage points in June 2021, compared to the

Figure II.34. House price index



Source: NBG

Figure II.35. Loans related to real estate



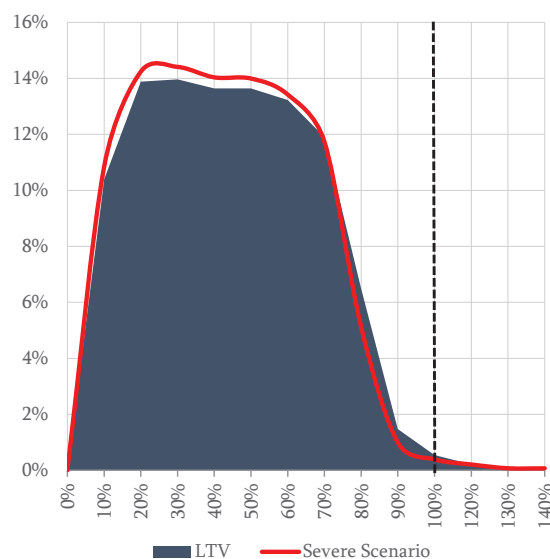
Source: NBG

corresponding period of 2020, and equaled 3 percent. Moreover, compared to the pre-crisis period, the share of non-performing loans to the construction sector issued in foreign currency increased by 2.5 percentage points up to 7 percent in June 2021. However, as a result of the government’s larization (de-dollarization) measures and the implementation of LTV and PTI limits by the National Bank, the vulnerabilities of households to foreign currency risk have decreased, while the quality of the mortgage loan portfolio has improved significantly.

29 It is implied that mortgages are issued to households with different characteristics.

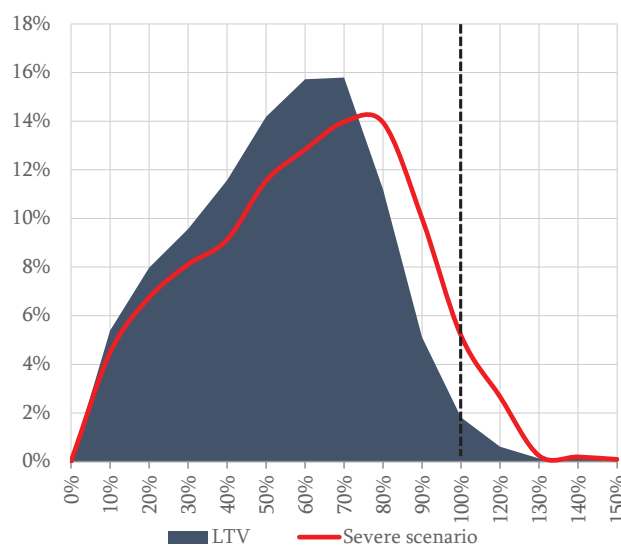
In the moderate risk scenario<sup>30</sup>, the distribution of the LTV ratio does not change significantly; while in the severe scenario, an additional 3 percent of mortgages will exceed 100 percent of the LTV ratio. If the national currency depreciates by 15 percent against the USD and the euro, while real estate prices in the national currency rise by 3 percent, 9 percent of foreign currency mortgages will have a LTV ratio of more than 100 percent, which is 6 percent higher than under the baseline scenario (see Figure II.38). It should be noted that in the case of the moderate risk scenario, an additional but insignificant portion of foreign currency mortgages will exceed 100 percent of the LTV ratio, compared to the baseline scenario. The distribution of the LTV ratio for mortgages issued in national currency does not change significantly between the moderate and severe risk scenarios (see Figure II.37). Therefore, foreign currency loans have a relatively higher risk. In order to reduce this risk, since 2019 the National Bank of Georgia has set the maximum LTV ratio for foreign currency mortgages at 70 percent since 2019. In addition, according to the principles of the responsible lending regulation, collateral only serves as an additional protection against risks and the main precondition for a loan repayment is the solvency of the borrower.

Figure II.36. Distribution of mortgage loans issued in the national currency by current and shock LTV ratios



Source: NBG

Figure II.37. Distribution of mortgage loans issued in foreign currency by current and shock LTV ratios



Source: NBG

30 For more details, see the Macro-Financial Risk Scenarios section of this report.



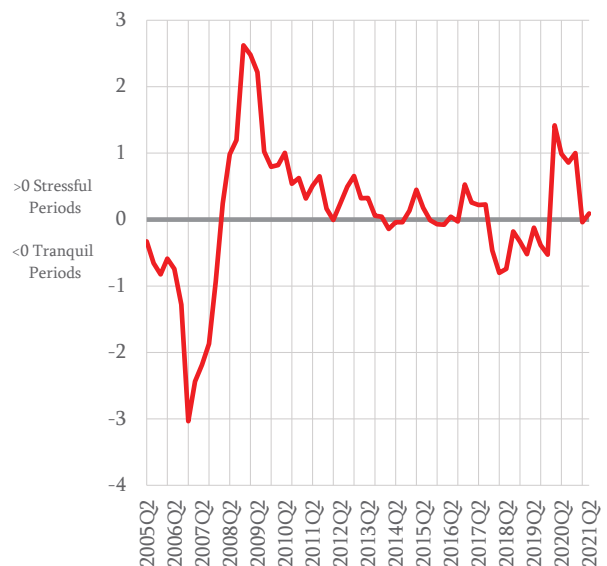
### III. Financial Sector

#### Financial Sector review

*As a result of the financial stability policy measures implemented by the National Bank of Georgia, the financial system has maintained its stability and continued smooth lending to the economy in times of the pandemic in 2021. The effect of the economic recession caused by the restrictions enacted to counter the COVID-19 pandemic has already largely been reflected on loan quality, and commercial banks have already created appropriate levels of loan loss reserves. During this year, it is expected that a significant portion of banks will recover the capital buffers that were released at the beginning of the crisis, with the sector returning to the pre-crisis capital adequacy ratio in 2022.*

**As a result of the financial stability policy implemented by the NBG, the financial sector has successfully passed through the most severe phase of the shock caused by the pandemic.** In the first half of 2020, due to COVID-19, the financial stress index (FSI)<sup>31</sup> exceeded the historical mean by about one standard deviation. However, starting from the second half of 2020, the FSI stabilized and has been characterized by a declining trend during 2021 (see Figure III.1). The decline in the FSI indicates a significant drop of the stress level in the banking system, which is a result of improvements in asset quality, profitability, and to capital and liquidity indicators – all of which increase the resilience of the financial sector.

Figure III.1. Financial Stress Index (deviation from the average)



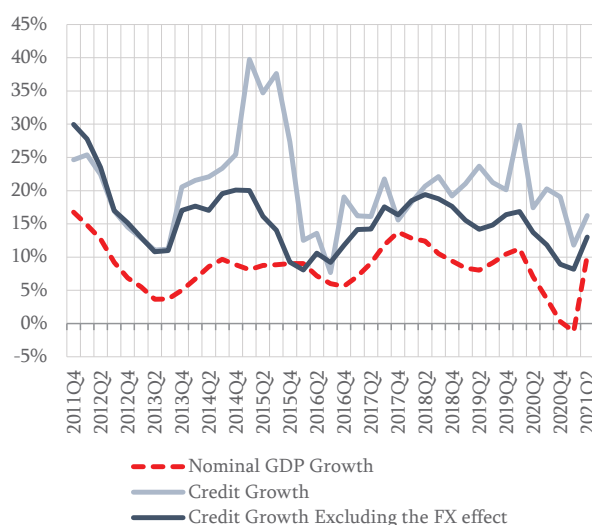
Source: NBG

<sup>31</sup> Considering that the banking system accounts for more than 90% of the Georgian financial sector, the financial stress index mainly combines the profitability, interest rate spread, capital and asset quality indicators of the banking sector. The index is constructed by standardizing the variables and then weighing them.

In 2021, credit growth is expected to be in line with nominal economic growth. In 2020, due to COVID-19, lending activity slowed down and, at the end of the year, the credit growth rate (excluding the FX effect) had fallen by 8 percentage points compared to the end of 2019 and amounted to 9 percent (see Figure III.2). In 2021, against the background of increased economic activity, the growth of lending has accelerated and, if the current tendency continues, credit growth is expected to be close to 18 percent.

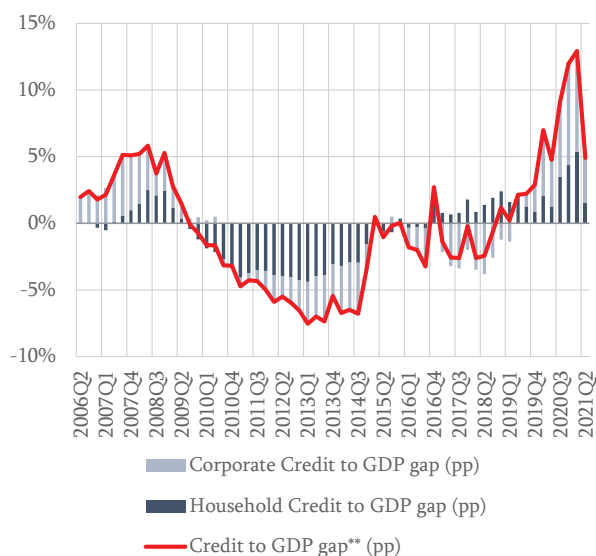
The credit<sup>33</sup>-to-GDP ratio is significantly higher than its trend<sup>34</sup> indicating the high debt burden and increased vulnerability of borrowers. The credit-to-GDP ratio still exceeds its long-run trend, which reflects the high growth of credit and the exchange rate effects observed in previous periods (see Figure III.3). At the end of 2020, approximately half of the annual growth of the credit-to-GDP ratio was a result of exchange rate movements (see Figure III.4). Over the recent period, the latter effect was the main driver of the significant increase of the debt burdens of both the household and corporate sectors. It is also noteworthy that the current level of the credit-to-GDP ratio in Georgia exceeds that of similar countries, which serves as an additional indicator of the high debt burden and ongoing vulnerability (see Box 1). Following the economic recovery, it is expected that the credit-to-GDP gap will gradually close in the long term.

Figure III.2. Annual growth of nominal GDP<sup>32</sup> and credit



Source: NBG

Figure III.3. Credit-to-GDP gap



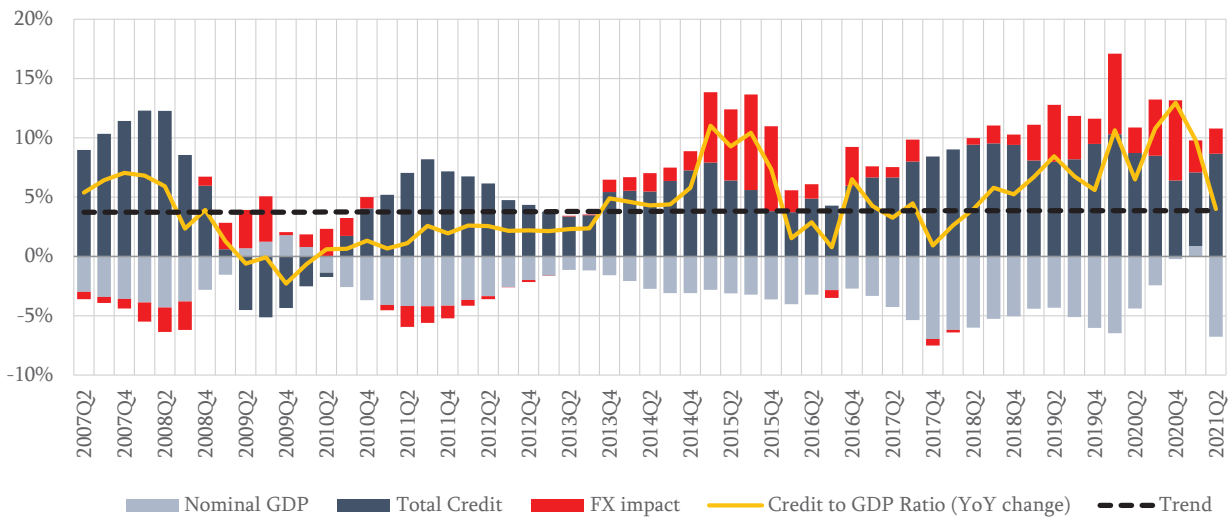
Source: NBG

32 Nominal GDP is calculated using data from four consecutive quarters.

33 Credit includes loans directly issued by commercial banks and microfinance institutions as well as bonds issued domestically by the non-financial sector.

34 The credit-to-GDP trend is estimated using an HP filter in line with the Basel recommendations ( $\lambda=400.000$ ).

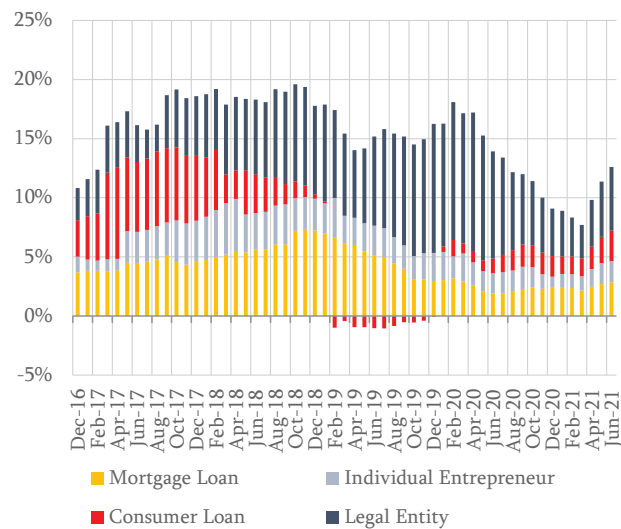
Figure III.4. Decomposition of the YoY change in the credit-to-GDP ratio



Source: NBG

**In 2021, the contribution of business loans to total loan growth has been increasing.** In June 2021, the total loan growth amounted to 12.5 percent, of which business loans made a contribution of 7.2 percentage points (see Figure III.5). In 2020, after the start of the pandemic, the growth rate of loans to legal entities decelerated significantly. However, from the beginning of the second quarter of 2021, demand for business loans increased. In the second quarter of 2021, compared to the end of 2020, the growth rate of consumer and mortgage loans also increased, amounting to 15 and 13 percent, respectively (see Figure III.6).

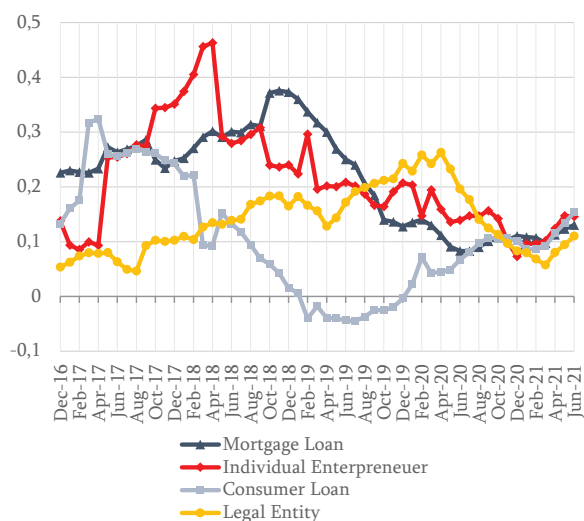
Figure III.5. Decomposition of the annual growth rate of bank loans (excl. FX impact)



Source: NBG

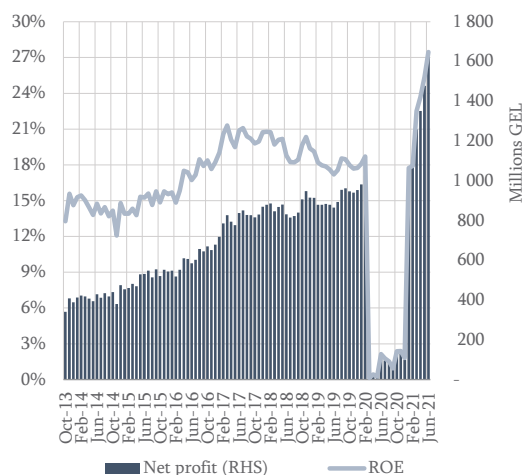
The banking system ended 2020 with a small but still positive profit, while profitability has remained at a solid level in the first half of 2021. If this current trend of profitability is maintained, it is expected that the ROE will exceed 25 percent by the end of the year (see Figure III.7). Improved profitability has mainly been supported by strong credit growth and a reduced need for loan provisioning, which is due to the loan loss reserves created in advance in 2020 and is of a temporary nature. Strong profitability is an important source for increasing capital and it provides banks with a significant buffer to absorb potential shocks. However, it is important that financial institutions do not accumulate excessive risks in an effort to make short-term profits.

Figure III.6. Annual growth rate of bank loans (excl. FX impact)



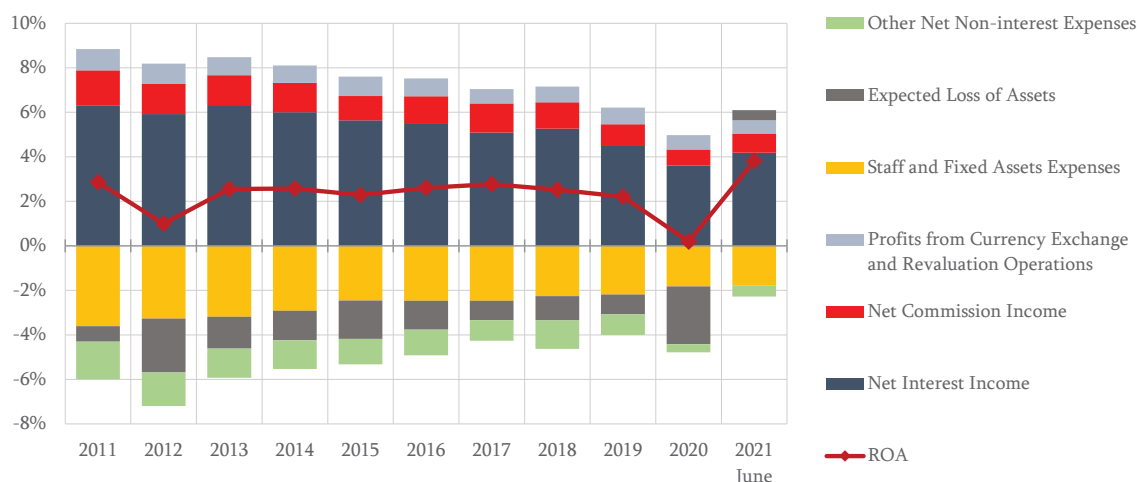
Source: NBG

Figure III.7. Profitability<sup>35</sup> in the banking sector



Source: NBG

Figure III.8. ROA decomposition for the banking sector

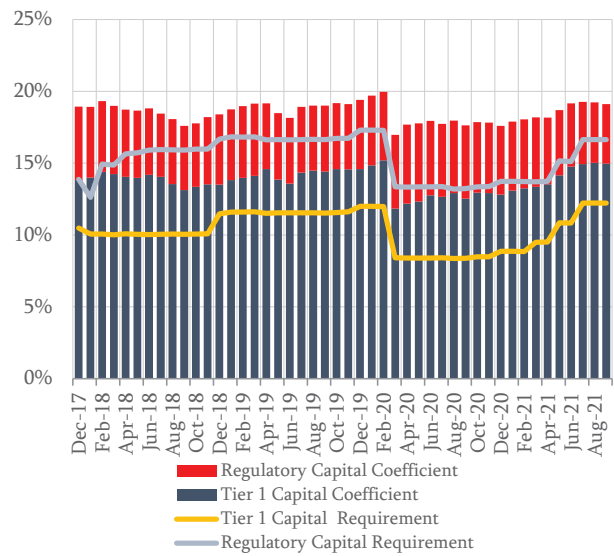


Source: NBG

35 This calculation is based on data from the last 12 months.

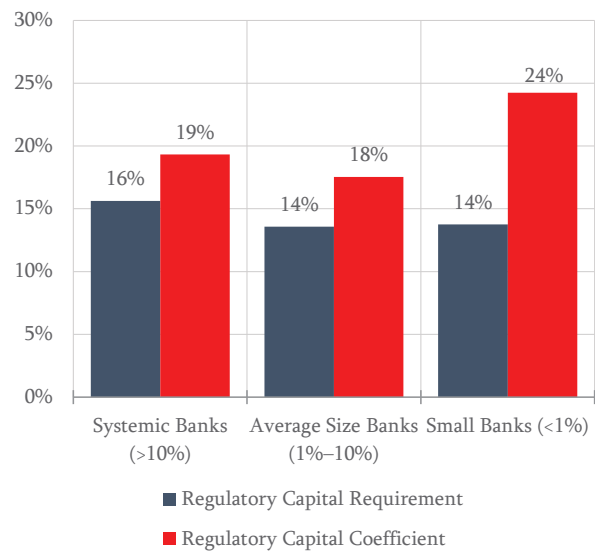
As a consequence of the earlier enactment of supervisory requirements and historically stable profitability, in the first half of 2021 the banking system had accumulated solid capital buffers. In 2020, the banking system was able to face the challenges of the pandemic-induced economic recession with high levels of capital that had gradually been accumulated as a result of stable profitability over the last 10 years and the enactment of additional supervisory requirements. In addition to minimal capital requirements, banks are required to hold combined buffers (conservation, countercyclical and systemic buffers) and buffers under Pillar 2 (the unhedged currency-induced credit risk buffer, credit portfolio concentration risk buffer, net stress test buffer and net GRAPE buffer). It should also be noted that, despite the reduction in capital requirements in response to the challenges resulting from COVID-19, the current capital ratios in the system exceed pre-pandemic requirements (see Figure III.9). Moreover, in the first half of 2021, the majority of commercial banks still maintained solid buffers (see Figure III.10), which, if necessary, will help them to overcome remaining uncertainties related to the pandemic and continue lending to the economy without difficulties.

Figure III.9. Capital adequacy in the banking sector (Basel III)



Source: NBG

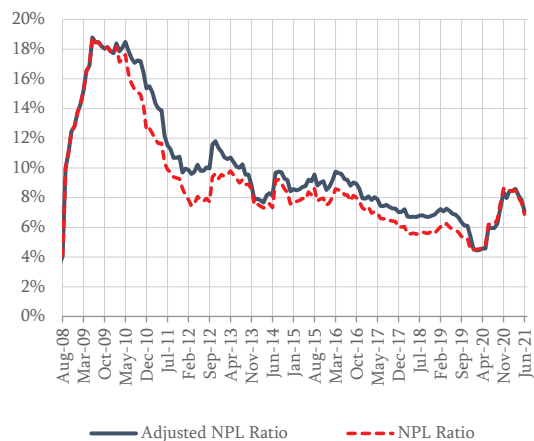
Figure III.10. Distribution of capital adequacy in the banking sector



Source: NBG

In response to the negative shock related to COVID-19, in March 2020 the NBG temporarily eased capital requirements for the banking system. However, since the main phase of the shock has passed, the NBG will gradually begin to restore capital requirements in 2022. By easing capital requirements, the NBG reduced the impact of the negative shocks resulting from the pandemic and supported lending activity. As a result, the NBG promoted the countercyclical behavior of the banking sector. However, since the main phase of the pandemic-induced shock has passed and economic growth remains at a high level, the capital buffer requirements will be gradually restored. In particular, according to the Financial Stability Committee’s decision<sup>36</sup>, effective from 2022, banks will be given one year to restore the currency-induced credit risk (CICR) buffer and two years to restore the capital conservation buffer. Additionally, as planned, new rates for the concentration and net GRAPE buffers were activated from March 2021, while, as scheduled, the requirements for the systemic buffer will also be increased from the end of 2021. It should be noted that some of commercial banks have already restored the capital requirements that had been eased, and therefore will no longer be restricted from distributing capital, provided that, under normal business conditions, the distribution of the capital will not result in a breach of the restored capital requirements and that the banks will consider the activation and the redistribution of the buffer and other expected factors (e.g. asset growth). Considering the existing capital

Figure III.11. NPL ratio for bank loans<sup>37</sup>

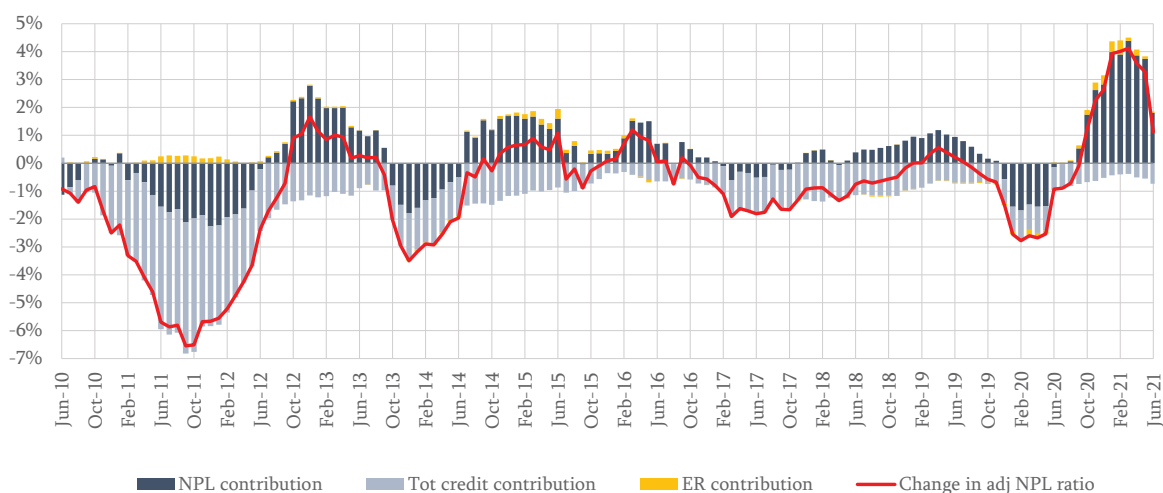


Source: NBG

levels in banks and their expected profitability, the restoration of the previously released capital buffer requirements is not expected to have a significant impact on lending growth.

**As expected, due to COVID-19, the share of non-performing loans increased. However, this indicator is expected to decline gradually with the recovery of the economy. Moreover, commercial banks have already created an appropriate level of loan loss reserves.** Over the last several years, loan quality has been improving. However, against the backdrop of the restrictions imposed due to the pandemic, at the end of 2020, compared to the same period of the

Figure III.12. Decomposition of the annual change in the adjusted NPL ratio<sup>38</sup>



Source: NBG

36 See <https://nbg.gov.ge/financial-stability/committee>

37 According to the NBG’s methodology, NPLs include substandard loans alongside doubtful and loss loans.

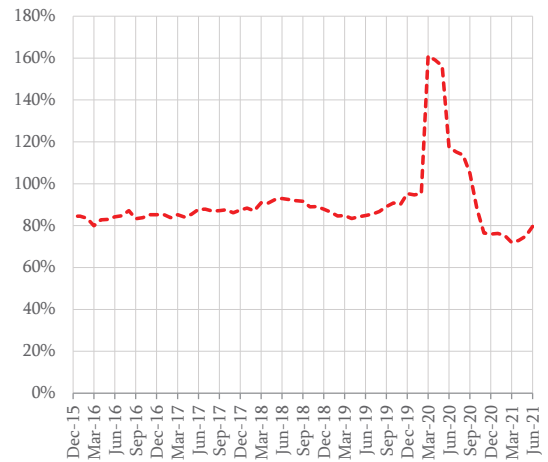
38 The adjusted NPL ratio accounts for loan write-offs and recoveries during the last 12 months.



previous year, the share of non-performing loans increased by 3.9 percentage points and amounted to 8.4 percent (see Figure III.11). In the first half of 2021, the share of non-performing loans declined to 6.9 percent, which was partially supported by the growth of loans (see Figure III.12). It should be noted that the loan loss reserve created by banks is adequate and, as of June 2021, the non-performing loans coverage ratio amounted to 80 percent (see Figure III.13).

**Only a small share of the loan portfolio remains under moratoria, indicating that the major effect of the grace period has already been reflected on non-performing loans.** The grace period programs on loan payments have helped households and companies to avoid instant financial difficulties related to debt servicing. The first three-month grace period started in March 2020 and was designed for all borrowers who wanted to postpone payments. Since July 2020, commercial banks offered the program to individual borrowers who had lost their jobs, whose income had been reduced or who had experienced difficulties making loan payments. However, following the economic recovery, the share of loans under moratoria declined significantly and amounted to 7 percent in July 2021 (see Figure III.14). Consequently, no significant increase in non-performing loans is expected in this regard.

Figure III.13. NPL coverage<sup>39</sup> in the banking sector



Source: NBG

Figure III.14. The share of loans that used grace periods



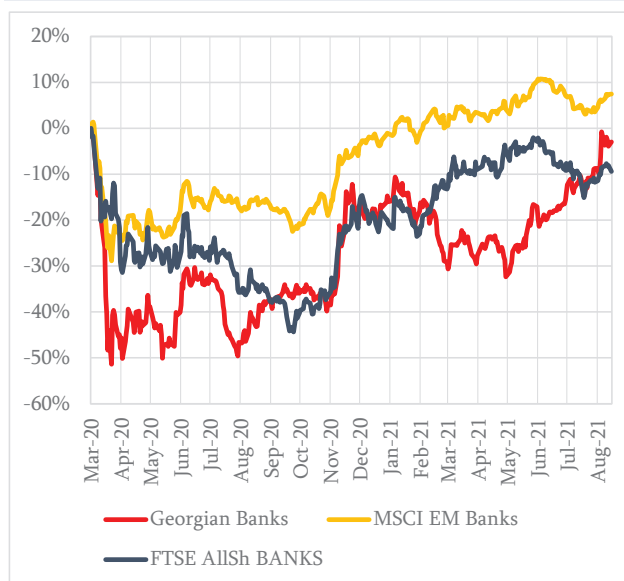
Source: NBG

39 The ratio of loan loss provisions to non-performing loans.

After the decline in equity prices on global stock markets that followed the pandemic, similarly to the global tendency, the stock prices of the Georgian banks have started to recover. Banks' equity prices effectively summarize their financial conditions, expected profitability and potential risks. Increased uncertainty related to COVID-19, a raised risk premium, increased GEL risk-free interest rates in relation to reserve currencies, fluctuations of exchange rates, and declined profitability have all negatively affected stock prices. However, from the second half of 2020, similarly to the global tendency, the stock prices of Georgian banks started to increase and converge to pre-pandemic levels. This improved dynamic was supported by solid profitability, higher-than-expected lending activity, accelerated economic growth observed in the second quarter of 2021 and the appreciation of the local currency (see Figure III.15). As the stock market is an important source of capital for listed banks, positive dynamics in this regard improve the resilience of the banking system.<sup>40</sup>

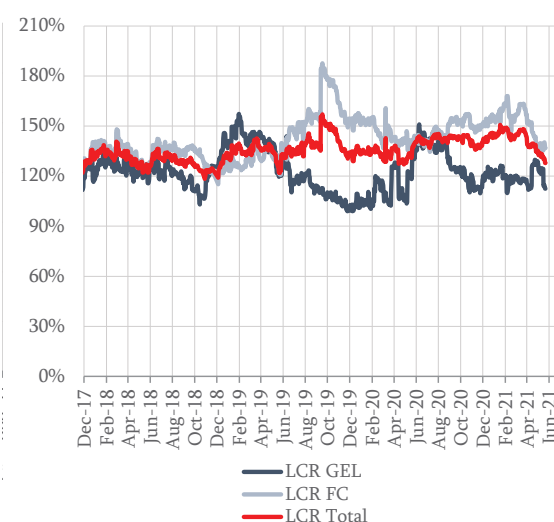
Despite the increased liquidity risks related to COVID-19, commercial banks maintain solid liquidity buffers. These were ensured as a result of the measures implemented by the NBG in 2020. Banks were able to face the challenges resulting from the pandemic with a stable source of funding and solid liquidity buffers, facilitated by the net stable funding (NSFR) and liquidity coverage (LCR) ratios implemented in previous years. Moreover, in the response to potential liquidity risks related to the onset of the pandemic, the NBG implemented a number of important measures.<sup>41</sup> As a result, in the first half of 2020, the LCR exceeded its pre-pandemic level (see Figure III.16). In the current period, the LCRs for the banking system in both domestic and foreign currencies significantly exceed the minimal requirements. Also, over the last year, the NSFR was maintained close to 130 percent, indicating the stability of funding. It should also be noted that the share of non-resident deposits declined by 2.1 percentage points during 2020, but have increased slightly in the current year (see Figure III.17). Consider-

Figure III.15. Normalized equity prices<sup>40</sup>



Source: NBG, Bloomberg.

Figure III.16. Liquidity coverage ratio (LCR) for the banking sector<sup>42</sup>



Source: NBG

ing the fact that, in response to the buildup of non-resident deposits, the NBG has introduced additional liquidity requirements and that the share of term deposits in these deposits is relatively high, the liquidity risks for banks remain low (see Box 3).

40 For Georgian banks, the index is weighted by equity capital. The data is normalized and reflects the percentage change with respect to the prices seen on 2 March 2020.

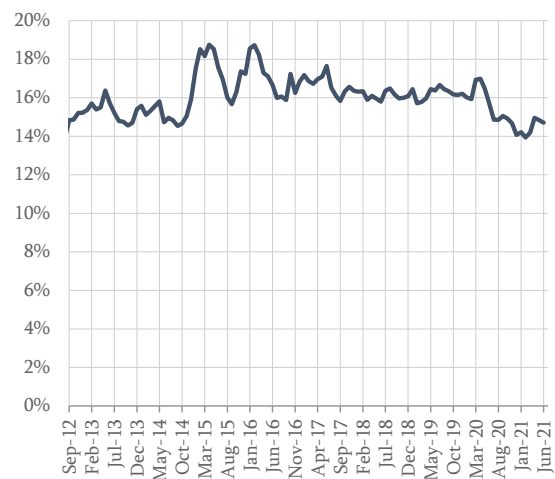
41 See the 2020 Financial Stability Report.

42 The minimal requirement for the LCR in GEL amounts to 75 percent, while for FX and in total it amounts to 100 percent.

**In order to maintain sustainable growth in domestic currency lending and to reduce reliance on other sources of funding, the banking system needs to attract more deposits in the domestic currency.**

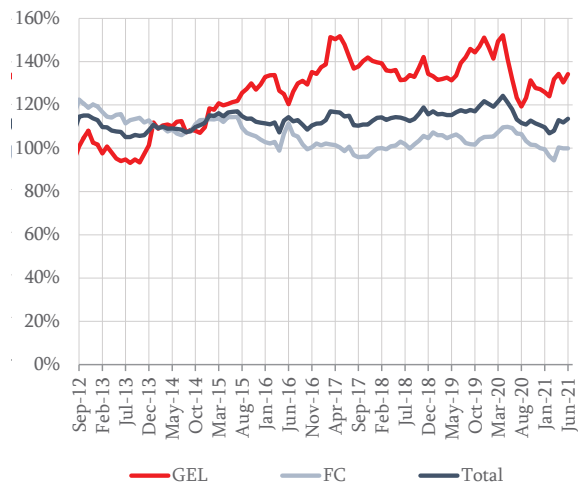
By the end of 2020, compared to the same period of 2019, the loan-to-deposit ratio declined significantly, which was mainly due to the high growth of deposits. However, in June 2021, the loan-to-deposit ratio in GEL remained high and amounted to 134 percent (see Figure III.18). Considering this fact, banks will have to partially satisfy the increased demand for loans by using borrowed funds.<sup>43</sup> However, compared to deposits, these funds are less stable sources of funding. It is notable that, with the exception of funds received from the NBG in the framework of monetary policy operations, the borrowed funds of Georgian banks are mainly long-term and are mostly financed by parent or development-oriented international financial institutions, which reduces liquidity risks. It should also be mentioned that, starting from July 2021, in order to support the growth of deposits in GEL, the minimum reserve requirements for funds attracted in foreign currency have been determined for each commercial bank individually in accordance with their levels of deposit dollarization. Consequently, these new reserve requirements will intensify competition in the GEL deposit market.<sup>44</sup> The loan-to-deposit ratio in foreign currency remains in the range of 100-110 percent. In addition, compared to funds borrowed in GEL, those borrowed in foreign currency are relatively long-term, indicating that loans in foreign currency are financed through relatively stable funds. The liquidity risk in foreign currency, in this regard, remains low. Given that the NBG is more flexible in supplying liquidity in the local currency, the stability of foreign currency funding is crucial.

Figure III.17. Share of non-resident deposits in total deposits



Source: NBG

Figure III.18. Loan-to-deposit ratio



Source: NBG

<sup>43</sup> It should be noted that equity capital is denominated in GEL. Therefore, the loan-to-deposit ratio will be naturally higher in the domestic currency.

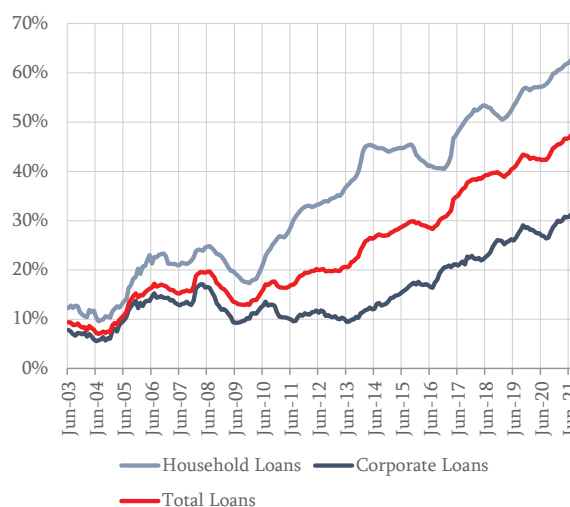
<sup>44</sup> See <https://nbg.gov.ge/>

**Despite a significant decline, dollarization remains one of the major challenges for the financial sector.** Over the recent period, the process of increasing loan larization (de-dollarization) has been ongoing. In June 2021, compared to the same period of the previous year, the share of loans issued in the local currency increased by 5 percentage points and amounted to 48 percent (see Figure III.19). Considering that most borrowers are unhedged, the local currency depreciation caused by the pandemic has made banks face increased credit risk, which has also been reflected in the increased NPL ratio for foreign currency. It should be noted that, in order to partially insure against currency-induced credit risk, banks are obliged to maintain an additional capital buffer for such risk. Despite the fact that interest rates on foreign deposits are relatively low, it is noteworthy that the dollarization of deposits remains high, especially for deposits of natural persons. Considering that the leverage ratio significantly exceeds the minimal requirement (see Figure III.20), by decreasing loan dollarization, with other factors remaining unchanged, banks will be able to increase the leverage and therefore lending.

**The share of floating rate loans has been increasing over the recent period, which reduces interest rate risk for banks. However, in the event of a possible increase in interest rates, the credit risk in foreign currency rises more than that in local currency.** As of June 2021, the share of floating interest rate loans in GEL, USD and EUR amounted to 91, 63 and 89 percent, respectively. It should be mentioned that the movements of domestic interest rates are more aligned with the domestic economic cycle, which significantly reduces credit risk in the local currency. At the same time, in the recent period, the USD and EUR interest rates have remained at historically low levels. Therefore, in the event of a possible increase in foreign interest rates, the credit risk in foreign currency rises more than that in the local currency because movements in foreign interest rates are mostly unrelated to Georgia’s economic cycle.

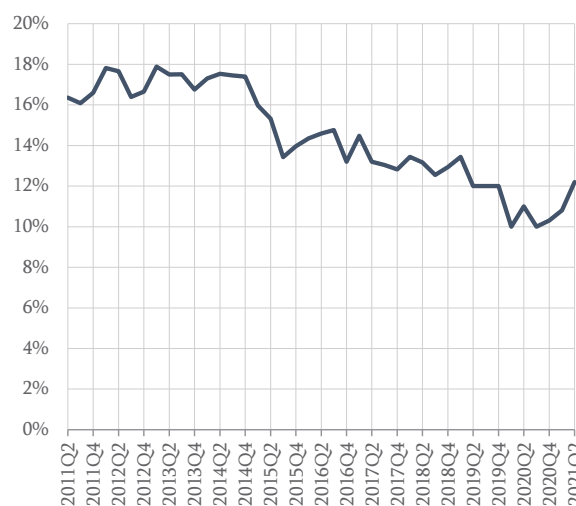
**Concentration remains high in the banking sector. However, considering that interest rate spreads have recently had a declining trend, this does not prevent competition in the market.** On the one hand, for systematically important banks, high levels of market concentration can lead to improved efficiency and increased asset diversification. On the other hand, high levels of concentration might be associated with low competition in the market. However, in the case of Georgia, over recent years, interest rate spreads have had a declining trend. Therefore, it can be concluded that high con-

Figure III.19. Larization at a fixed exchange rate



Source: NBG

Figure III.20. Capital-to-assets ratio for the banking sector rate



Source: NBG

centration does not prevent competition. It should also be mentioned that, in the current period, Credo Bank acquired Finca Bank, indicating that, in accordance with the increased scale of the economy, competition in the market will be promoted. Theoretically, high concentration may create the problem of moral hazard among banks because it can generate misaligned incentives for systematically important banks that might expect interventions and assistance from the state and the National Bank in times of financial stress. Due to such potentially misaligned incentives, banks may take excessive risks. Considering this, the NBG has set additional capital buffers for systematically important institutions.<sup>45</sup> It is expected

45 See <https://nbg.gov.ge/en/financial-stability/systemic-buffer>

that the development of services based on new financial technologies will increase competition and reduce concentration in the market.

**Promoting the development of consumer-centric and cost-effective financial innovations will encourage competition in the financial sector.**

In order to do so, the National Bank of Georgia has established a financial innovations office, which serves as the main channel for communication between financial innovators and the NBG.<sup>46</sup> Within this framework, the NBG and the Banking Association of Georgia have started working on the development of standards of open banking.<sup>47</sup> It should be noted that the NBG has also developed a framework for a regulatory laboratory, which will allow representatives of the financial sector to test innovative services and products in a supervised environment in real time. In addition, the NBG has published the principles of digital banking licensing.<sup>48</sup> The emergence of new entities through digital banking will promote the development of a digital ecosystem and encourage innovative business models, which, in turn, will improve competition in the financial market. The NBG is also considering the issuance of a Central Bank Digital Currency (CBDC) to facilitate the use of new financial technologies, to improve the efficiency of the payment system and encourage financial inclusion. The CBDC will be able to better adapt to the digital economy and will increase the efficiency of economic policy. However, the risks associated with the implementation of the CBDC have yet to be considered (see Box 4).

**Despite the pandemic-induced risks, operational losses due to cyber threats and IT disruptions have only increased insignificantly.**

Starting from the early stages of the COVID-19 pandemic, global cyber-attacks towards the financial sector increased more than against other sectors.<sup>49</sup> In Georgia, despite the fact that a large portion of the staff of financial institutions started working remotely, cyber-attacks did not increase significantly, with only a small number of “phishing” and distributed denial-of-service (DDoS) attacks noticed. The increase in cyber-attacks globally exposes Georgia to heightened cyber risks. Considering this, according to the current cybersecurity supervisory requirements, Georgian commercial banks are required to implement and regularly evaluate their cyber security controls. In 2020, total operational losses of commercial banks

amounted to 29.6 million GEL, and the amount of the cases, compared to the previous year, declined by 19 percent. In 2020, total operational losses amounted to 1.1 percent of gross income (calculated using the Basel II methodology). Considering the global increase in such incidents, it is important to monitor cyber risks and ensure that the financial system is prepared to deal with those potential threats.

**Non-banking financial institutions were well prepared to face the challenges resulting from COVID-19 with high levels of capital and liquidity. In 2021, these institutions have continued to maintain solid buffers.**

Georgia has one of the highest levels of household accessibility to formal banking services in the world and the share of shadow banking remains low.<sup>50</sup> In terms of accessibility to formal financial services, the role of non-banking institutions is also important. As a result of the supervisory regulations implemented in recent years, these institutions were able to withstand the pandemic-induced difficulties. In the first half of 2021, the assets of the non-banking financial sector amounted to GEL 2 billion (of which GEL 1.5 billion belonged to microfinance organizations). In the previous year, due to the pandemic, microfinance organizations created loan loss reserves that amounted to 5 percent of the total loan portfolio. In June 2021, the quality of the loan portfolio of microfinance organizations improved and the NPL ratio amounted to 6.5 percent. It is noteworthy that loan dollarization in the portfolio of microfinance institutions declined significantly to 7 percent. In the recent period, the capital adequacy ratio for microfinance organizations amounted to 35 percent, which serves as an additional buffer against potential shocks. Moreover, as a result of the liquidity requirements enacted from 2018 and the liquidity support programs provided by the NBG in response to the COVID-19 crisis, microfinance institutions maintain high liquidity buffers that will help them provide financial services to customers without any difficulties, even in stressful conditions.

46 See <https://nbg.gov.ge/en/page/financial-innovation-office>

47 See <https://nbg.gov.ge/en/page/open-banking>

48 See <https://nbg.gov.ge/en/page/digital-bank>

49 See <https://www.bis.org/publ/bisbull37.htm>

50 See <https://data.imf.org>



### Box 3. Structure of non-residents' deposits in the Georgian banking sector

Non-residents' non-bank deposits in the Georgian banking sector exceeded GEL 5 billion and reached 15 percent of total non-bank deposits at the end of June 2021. A total of 89 percent of these deposits are denominated in foreign currency and 79 percent belong to individual depositors.

In order to prevent excessive dependence on this type of funding, the NBG maintains an additional liquidity requirement for non-residents' deposits. The necessity for additional liquidity in banks with a high share of non-resident customers reduces the incentives for banks to attract this type of deposit portfolio. The latter fact has been reflected in a stabilization of the share of non-residents' deposits in recent years. A positive factor for liquidity is that a large part of these deposits (48 percent) are term deposits, of which 55 percent represent non-callable certificates of deposit.

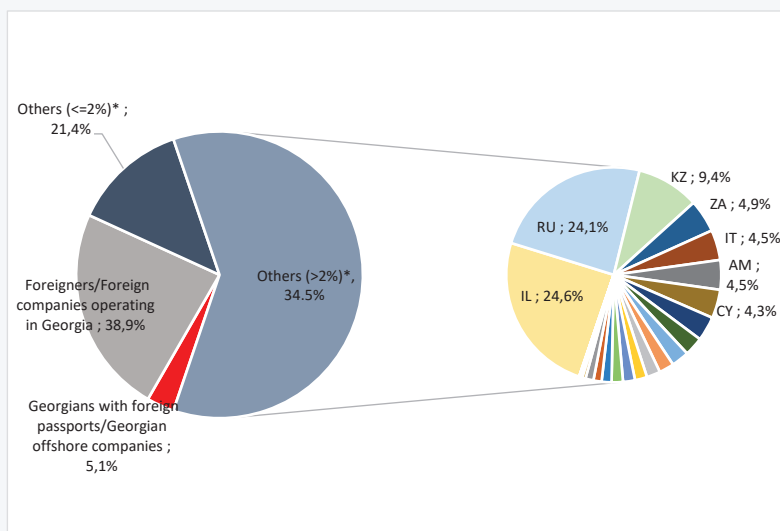
For the purpose of analysis and risk assessment, the NBG periodically requests detailed data from banks on non-resident deposits according to their largest groups of depositors. The last such analysis was conducted based on data from 28 February 2021.

The sample of non-residents' deposits can be divided into four groups based on the type of depositors:

1. Georgians with foreign passports or Georgian companies registered offshore.
2. Foreigners or foreign businesses operating in Georgia.
3. Remaining non-residents, who place money in Georgia for security. Their main goal is not a high interest rate. It is assumed that remaining deposits with an interest rate lower than 2 percent fall into this category.
4. Other non-resident deposits, which are probably placed to generate a high interest revenue. It is assumed that remaining deposits with an interest rate of more than 2 percent fall into this category.

As seen from Figure B3.1, the largest share of non-residents' deposits, at 39 percent, belong to the second group, which are foreigners and foreign companies operating in Georgia. The fourth group also has an important share at 35 percent. This fourth category bears the highest risks because their main goal

Figure B3.1 Distribution of non-residents' deposits in the sample by type and country, February 2021



\* "Others (<=2%)" represents the third group's deposits, whose main goal when placing money in Georgia is not a high interest rate. \* "Others (>2%)" represents the fourth group's deposits, whose main goal when placing money in Georgia is a high interest rate.

Source: NBG



is to generate high interest revenues and, in the event of increasing financial risks, the probability of their outflow is the highest.

The same figure shows that the structure of the fourth group's deposits is well diversified by country, which is a positive factor in terms of risks.

The first group includes Georgians or Georgian companies registered offshore. These deposits have low liquidity risk, because the depositors have tight connections with the country, and it is therefore less likely that there will be outflows during periods of increasing risks to financial stability. The second group includes foreigners and foreign businesses operating in Georgia that have a connection with the Georgian banking sector because of their business needs. These deposits are also less risky, because they have connections with local banks even in times of financial stress, because of their business needs. The third group includes remaining deposits with interest rates of less than 2 percent, as their main goal is not directed toward receiving a high interest rate, this makes them less risky than the fourth group. Most of the third group's depositors are from countries where Georgian banks operate on their holding group level: the UK, Cyprus, Azerbaijan, Israel, etc.

All remaining deposits fall into the fourth group. As the main goal of this group is to generate high interest income, the probability of their outflow during financial stability risks is the highest. Generally, these depositors also have bank accounts in their own countries, which makes it easy for them to quickly transfer money. It is noteworthy that 93 percent of these deposits belong to individuals. Furthermore, the accounts of all individual as well as legal entities are term deposits, which significantly decreases liquidity risks. These term deposits include lots of certificates of deposit, which are non-callable and thus represent an additional positive factor.

The results of the conducted analysis show that the risks coming from non-residents' deposits have not increased in recent years. They are well diversified by country of origin and most of them (including all of the more risky non-residents' accounts) are term deposits, which significantly reduces liquidity risks. The current risks are effectively incorporated into the existing liquidity requirements.

## Macro-Financial Risk Scenarios

*A quantitative assessment of financial sector resilience under various macro-financial risk scenarios is an important part of financial stability analysis. The macro-financial risk scenarios are based on the risks and vulnerabilities that have been discussed in the previous chapters of this report. In order to inform macroprudential policy about existing trade-offs and the impact of adverse external developments on the domestic economy and financial system, different risk scenarios are assessed over a three-year horizon.*

**Two risk scenarios are considered in order to capture the downside risks originating from adverse global and regional developments in the macro-financial environment.** One scenario reflects reasonably likely and moderately adverse outcomes, while the other replicates unlikely, but still plausible, instances of severe stress. This approach permits an examination of how the domestic economy would perform under varying degrees of stress and reveals the possible nonlinear effects of external shocks. The risk scenarios are benchmarked against a baseline that is based on the NBG's macroeconomic forecast as published in the August 2021 Monetary Policy Report.<sup>51</sup>

**The moderate risk scenario considers global disruptions in the COVID-19 vaccination process.** As a consequence, under this scenario, reaching herd immunity is delayed and so is the economic recovery, particularly in developing and emerging market economies. Given insufficient vaccination rates in such countries, the spread of the pandemic persists into the current year. This leads to a delayed recovery of international travel and widespread repercussions on contact-intensive industries such as tourism.

In advanced economies, relatively higher rates of vaccination lead to improvements in consumer confidence. Therefore, pent-up demand creates inflationary pressures. In response to these pressures, advanced economies engage in monetary policy normalization faster than as anticipated under the baseline scenario. This is transmitted to developing and emerging economies in the form of tightened financial conditions. In the latter group of countries, adversely revised expectations regarding the economic recovery and increasing risk aversion become additional drivers of tighter financial conditions. After addressing the interruptions in the vaccination process, expectations and market sentiment will gradually improve in developing and emerging market economies. In these countries, the economic recovery gains momentum starting from the second half of 2022.

In the moderate risk scenario, depressed ex-

pectations regarding economic recovery in the region adversely affects not only international travel but also trade and investment flows. Given the deterioration of market sentiment and weaker-than-anticipated economic fundamentals, the country risk premium rises and the domestic currency depreciates. As a result, the burden of debt increases for foreign currency borrowers.

In this scenario, weak external demand is accompanied by reductions in domestic expenditure. In the face of pessimistic expectations and an increased burden of debt, households and companies cut consumption and investment expenditures. A proportion of companies with financial resilience issues become insolvent and exit the market due to reduced revenues and higher debt servicing costs. Subsequently, unemployment rises and, given lower incomes, households also face debt servicing difficulties. The increasing credit risk leads to tighter lending conditions and further hampers the economic recovery. Meanwhile, the fiscal space to support the economy is limited given the increased level of government debt. Consequently, through the rest of the current year and the first half of 2022, real GDP exhibits weak growth. The economic recovery then gains pace from the second half of 2022.

According to the moderate risk scenario, lowered expectations regarding economic growth and the recovery of the tourism industry create downward pressures on real estate prices for the remainder of this year. However, this effect is offset by increased intermediate costs of construction. In following years, the growth of real estate prices will be driven by improved confidence and an increase in demand.

In the moderate risk scenario, the downward pressure on inflation caused by weak demand will be more than offset by the increase in imported inflation and intermediate production costs accompanying a depreciation of the local currency. As a result, headline inflation will remain above the target throughout 2021 and 2022. Moreover, as actual inflation has remained above the target level for so long, inflation expectations will tend to increase. In order to respond to increased inflation expect-

<sup>51</sup> See <https://nbg.gov.ge/en/publications/monetary-policy-reports>

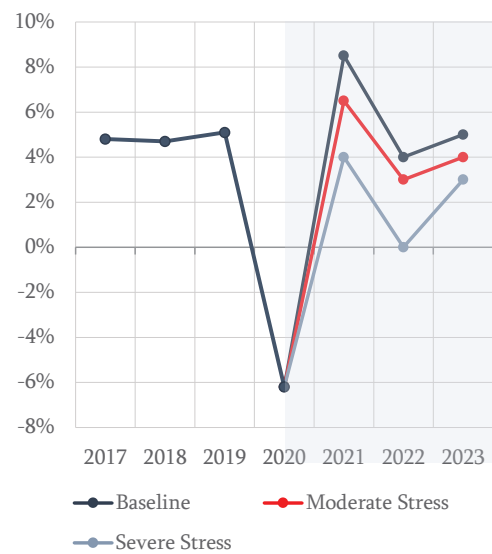
tations, under this scenario, monetary policy is tightened further and is kept in a contractionary stance for longer compared to the baseline. Monetary policy will start to ease as the shocks dissipate. In this scenario, the cumulative drop in GDP growth from the baseline is 4 percentage points over the three-year horizon.

**The severe risk scenario considers the global spread of new variants of the coronavirus and their resistance to existing vaccines.** In this hypothetical scenario, in the second half of the current year, a strong resurgence of the pandemic caused by coronavirus mutations leads to a reintroduction of containment measures that restrict mobility and economic activity. Meanwhile, uncertainty remains regarding the duration of the pandemic and its ultimate impact on the global economy. Given the already eased monetary policy in advanced economies and the fiscal resources utilized in response to the previous waves of the pandemic, there are limited additional toolsets to support the economy. Against the backdrop of worsened expectations and lingering uncertainty, risks are repriced in global financial markets leading to a tightening of financial conditions and declining asset valuations. Restrictions on mobility and economic activity cause lower demand for oil products and thus decrease oil prices.

In the severe risk scenario, developing and emerging small open economies suffer the most. These countries will experience massive capital outflows due to risk repricing and they cannot restart foreign currency inflows because of the prolonged halt in international trade and tourism. Subsequently, these economies will face increases in their sovereign risk premia and a sizable depreciation of their local currencies. Given the expected decrease in oil prices, commodity exporting countries will suffer an additional adverse impact on their economies.

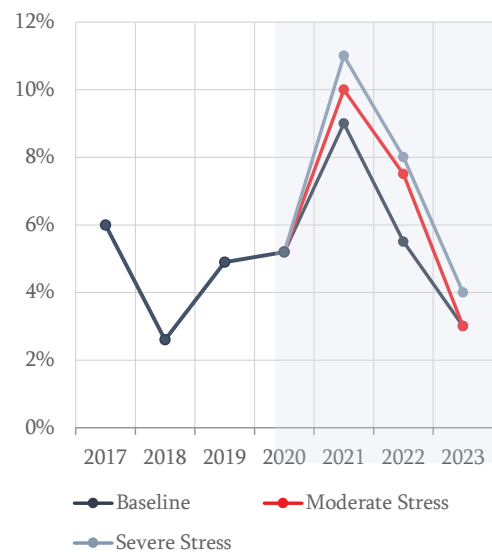
According to this scenario, weak external demand is accompanied by a significant drop in domestic expenditures. This is caused by a significant deterioration in consumer and business confidence, accompanied by an increased burden of debt. As a result, the domestic economy falls back into recession in the last quarter of the current year. Due to the abrupt financial stress and increased debt burden among borrowers, the financial sector suffers sizable losses. As a response, lending conditions tighten, further contributing to the economic downturn. The real estate market contracts due to the looming uncertainty and expected drop in rental incomes. The prolonged and highly uncertain duration of the downturn causes the production capacity of the economy to deteriorate. Productive capital depreciates and long-

Figure III.21. Risk scenarios: annual real GDP growth (YoY)



Source: NBG staff estimates

Figure III.22. Risk scenarios: average annual CPI inflation



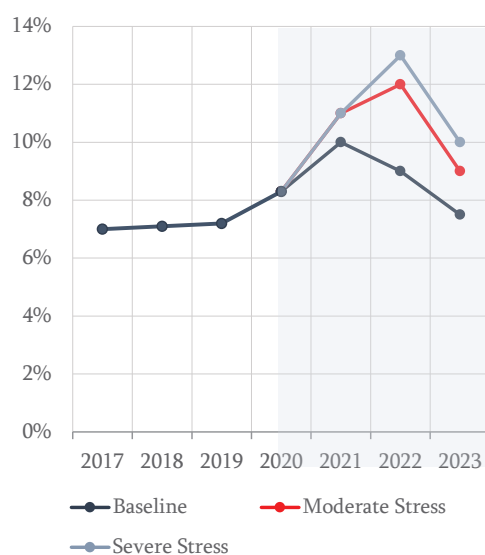
Source: NBG staff estimates

term unemployment increases, leading to a downgrade in the professional skills of the labor force. Thus, the economic recovery in the aftermath of the crisis will be modest.

In the severe risk scenario, the disinflationary effect of reduced demand is weaker than in the moderate risk scenario as the drop in demand is accompanied by a deterioration in potential economic growth. On the other hand, there is a much larger increase in import prices and intermediate production costs due to the sizable depreciation of the local currency. Ultimately, headline inflation will be higher compared to the moderate risk scenario. In order to curb increased inflation expectations, monetary policy is tightened further and then gradually returns

to the neutral stance. In this scenario, the cumulative drop in GDP growth from the baseline is 10.5 percentage points over the three-year horizon.

Figure III.23. Risk scenarios: annual average monetary policy rate



Source: NBG staff estimates

Table III.1. Macro-financial risk scenarios\*

Variable \ Scenarios	Current value*	Baseline scenario			Moderate risk scenario			Severe risk scenario		
		2021	2022	2023	2021	2022	2023	2021	2022	2023
Fed Funds Rate	0.25%	+0.0 pp	+0.0 pp	+0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+0.0 pp	+0.0 pp	+0.25 pp
ECB Policy Rate	0%	+0.0 pp	+0.0 pp	+0.25 pp	+0.0 pp	+0.25 pp	+0.5 pp	+0.0 pp	+0.0 pp	+0.0 pp
Country Risk Premium	2.0%	+0.0 pp	+0.0 pp	+0.0 pp	+2.0 pp	+1.0 pp	-2.0 pp	+3.0 pp	+2.0 pp	-2.0 pp
GEL/USD Nominal Exchange Rate	3.10	Appr. 0%	Appr. 0%	Appr. 0%	Depr. 10%	Appr. 5%	Appr. 0%	Depr. 15%	Depr. 10%	Appr. 5%
Nominal Effective Exchange Rate Index (1995=100)	254.6	Appr. 0%	Appr. 0%	Appr. 0%	Depr. 6%	Appr. 3%	Appr. 0%	Depr. 10%	Depr. 6%	Appr. 3%
Change in Real Estate Prices (in GEL, YoY)	11.7% (2020)	5.0%	5.0%	5.0%	6.0%	5.0%	5.0%	3.0%	2.0%	5.0%
Real GDP Growth (YoY)	-6.2% (2020)	8.5%	4.0%	5.0%	6.5%	3.0%	4.0%	4.0%	0.0%	3.0%
Unemployment Rate	18.5% (2020)	+1.0 pp	-1.0 pp	-2.0 pp	+3.0 pp	-0.0 pp	-2.0 pp	+5.0 pp	+1.0 pp	-2.0 pp
CPI Inflation (YoY)	5.2% (2020)	9.0%	5.5%	3.0%	10.0%	7.5%	3.0%	11.0%	8.0%	4.0%
Monetary Policy Rate**	10.0%	+0.0 pp	-1.0 pp	-1.5 pp	+1.0 pp	+1.0 pp	-3.0 pp	+1.0 pp	+2.0 pp	-3.0 pp

\* The values under each scenario display the average change in the corresponding macro-financial indicators compared to the previous period. The numbers for 2021 show changes relative to the current values. The current values correspond to 31 July 2020 unless otherwise stated.

\*\* The current value of the monetary policy rate reflects the Monetary Policy Committee decision made on 4 August 2021. In the scenarios, the change in the monetary policy rate corresponds to the change in the average value of the rate in the given year.

## Financial Sector Resilience

*This section provides a quantitative assessment of the resilience of the banking sector in terms of the macro-financial risk scenarios discussed above. According to the results of stress tests, the banking sector remains resilient, even under the most severe scenario. Despite facing high credit losses in the event of a realization of the severe risk scenario, the existing buffers will allow the banking system to maintain an adequate capital level.*

**The main purpose of stress testing is to assess the resilience of banks in the event of adverse shocks.** Stress tests are thus a major part of the financial stability analysis toolkit. This tool enables central banks to determine appropriate mitigation actions and formulate policies aimed at ensuring the uninterrupted provision of financial intermediation services under conditions of stress, limiting the duration of the stress, and contributing to faster economic recovery. It should be noted that stress tests provide an analysis of hypothetical risk scenarios and the results attained are thus conditional.

**The National Bank of Georgia has enhanced its top-down stress-testing model with the support of technical assistance provided by the International Monetary Fund.** Satellite models, which were revised in 2019-2020, incorporate separate credit risk assessments for the household and corporate sectors, as well as by currency of denomination. This allows better estimation of the impact of macroeconomic shocks on non-performing loans. The revised model also includes the analysis of interest rate risk by currency of denomination, encountering the maturities of assets and liabilities. The framework also allows detailed monitoring of on and off-balance sheet components. It should be noted that the NBG plans to recalibrate and further develop the satellite models as longer data series become available.

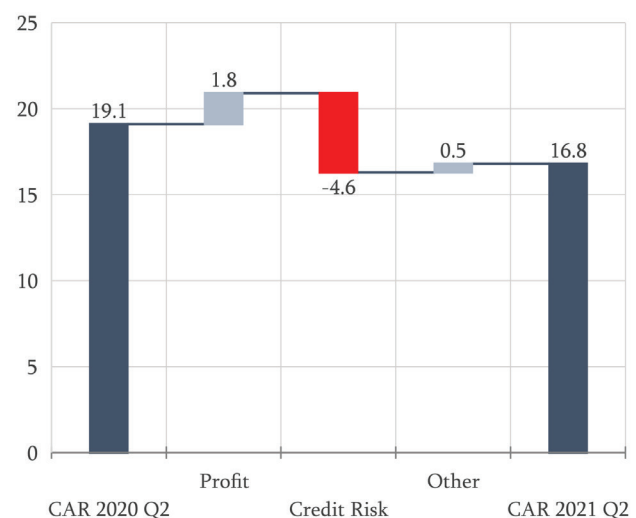
**The risk scenarios are analyzed in the context of their impact on the main drivers of banks' capital adequacy ratios.** To assess the solvency of banks, capital ratios were calculated as the ratio of forecasted capital to the projected amount of risk-weighted assets. The capital projection was calculated by adding the projected net income, which includes estimated provisioning, to current capital. In addition, any change in assets due to credit losses and exchange rate fluctuations are considered when projecting risk-weighted assets. Similar to the European Banking Authority's (EBA) methodology, the NBG's stress testing is based on the assumption of a static balance sheet and does not assume any active response from banks to the shocks in the system nor any change to their business models. The stress test has a three-year horizon (2021-2023) and no maturity adjustments to assets and liabilities over

this period are considered.

**Despite losses, the banking sector maintains a capital ratio well above the regulatory threshold in both the baseline and moderate stress scenarios.** Under the baseline scenario, the economic recovery and exchange rate stability improve the abilities of households and firms to service their debts. Credit risk thereby declines. In addition, banks maintain solid profitability and the banking sector's capital ratio remains around 20 percent over the three-year horizon, which is well above the regulatory minimum. Each bank maintains an adequate level of individual capital under the baseline scenario. The exchange rate fluctuation and an increase in interest rates under the moderate scenario weaken households' and firms' abilities to service their debt, which increases the credit risk. However, the operating profit of banks offsets this risk and the capital adequacy ratio thus declines slightly.

**The severe risk scenario would impose significant losses on the banking sector, but the sector's overall capital ratio would remain above the regulatory threshold.** Based on this scenario, the economic recovery is hindered, the exchange rates fluctuate significantly, the risk premium increases and the interest mar-

Figure III.24. Decomposition of the change in the capital ratio of the banking sector in the severe risk scenario (%)



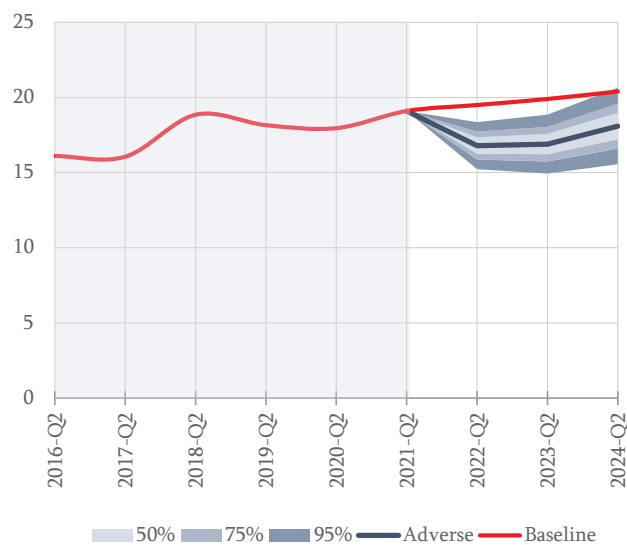
Source: NBG



gin initially compresses. Thereby, net profits decline and banks face sizeable credit losses. The revenue generated over the first year increases the capital coefficient by 1.8 percentage points, which is not enough to compensate for the -4.6 percentage points drop in the capital ratio caused by the credit losses (see Figure III.24). Therefore, under this scenario, the capital ratio significantly deteriorates. However, it should be noted that even under the severe risk scenario, the existing capital buffers would ensure a mitigation of potential losses. According to the scenario, at the end of the first year, some banks would need additional capital to maintain the minimum capital adequacy ratio. However, according to current estimates, the ownership structure of the banks would enable them to attract additional capital. Therefore, the capital losses identified under this scenario are not significant enough to constitute a risk to the sector's stability or resilience. It should also be noted that after the second year of the stress horizon, the capital adequacy of banks starts to gradually recover as a result of improved asset quality and stable operating profits (see Figure III.25).

**According to “reverse stress-testing”, the banking sector is able to mitigate an additional GEL 3 billion of credit losses.** The goal of reverse stress-testing is to assess the level of economic shocks and the increased losses under which capital buffers, on top of the minimal capital requirements, fully deplete. Considering the current level of capital adequacy, a 6 percent decline of capital buffers was analyzed, which equals around GEL 3 billion of credit losses. The non-performing loan ratio would need to be three times higher and exceed 20 percent to obtain such credit losses. This loss could be attained in different ways, however, in aggregate, real economic losses in 2021-2022 would need to be at the level of 2020 in addition to there being a significant depreciation of the exchange rate and a rise of unemployment. It should be noted that reverse stress-testing, similarly to the “top-down” stress test, does not assume any active response to the shocks from banks nor any change to their business models that might help them mitigate losses.

Figure III.25. Capital adequacy under the baseline and severe risk scenarios (%)



Source: NBG

**It should be noted that the National Bank of Georgia compares the results of the “top-down” and supervisory “bottom-up” stress tests and, based on the results of the latter, sets additional stress test buffers for individual banks.** Unlike “top-down” stress tests, which are conducted by the NBG, “bottom-up” stress tests are carried out by commercial banks following the scenarios and the detailed methodology provided by the NBG. The results convey important information for analyzing financial sector vulnerability and are actively used in the supervisory process, including in the formation of Pillar 2 buffers. In addition to macroeconomic parameters, these scenarios include the distribution of shocks according to different sectors of the economy, allowing banks to assess the creditworthiness of specific borrowers and to generalize the results obtained for groups of borrowers with similar characteristics. While this approach is distinguished by its simplicity, it is the best option when there is no long historical data series available and statistical modeling thus remains highly risky. The next round of supervisory stress testing is planned for the end of the current year.



## Box 4. Central Bank Digital Currency and Systemic Risks

A Central Bank Digital Currency (CBDC) is a digital analog of a central bank's cash banknote, and represents a direct liability of a central bank. A CBDC has the potential to provide cash-like security and convenience for peer-to-peer payments, and the internet compatibility of a CBDC can create brand new opportunities to improve the financial sector. To achieve this, a CBDC must be widely accessible, easy to use and should safeguard users' privacy. However, despite such potential positive effects, the implementation of a CBDC is fraught with various risks.

From a macroeconomic point of view, it is worth mentioning that there is a risk to financial sector stability associated with CBDC implementation. A CBDC could be a reason for disintermediation in commercial banks. If CBDC accounts accrue interest, this will decrease the volume of deposits in commercial banks, thereby lowering their funding and liquidity. The risk of disintermediation is one of the crucial problems associated with CBDC implementation. It should be mentioned that a run on commercial bank deposits to CBDC might intensify during a financial crisis, which would amplify procyclicality. Unlike cash, which is inconvenient to carry in large volumes, a CBDC simplifies bank runs. To mitigate these risks, central banks should consider various measures. Because a CBDC is a digital alternative to cash, it would be reasonable to impose an upper limit on CBDC accounts. As a result, a consumer would be able to use CBDC for daily expenses but would not be able to transfer money from a commercial bank deposit to a CBDC account above that set limit. Another instrument to mitigate the risk of disintermediation is accruing differentiated regressive interest on CBDC accounts, which would keep users from accumulating a large volume of a CBDC. Moreover, new mechanisms for supplying liquidity to commercial banks are considered, which will provide central banks with an instrument for returning the liquidity directed to CBDC to commercial banks.

Another vital risk associated with CBDC implementation concerns cybersecurity. In a country where a CBDC is widespread, any malfunctions to the CBDC network would cause a destabilization of the financial system. Distributed Ledger Technology (DLT) can mitigate this risk. DLT has a higher level of cybersecurity than traditional centralized databases. Smart contracts and the decentralized finance architecture developed around a CBDC might also increase the exposure of the CBDC network to cyber-attacks, especially at the points where a secure CBDC network connects to other networks of the digital economy. It is vital to keep these points as safe as possible. The system should be transparent and an independent audit of smart contracts is encouraged.

The late implementation of a CBDC could also be a reason for severe strategic risks. It has the potential to slow down the development of the financial system, increase dollarization and associated system risks.

At present, some countries are intensively researching and implementing CBDC technology. Moreover, private stable coins are widely used and are more acceptable in the regulated financial sector. For example, the crypto asset regulatory framework, on which international consultations are currently underway, give preference to stable coins over other crypto-assets and its adoption could open the door to these assets in the banking sector.

What follows from the above is that non-digital national currencies, compared to tokenized ones that are compatible with the internet, may become uncompetitive and consumers might switch to more convenient and functional currencies. This may harm both the efficiency of monetary policy and expose external risks to financial stability.

The development of a CBDC may also highlight other systemic risks. It is therefore critical to develop any CBDC in a controlled environment, to observe risks and to continuously try and find ways to mitigate them.

## IV. Financial Stability Policy Measures and Recommendations

*The NBG maintains financial stability and supports the sound operation of the financial system in Georgia. With this central aim in mind, a number of macroprudential and microprudential policy measures have been implemented in previous years. Amid those measures and the financial stability policy implemented by the NBG after the start of the pandemic, the financial sector has successfully passed the most severe phase of the shock caused by the pandemic. As the economy recovered, financial stress has eased. Under the decision of the Financial Stability Committee, banks began to restore the buffers released during the crisis. In light of the restored capital requirements and eased debt burden amid high economic growth, there is no need to change the countercyclical buffer in the current period. The NBG has thus left it unchanged at 0 percent. The National Bank of Georgia continues to monitor the country's financial stability and works to support the sustainability of the financial system.*

**Amid the macroprudential and microprudential measures taken by the National Bank before the pandemic and the financial stability policy implemented after its commencement, the financial sector was able to successfully pass the most severe phase of the shock caused by the pandemic.** Banks faced the shock caused by the pandemic well prepared. The imposition of additional capital requirements by the National Bank in previous years and the profits generated by commercial banks allowed them to accumulate sufficient buffers to cope with the shock. Moreover, the macroprudential measures taken in the pre-crisis period to reduce household over indebtedness and loan dollarization ensured the resilience of the asset quality of banks. In addition, the Liquidity Coverage (LCR) and Net Stable Funding (NSFR) ratios imposed during previous years promoted the stability of banks' funding and contributed to the building up of a solid liquidity buffer. To further support lending to the real economy, the NBG expanded GEL liquidity instruments in 2020, while a temporary supervisory plan released a portion of banks' capital buffers and gave them greater flexibility in managing their liquidity. Meanwhile, commercial banks had made loan loss provisions in advance for possible losses amid the pandemic. These measures ensured the resilience of the Georgian financial system to the shock caused by the pandemic. The financial system has successfully weathered the most severe phase of the shock and continues lending to the economy without any difficulties.

**Along with the economic recovery and an easing of financial stress, the Financial Stability Committee has discussed the recovery dates of the capital buffer requirements released during**

**the crisis.** According to the decision of the committee, the capital buffers that were released in March 2020 will be restored gradually. The first of January 2022 was set as the start date for the recovery of capital buffers and, from that date, banks are given two years to fully meet their capital requirements. Banks will be required to restore the currency-induced credit risk (CICR) buffer by 1 January 2023 and the capital conservation buffer requirement by 1 January 2024. It should also be noted that, given the level of capital buffers already in place and the expected profitability, the recovery of buffers will not significantly affect credit activity. In addition, according to the current forecast, banks will be able to restore these buffers ahead of time. In such a case, the restrictions on the redistribution of capital will be lifted, provided that this, under normal business conditions, does not lead to a breach of the restored requirements and that the banks concerned consider the activation of buffers, buffer redistribution and other expected factors (e.g. asset growth) in their capital management processes. As with the other forecasts provided in this report, the uncertainty surrounding this forecast remains high; it depends on the potential development of the pandemic and the effectiveness of the vaccination process.

**The Financial Stability Committee of the NBG has left the countercyclical buffer unchanged at 0 percent.** As of April 2021, the annual growth of credit portfolio, excluding the exchange rate effect, amounted to 9.8%. Business loans accounted for a significant share of this growth. However, the ratio of credit to GDP still exceeds its long-term trend, which is due to the exchange rate effect and the high credit growth in previous periods. Amid the improving

global situation and the recovery of the Georgian economy, real GDP growth has improved significantly, which has helped bring the debt burden closer to its sustainable level. However, it should be noted that the capital buffers released in previous periods will be gradually restored starting from 1 January 2022, which will play a somewhat countercyclical role. Consequently, there is no need to change the countercyclical buffer in the current period.

**Dollarization has declined significantly amid measures taken by the National Bank; however, it remains the source of structural risks in the economy and poses a challenge for the financial sector.** Foreign currency denominated loans are associated with exchange rate and interest rate risks. Particularly noteworthy is the exchange rate risk in the face of a high share of foreign currency loans and increased exchange rate fluctuations. In addition, the historically low interest rates on the US dollar and the euro on the world market make interest rate risk more noticeable in the medium term. Against this background, financial dollarization is one of the major challenges for non-hedged borrowers and the financial system in general.

**The National Bank continues to take measures to mitigate the structural risks caused by high levels of dollarization.** The National Bank has taken a number of macroprudential and microprudential measures to reduce financial dollarization. Those measures include the differentiation of reserve requirements according to currency. Additional changes have been made to this rule in 2021. From 6 July 2021, the minimum reserve norm for foreign currency denominated loans will be determined for each bank individually, in accordance with the dollarization of their deposits.<sup>52</sup> The minimum reserve ratio for loans denominated in foreign currency will fluctuate in the range of 10% to 25% and will increase with an increase of the dollarization ratio of a bank's deposits. Those changes came into force from 5 August 2021 and aim to reduce the dollarization of deposits. The mitigation of structural risks caused by the high level of dollarization is also supported by the foreign Currency-Induced Credit Risk buffer, part of which (2/3) was abolished last year as part of a temporary supervisory plan to allow banks to neutralize potential losses and resume business. With the recovery of the economy, the CICR buffer was restored and banks have been given until 1 January 2023 to meet this requirement. The differentiation of Liquidity Coverage Ratios according to domestic and foreign currencies has also been restored.

**The National Bank continues to efficiently implement its supervisory mandate and has published an updated version of its supervisory strategy for 2021.** The first document of the supervisory strategy was published in 2020 and covered the strategic priorities for the next three years (2020-2022). The strategy aims to facilitate access to information on supervisory priorities and plans for investors, international financial institutions, rating companies, the public and other stakeholders. Although the supervisory priorities remain unchanged for these three years, the NBG updates the strategy annually to reflect changes in supervisory priorities and the timing of implementation, which in turn supports the efficient implementation of the National Bank's supervisory mandate and mission.

**The National Bank of Georgia continues to monitor the country's financial stability and works to support the sustainability of the financial system.** National Bank is constantly monitoring the country's financial stability and will use all the tools at its disposal to reduce the impact of the COVID-19 pandemic on the country's economy and ensure financial stability. It should be noted that although the development of different vaccine variants and the increase in their mass production have partly improved health and economic prospects, high uncertainty remains over the end date of the pandemic and its impact on economic and financial sectors. Nevertheless, the current forecast suggests that the impact of the shock on the financial sector has already largely been reflected, and, if the current trend continues, commercial banks will attain solid profits by the end of 2021. The National Bank continues to actively work to promote a sound and stable financial system. The sustainability of the financial sector is ensured by the National Bank of Georgia through a number of macroprudential and microprudential instruments (see Table IV.1). Furthermore, the non-banking sector, which also has to meet prudential requirements, remains resilient.

<sup>52</sup> See [Changes in the Minimum Reserve Requirement for Commercial Banks](#).

Table IV.1. Macroprudential measures of the NBG

Instrument	Rate	From
Counter-cyclical buffer	0%	18.12.2017
Systemic Buffers JSC "TBC Bank" JSC "Bank of Georgia" JSC "Liberty Bank"	2.5% 2.5% 1.5%	31.12.2021
Conservation buffer	2.5%	01.01. 2024
Pillar 2 buffers CET1 Pillar 2 Requirement Consolidated Range Tier 1 Pillar2 Requirement Consolidated Range Regulatory capital Pillar 2 Requirement Consolidated Range	1.7% 1% - 4% 2.3% 1.3% - 5.4% 4.6% 2.9% - 13.3%	As of 30.06.2021 As of 30.06.2021 As of 30.06.2021 As of 30.06.2021 As of 30.06.2021 As of 30.06.2021
Total Regulatory Capital Requirements (including buffers) Common Equity Tier 1 (CET1) requirements (including buffers)	11.1% - 21.3% 5.7% - 11.2%	As of 30.06.2021 <sup>53</sup>
Leverage ratio	5%	26.09.2018
Payment-to-Income limit (PTI) For loans in foreign currency (unless income is in the same currency) Monthly net income < 1000 GEL Monthly net income ≥ 1000 GEL For loans in GEL (or in foreign currency if the borrower's income is in the same currency) Monthly net income < 1000 GEL Monthly net income ≥ 1000 GEL	20% 30% 25% 50%	15.04.2020 15.04.2020
Loan-to-Value limit (LTV) for GEL loans for foreign currency loans	85% 70%	01.01.2019 01.01.2019
Liquidity coverage ratio (LCR) requirements in All currencies (Cumulative) GEL Foreign currency	100% 75% 100%	01.09.2017 01.09.2017 01.09.2017
Net Stable Funding Ratio (NFSR)	100%	01.09.2019
Limits on open foreign exchange positions	20% of regulatory capital	20.07.2006
Reserve requirements for National currency for liabilities with the remaining maturity up to 1 year Foreign currency for liabilities with the remaining maturity up to one year for liabilities with the remaining maturity between 1-2 years	5% 10-25% 10-15%	25.07.2018 05.08.2021 05.08.2021
Restrictions on foreign currency loans	Below 200,000 GEL <sup>54</sup>	22.12.2018

53 Some of banks have voluntarily restored the capital buffers that were released under the NBG's temporary supervisory plan during the COVID-19 pandemic (the conservation buffer and 2/3 of the CICR buffer).

54 This restriction is imposed by the Parliament of Georgia.





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