# Non-performing loans forbearance – Impact of COVID-19 measures (case of Slovakia)

# BARBORA STANOVÁ

#### **ABSTRACT:**

The 2008 financial crisis opened the eyes of financial markets participants and the financial world was showed up that overlooking the risks related to risky borrowing might have devastating consequences. One of the crucial lessons learned from the last 12 years was that non-performing loans represent a major obstacle to the development of banking sector. The aim of this paper is to focus on the recent forbearance measures adopted by regulatory authorities in light of the outbreak of the pandemics and estimate potential impact of these measures on the NPLs identification and resolution in Slovakia. In the first part we describe the determinants of the correlation of the volume of NPLs and the banking crisis, and the reaction of regulators on the unexpected hit of the financial sector. The second part leverage available data to capture the first possible impacts of these measures on the non-performing exposure of Slovak banks. Limited by the sparse amount of data, we conclude that the most affected sector is the sector of self-employed followed by the households. Surprisingly the non-financial corporations' sector which had to face the largest cash-flow outages seems not to be seriously affected. Using the breakdown by the type of the loan, the highest increase in the NPLs can be observed for the intermediary loans and the sharpest decrease for the loans for housing purposes other than mortgages.

**KEY WORDS:** non-performing loans, COVID-19, forbearance

#### INTRODUCTION

The main role of banks in the economic system is to optimally allocate capital accumulated by savers to borrowers. These financial institutions designed to ensure transfer of funds face an inherent risk that the repayments of the loans might derive from the contractually agreed schedule or might not be delivered at all. The quality of the bank's portfolio is therefore one of the crucial determinants of the sound banking system and further development of the real economy. The importance of the quality of the bank loans is undeniable and depend very Vedecký časopis FINANČNÉ TRHY, Bratislava, Derivat 2021, ISSN 1336-5711, 1/2021

much on the number of the NPLs (*non-performing loans*). In the recent period, the development of NPLS became a rising matter of concerns for regulatory and financial authorities. However, even if the effort is considerable, they still did not find a harmonized way how to define, classify, report, monitor them.

Basel Committee defines a non-performing loan as a loan when "borrower is 90 days or more behind on the contractual payments or when the obligor is unlikely to pay its credit obligations to the banking group in full without recourse by the bank to actions such as realizing the security". The definition seems to be straightforward and easy to apply, however on the nature of the "unlikely to pay", the authorities remain silent. Within last years a lot of clarity was brought to these topics, however the market practice, interpretations often vary across the market participants and jurisdictions.

The 2008 financial crisis opened the eyes of financial markets participants and the financial world was showed up that overlooking the risks related to risky borrowing might have devastating consequences. Non-performing loans (NPLs) represent a major obstacle to the development of banking sector and thus a number of coordinated initiatives with respect to LLP (*Loan Loss Provisioning*) were in place during the last decade. Banks have adopted a huge amount of measures, new methodologies of assessments of creditworthiness and other actions to mitigate this type of thread. Despite the effort to bring the soundness to the banks' balance sheets, 2 basic causes preserve standing behind the significant amount of NPLs to the loan portfolio structure.

One of them is the risk resulting from the development of the macroeconomic environment affecting the ability to fulfill the contractual obligation of the borrower. Many studies have proved that a NPL is an anti-cyclical element of the financial sector. Economic overheating highly improves the ability of the debtor to provide funds and leverage the ease of accessing free capital resources and consequently relaxes the banks behavior towards the borrowers. At the same time, the temporarily increased price level might create illusions of reducing the debt burden. The second one is the "moral hazard" issue. The trade-off between the increasing the risk-exposure and a higher profit gain is a very sensitive topic. Banks being the profit-oriented institutions facing high stakeholders' expectations often lead to poor management and insufficient precautionary measures and monitoring of the increasing NPL ratio.

The consequences of the increased NPL ratio consist in the week ability to absorb potential losses, leading to a spiral of rising costs transferred to borrowers in the form of higher interest rates rated on their loans, further increasing the volume of the NPLs in the balance sheet. Bearing the burden of the increase interest-rate costs, the GDP slows down, and the economy might further fall into a recession. If the scenario is present across numerous banks at the same time, it might trigger a systemic failure of the banking system and forced liquidations.

#### THE RELATIONSHIP BETWEEN NPE AND THE CRISIS' TIMES

During crises, the number of loans that cannot be paid back increases because even the prime borrowers often must be downgraded due to facing difficulties to realize the repayments. The usual ability of banks to steer the financial stability goes often out of their hands and gives rise to financial stability concerns with the adverse impact on financial intermediation perception.

The literature is quite sparse regarding the quantitative analysis of the direct relationship between the NPL ratio and the macroeconomic shocks or related crisis, mostly due to the lack of data on both sites the NPL identification and resolution. The fact that the elevated level of NPLs (in or close to default) is a common feature of banking crisis 1 is however supported by the studies of Ari, Chen, Ratnovski et al. (2020), Fell et al. 2016) or Laeven -Valencia (2013). NPLs typically follows an inverse U-pattern, starting at modest levels, rising rapidly around the start of the crisis and peak some years afterwards, before stabilizing and further declining.

High NPL ratio translated in numbers represents a value over 7% of the total loans. In 2020, ECB used a newly constructed data set to show a peak of 88 banking crisis. The research showed that only during less than 1 fifth of the banking crisis the NPL ratio peak is lower that 7% and that banks usually peaks at 20% loans on average. The variance of the value is very large and for more sensitive economies such as developing countries, the level rises up to 50% of the total loans.

igure 2 – Peak of NPLs – multiples of pre-crisis level

Source: ECB

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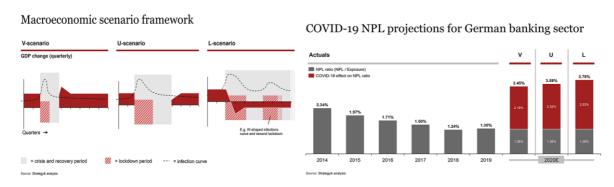
Peak NPL ratio (%)

10 7

An estimation of the COVID-19 impact on NPLSs was performed by Wackerbeck, Marek and Wegner (2020). They conducted COVID\_19 stress testing and estimated the increase of NPE on German banking sector. Under the "optimistic" or "mild" scenario, built on the assumption of several weeks' lockdown period and a sharp economic recovery after a shock, the percentage increase in NPL caused by the COVID-19 was 3,45%. As the lockdown period lasted more than 2 months for most countries, this scenario is not realistic, however gives as a nice benchmark value for a comparison with the 2 remaining scenarios. The second or "severe" scenario assumes that the overall economic growth measured by the average percental GDP growth contraction of 8,4% is affected for at least 2 years. Under this scenario, the German banking sector NPE would increase to 3,58%. Under the "drastic" or L scenario, the wide spreading of the infection and consecutive lockdowns would condemn the economy to a GDP contraction up to 10,9%, resulting in the increase of the NPE to 3,78%.

Figure 3 -COVID-19 stress test scenarios

Figure 4 – NPL projections for Germany



Source: Strategy&

#### NPLs AND COVID - 19 FORBEARANCE MEASURES

After 12 years since the outbreak of the financial crisis, it seemed that the non-convential era of monetary policy approached the path of exit strategy. The pandemics hit the European economy right at the stage when the voices about the economic recovery started to sound already loud. The ECB was forced to relive the 2008 scenario and come up with series of non-convential measures to support the banking system. ECB started to leverage a strong forward guidance to calm financial markets and decrease the pressure on longer-term yield-curve. By extending the LTRO and TLTRO programs, the ECB aimed at providing cheap and accessible longer-term liquidity. When the situation worsened, ECB created new PELTRO (*Pandemic Emergency Longer Term Refinancing Operations*) program and massively enlarged the volume of liquidity provided through asset purchase programs, especially the APP (*Asset Purchase Program*) and PEPP (*Pandemic Emergency Purchase Program*).

ECB equally addressed the capital requirements and reporting rules to help banks to deal with the sudden halt. It was announced that banks can leverage the regulatory capital and liquidity buffers accumulated by exemplary fulfillment of previous regulatory requirements to boost the lending to consumers, non-financial corporations and support other banks with liquidity provisions. By such measure, additional volume of 120 billion EUR of liquidity was laidback to absorb the huge losses related to the pandemics outbreak. ECB decided to reassess the planned timeline for the stress test schedule and will further postpone the required fulfillment resulted from previous testing.

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We have already mentioned that during the crisis, the number of NPLs tend to be significantly higher. At moment of the outbreak of the COVID-19 pandemics, it has been clear that such an unexpected hit will have far-reaching impacts on the economic development. Since the pandemics is not an inherent part of the economic cycle, there was no warning period and therefore the increase in NPLs is expected to be extreme. Even the prime borrowers faced temporary outage of the cash-flow and experienced difficulties with the loan repayments. The regulatory authorities offered to banks a wide range of classification of the non-performing loans to correctly distinguish and project the impacts of the pandemics. At the same time, banks were not obliged to accumulate such levels of capital to cover those loses to avoid a rapid economic slowdown.

#### DATASET AND METHODOLOGY

We use the available data set from the ECB and NBS Statistics. We focus on a 2020 time-series data to capture the first potential impacts of the COVID-19 crisis on the NPLs in Slovakia. We split the data by 2 categories, the first one is the sector, i.e. the households, the self-employed, the non-financial corporations and monetary and financial institutions. At moment of article publishing, the latest available data were for July. The second split we used is the breakdown of the total amount of NPLs by the type of the loan. We worked with the data on volume and calculated the NPLs ratios according to these splits. We used the data available in the NBS statistics time-series database.

## NPL s IN SLOVAKIA IN LIGHT OF COVID-19 SO FAR

By the definition of a non-performing loan, it is evident that it is still too early to describe and assess the full banks' exposure towards risk brought up by the COVID-19 crisis. Because the outbreak of the crisis in Slovakia started around the lockdown announcement day in the second week of March, the first real non-performing loans would potentially have appeared in June/July 2020. The banks start to analyze first losses and it will take a few months to understand how the resolution will impact the soundness of the banking system.

However, it is already possible to try to capture the first signs of the impact of the forbearance measures on the NPL development. If we look at the chart showing the development of NPLs, we can see that by applying new standards on the NPLs classification, the volume as well as the NPL ratio decreased in June and July. The NPL ratio is currently at the 2% level and therefore does not even approach the 7% value.

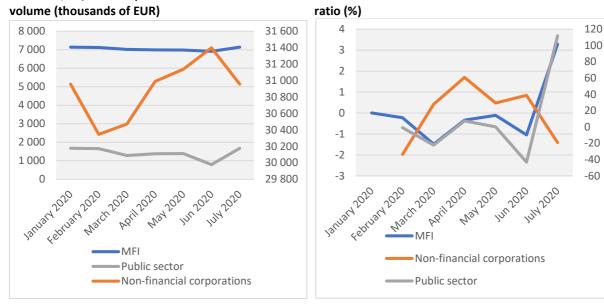
1 830 000 1% 1 820 000 1% 1810000 0% 1 800 000 -1% 1 790 000 1 780 000 -1% 1 770 000 -2% 1 760 000 -2% 1 750 000 1 740 000 -3% III.2020 1.2020 II.2020 IV.2020 V.2020 VI.2020 VII.2020 NPLs volume NPLs percentage growth

Figure 5 NPE of Slovak banking sector in 2020 (in. thousands EUR)

Source: NBS

If we breakdown the volume of NPLs by the sector, it is obvious that the most affected sector is the sector of self-employed followed by the household's sector, where the volume of NPLs started to increase since June 2020. Surprisingly, the sector of non-financial corporations which by assumption mostly suffered from the outage of the cash-flow seems no to be seriously impacted. It is especially because the forbearance measures were applies and allow to properly distinguish the net NPL volume and the NPL contribution to the overall ratio.

Figure 6 NPE of Slovak banking sector in 2020, breakdown by the reporting class (MFI, Public sector, Non-financial (corporations)



Source: NBS

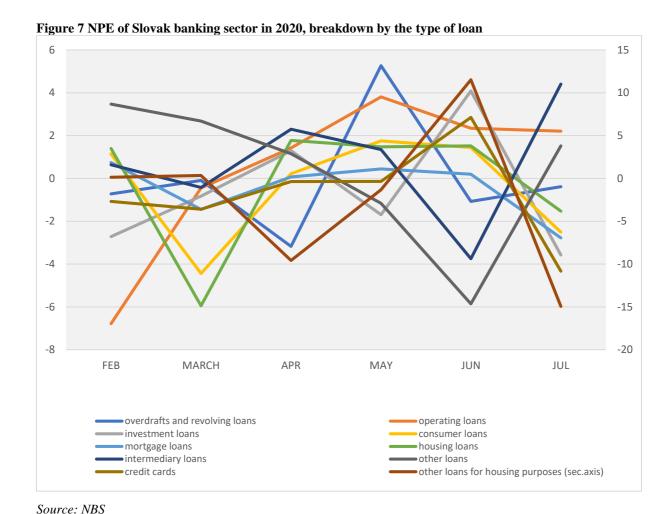
Figure 7 NPE of Slovak banking sector in 2020, breakdown by the reporting class (households and self-employed)



Source: NBS

Since the type of loans plays also an important role in the resolution of NPLs, mainly due to the type of collateral and maturity period, it is important to understand what type of loans were affected the most by the COVID-19 outbreak. We conducted a breakdown of the provided loans by the type of loan and the analysis showed that the most important rise in the NPLs after June 2020 can be observed for the sector of intermediary loans and other unclassified loans. For other type of loans, the NPLs ratio seems to be stable or rather slightly decreases. On the other

hand, a really sharp decrease of the NPLs ratio can be viewed for the loans for housing purposes other than mortgage loans and investment loans. We assume this is only a temporary decrease and with further deterioration of the labor market conditions this ratio will behave differently.



### **CONCLUSION**

The aim of the paper was to focus on the NPLs forbearance related measures adopted in light of the COVID – 19. Limited by the sparse amount of data, we conclude that the most affected sector in Slovakia is the sector of self-employed followed by the households. Surprisingly the non-financial corporations' sector which had to face the largest cash-flow outages seems not to be seriously affected. Using the breakdown by the type of the loan, the highest increase in the NPLs can be observed for the intermediary loans and the sharpest decrease for the loans for housing purposes other than mortgages.

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#### **CONTACT DETAILS:**

Ing. Barbora Stanová, PhD.

Ekonomická univerzita v Bratislava

Národohospodárska fakulta

Dolnozemská cesta 1, 852 35 Bratislava

barbora.stanova@euba.sk