

RAISING THE PROFITABILITY OF COMMERCIAL BANKS

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The banking sector in the Slovak Republic has undergone a period of transformation and should be able to effectively fulfil the role of a main mediator of resources in the economy. The stability of the banking sector is conditional upon macro-economic conditions as well as the level of an individual bank's management. These factors are mutually interconnected. A specific feature of a bank's management is the fact that a bank as an enterprise, in comparison with other enterprises, is characterised by a high degree of dependence on the macro-economic development and its profit, to a large extent, is determined by the situation on the financial market, domestic as well as foreign. A further specific feature is that the success of a bank also depends on its ability to foresee and avoid risks, possibly to cover losses brought about by risks arisen. In connection with a bank's management there are often used the terms, such as risk management, profitability management and balance-sheet structure management.

Profit is the essential prerequisite of a competitive banking institution and the cheapest source of funds. It is necessary to see it not merely as a result, but also as a necessity for successful banking in a period of growing competition on financial markets. These facts together are the reason for this article's focus on the currently topical issue of bank profitability. In it, we will identify problem areas negatively influencing banks' effectiveness to manage their assets and liabilities in aiming to achieve a profit and highlight areas where it might be possible to find room for raising banks' profitability.

Prerequisites: stability and profitability

The stability of the banking sector as a whole is conditional upon the overall stability of the economic environment in applying the basic principles of a market economy and the principles of managing a modern democratic society. A stable macro-economic environment contributes to the effective growth of savings, sound investment decisions and consequently also to economic growth. Appropriate macro-economic policy should support the correct functioning of the banking sector mainly in the areas of financial stabilisation, transparent fiscal policy and monetary policy support. An important role in ensuring banks' stability at the macro- and micro-level is played by the central bank, which through monetary policy and the application of suitable monetary instrument parameters can positively influence the banking sector's stability.

One component in the set of instruments for removing certain negative phenomena in banking is also the setting of prudent conduct standards. Prudent conduct standards create the basic framework and certain minimum risk standards in commercial bank management, which each bank then adapts to the

specific nature of its own business and prospective business objectives.

Another prerequisite for achieving stability and profitability is the management of the banking institution itself. The quality of a bank's management directly influences a commercial bank's ability to work efficiently in a competitive environment. The aim of a bank's management is to achieve a profit, as the essential requirement for conducting any business. An important component of a bank's management geared to achieve a successful business result is the management of its assets and liabilities.

One of the decisive factors influencing a bank's profitability is the composition of its assets. The structure of banking assets influences not only liquidity, but also profitability and in the end is reflected on the bottom line. Bank assets are grouped into two main categories - fixed and revenue generating assets. One of the basic characteristics of a commercial bank is the rate of creating revenue generating assets from funds obtained. This is an evaluation of the share of revenue generating assets in total assets, which defines the revenue generation ability of assets, where the standard level for revenue generating assets as a share of total assets is taken to be more than 90%.



In connection with achieving bank profitability expressed as balance-sheet profit, another particularly important fact is the structure of revenue generating assets. Revenue generating assets mean those asset operations that bring an interest income. These assets are the main source of income for commercial banks. Loans, interbank assets and securities operations all have an important position in the structure of a bank's assets. It is therefore obvious that the average revenue generation ability of these assets has a decisive influence on a commercial bank's profitability.

In making decisions on the allocation of resources to asset deals a bank must take into account the level of risk to the assets, expressed as the general rate of its return and the price of the asset expressed as an interest income. With a certain simplification it may be said that bank assets are placed in relatively independent financial markets. The price of these assets is influenced by supply and demand. In a standard banking environment (excluding singular deviations), where the mechanism of capital interchange in the long term essentially balances out the level of profitability of individual assets, and the relationship between the structure of assets and the consequent profitability of a bank is less fixed. Profitability is dependent more on a bank's ability to eliminate risks in asset operations and to ensure a correspondence between assets and liabilities. The economic environment in which bank assets are placed in transforming economies is different from that of a standard economic environment. The consequence of this is a relatively high difference in the price of aggregate asset groups. This means that particularly in transforming economies the structure of banking assets significantly influences the profitability of commercial banks.

In assessing the effect of the liability structure on a bank's profitability, the level of a bank's capital is of especial importance. A bank, as a business subject, must have sufficient capital available. Together with reserves and provisions it serves to safeguard a bank against various types of risk. In examining the relationship between capital and profit it is necessary to note its two dimensions. The proportion of own capital directly influences profitability. It is clear that in the arithmetic sense the yield on own capital grows *ceteris paribus* as the capital proportion declines, since a given volume of capital supports a higher volume of assets. There thus exists a direct conflict between prudence and profitability measured as the profitability of own capital.

Profit and some forms of capital are to a certain

extent mutually interchangeable in the sense that they are alternative funds for covering losses of a current year. It is true that the greater a bank's net profit, the smaller may be the share of its own capital while, vice-versa, in the case of a negative long-term period there may in the range of net profits occur a reduction in the part of own capital, if the bank has not created a sufficiently large reserve fund to cover the losses of a current year. Own capital as a liability balance sheet item influences also the gross profit margin, reducing average interest costs. The greater the share of non-interest-bearing own capital, the greater the gross interest margin. On the basis of grouping together both effects it may be said that a smaller share of own capital has a many times greater effect on the profitability of own capital than does the effect of its interest yield.

An important prerequisite for the stability and profitability of a bank is the management of the structure of bank assets and liabilities. Therefore, it is the aim of every bank's management to optimise the structure of assets and liabilities with regard to the bank's specific business policy, and which determine its profit, as well as with regard to an evaluation of the level of risk, which the bank is willing to bear, or respectively against which it has created against sufficient reserves. An optimum structure of a bank's balance sheet ensures the maximisation of a bank's profit at the level of risk borne. The role of ordering the structure of assets and liabilities is to manage the net interest margin, mitigate the risk of interest rate changes, where presently these are one of the most serious risks to which commercial banks are exposed. The sensitivity of assets and liabilities to interest rate changes is an important issue. This sensitivity enables a bank to change the structure of its assets and liabilities so as to minimise the negative effect of a change in interest rates, or, conversely, to exploit positive changes fully.

Assets sensitive to interest rate changes include those reaching maturity in the near future, assets with repricing, and a part of assets that are amortised over a defined time period. Sensitive liabilities, on the other hand, include those payable in the near future, liabilities with repricing, and those liabilities which it is assumed will be withdrawn, as well as for example a part of deposits without any term of notice. As regards assets and liabilities sensitive to interest rate changes J. Makúch (1996) denotes the ratio of these assets to liabilities as an indicator of the risk of a fall in profits.

Sensitivity of liabilities is characterised as negative



also due to the fact that the management of liabilities is more complex. Often market influence is stronger than a bank's capacities. Conversely, in the case of asset operations a bank can change its structure more easily. In the case that liabilities sensitive to interest rate changes are greater than assets correspondingly sensitive, a rise in interest rates has a negative effect on profits, since the increase in the cost of funds, i.e. those concerning liabilities sensitive to interest rate changes, will be greater than the revenues gained through the increase in interest on sensitive assets. If, however, a fall in interest rates is expected, then such a structure is appropriate.

The opposite situation occurs where assets sensitive to interest rate changes are greater than sensitive liabilities. In this case a rise in interest rates is more advantageous for the bank than their fall. The structure of bank assets and liabilities sensitive to interest rate changes influences the development of the net interest margin and thereby also a bank's profitability. Therefore it is important for a bank to adjust the structure of its assets and liabilities in accordance with the expected development of interest rates, which will have a positive influence on its profitability.

The profitability of a commercial bank is influenced also by its interest rate policy. Here the decisive factor is a bank's ability to set such an interest rate for asset deals that meets costs of outside funds, operating costs, as well as the required rate of profitability and ensures that the predicted risk of these assets is covered. The significance of interest is influenced also by the fact that revenue generating assets represent a decisive part of the assets and outside funds comprise a substantial part of the banking sector's liabilities.

The relationship between interest income and interest expenses is described as the interest rate margin. A more precise indicator is the net interest margin. This indicator gives a more precise economic depiction of a bank's profit environment. The net profit margin describes the bank's ability to create assets from funds that lead to the creation of revenues enabling it to cover costs ensuing from the bank's activity. Its normal level is 4.5%. A fall below this level means a risk that the mutual interrelationship of the decisive revenue items (interest incomes) and costs (interest expenses) in the current creation of other revenues and costs will probably be reflected in a loss. With regard to the high share of interest incomes and expenses in a bank's total revenues and costs, managing the net interest margin is key to a bank's ability to achieve a profit.

An evaluation of the financial situation of banks

An essential prerequisite for the effective management of a commercial bank is financial analysis. Information gained through analysis is important not only for a bank's management but also for potential investors and clients. The objective of a financial analysis is to gain an understanding of a bank's financial situation. By the bank's financial situation we mean the balance and development of its assets, liabilities, off-balance-sheet receivables, liabilities, expenditures and revenues. On the basis of analysing and evaluating a bank's financial situation, using publicly available information, the foremost global rating agencies then draw up their ratings of banking institutions.

In an analysis and evaluation of a bank's financial situation various indicators are used. These are arranged either from the aspect of one basic criterion (profitability) into a tree of indicators, or several basic aspects are used. An advantage of analysis and evaluation from the aspect of one criterion is simplicity in the procedure and the possibility to reach a definite conclusion. Its shortcoming, however, is the fact that it is oriented solely on profitability and does not take account of other aspects of a bank's activities, which are important from the aspect of prudent conduct principles. A positive feature of analysis and evaluation from the aspect of multiple criteria is that their subjects are all the basic aspects of a bank's financial situation, including those that relevant from the aspect of prudent banking principles. A certain negative factor is the complexity and possible ambiguity of the analysis results, complicating their interpretation.

In both types of analysis and evaluation of a bank's financial situation the development of indicators is monitored over time. This development is compared with the development of the banking sector as a whole, or respectively with the average of the respective classification group, comprising at least three bank's operating in a given country. In evaluating the financial situation from the aspect of one criterion - from the aspect of profitability various indicators are used, where these are arranged into a tree of indicators. Analysis is oriented on the development of those economic relationships influencing decisively the profitability of commercial banks.

In analysing a profit and loss statement and its relationship to the balance sheet structure it is essential to work with individual data indicative of business policy, as well as the forecast development



of the bank's economic position. For this reason all data and trends defined on the basis of them are aggregated at the banking sector level as a whole. Despite this limitation, conclusions may be drawn that are both sufficiently meaningful and at the same time allow a specific bank to be compared against the average aggregate values.

Back in the 1920s the American firm DuPont developed a basic method for the financial analysis of a firm, and which today is used in modified form also by the leading rating agencies in the analysis and evaluation of a bank's financial situation. This analysis and the evaluation are single-criterion, made from the aspect of after-tax profit. The basic idea lies in a hierarchical arrangement of indicators. This analysis serves for identifying and explaining trends in the development of ROE and ROA indicators, which are those most often used in evaluating profitability. In the calculation of individual indicators 13 items are necessary, where these are available from a bank's annual report.

The DuPont analysis is a means for breaking down the indicators ROE and ROA, identifying development trends and isolating problem areas. On the other hand, however, it does not deal with the issue of capital adequacy, asset quality, a bank's risk exposure to interest rate changes nor the issue of liquidity. In analysing these areas it is necessary to use other analytical methods. The indicator ROA (return on assets) and ROE (return on equity) are used as the basic indicators of profitability in evaluating commercial banks' profitability:

$$\text{ROE} = \text{profit after tax} / \text{own capital}$$

$$\text{ROA} = \text{profit after tax} / \text{total assets}$$

We can calculate the return on own capital also with the aid of ROA:

$$\text{ROE} = \text{ROA} (\text{total assets} / \text{own capital})$$

This relationship of both indicators is important. ROE and ROA are interconnected via total assets, which express the extent of financing. This means that small changes in the ROA indicator lead to large changes in the ROE indicator.

The ROE indicator is an important indicator of how efficiently bank capital is used. Its level is a subject of interest of shareholders, since it expresses the rate of return on the capital invested by them. The main shortcoming of this indicator is that it does not take the level of debt into consideration. The ROE may increase in consequence of a high level of debt. There thus arises the danger that an effort to incre-

ase this indicator will lead to a bank taking on an immoderate level of debt. This situation may be prevented by a capital adequacy limit set by the central bank. A better evaluation of a bank's profitability is provided by the ROA figure, which indicates the efficiency of asset and liability management. Its value in the medium term should not fall below 0.6%. A one-sided orientation on the return on assets is inappropriate in particular in the case of a high share of own capital.

With regard to these facts it is necessary in analysing profitability to monitor the ROA and ROE indicators concurrently, where risk ensuing from a bank's level of debt must be taken account of. In an analysis of Slovak banks' financial situation it is, with regard to the non-standard economic environment in the transformation period, necessary to proceed with care. One of the reasons are, for example, problems connected with the quality of banks' loan portfolios and thereby the lower predictive value of single-criterion analyses of a commercial bank's financial situation.

A more realistic criterion is offered by multi-criteria evaluation which allows all basic aspects of a bank's economic situation to be taken account of. Among these basic aspects it is necessary to include in particular the quality of a bank's assets, its capital and the structure of its expenditures and revenues. The indicators used for analysing and evaluating the quality of a bank's assets involve primarily reserves and provisions. A bank creates them in order that it may overcome a situation where its assets worsen and to safeguard itself against risks. Publicly available information is only indirectly meaningful as regards the quality of assets, since banks usually do not make public the volume of their classified loans and other classified assets in their portfolios. Despite this, it is possible to reach certain conclusions through analysing the level and trends of development of the following indicators:

- Ratio of the creation of reserves and provisions to assets. If this shows that the creation of reserves and provisions given in the profit and loss statement is faster than the growth in the balance sheet total, it may be deduced that the quality of the bank's assets is worsening. It is, however, possible that a bank's management has taken the path of not creating sufficient reserves and provisions, even despite a worsening quality of the bank's assets. Using this indicator it is not possible to ascertain from publicly available information whether the management has taken this path, one which is, from the aspect of the bank's future, clearly unacceptable. An increase in



the ratio of reserves and provisions created to assets, or to the whole balance sheet total represents a negative sign, a fall in the ratio a positive sign, while stagnation in the value also represents a negative sign. It is however necessary to judge all this within the context of a classification group.

- Since loans provided represent a large part of a bank's assets, it is appropriate to devote attention also to the ratio of reserves and provisions created to loans provided. An increase in this ratio indicates that the quality of a bank's loan portfolio is worsening.

- The ratio of reserves and provisions created to gross profit is an indicator that reacts more sensitively to changes in the creation of reserves and adjustment items than the previous indicators. This is due to the fact that the creation of reserves and provisions reduces gross profit. This means that the value of the denominator is indirectly proportional to the reserves and provisions created.

A bank's capital is a measure of its financial strength. From its amount and structure are derived important qualitative parameters, by which the prudence of a bank's conduct may be ascertained. Two ratio indicators are used for assessing a bank's financial strength. The simplest indicator is the ratio of the bank's capital to its assets. This value should be in the range of 2% to 10%. Values only slightly above 2% are acceptable only in the case where a bank has not recorded dynamic growth, has an excellent quality loan portfolio, good liquidity and profitability.

The second indicator of a bank's financial strength is the ratio of a bank's own funds to its liabilities. Besides capital, own funds include a bank's reserves. The value of this indicator should be between 5% and 15%. Each increase within this range should be evaluated as positive. An increase above the 15% level is undesirable since too high a volume of capi-

tal and in particular large reserves negatively influence profit. The ability to quantify costs is very important for a commercial bank's management, since through this being the basis for deciding on a strategy of obtaining funds it determines the optimal rate of return. Analysis of a bank's individual expenditure and revenue items may reveal strong and weak points in its activity.

The most important factors of expenditures and revenues are interest. On the one side interest represents the price that a bank must pay for funds on the money and capital market; on the other side it represents the price for which a bank provides funds to its clients. The relationship between interest incomes and expenses is termed the gross (or net) interest margin.

Conclusion

The banking sector has already passed through the decisive period of setting up a two-layer system in particular in the application of extensive elements. With regard to the value of macro-economic financial flows in the Slovak Republic in which banks' assets are involved it may be said that the saturation point has now been reached in terms of the institutional system of commercial banks. Banks management should logically focus on improving the quality of managing their bank profitability.

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