

ANALYSIS OF BANKING PERFORMANCE IN POLISH COMMERCIAL BANKS. SYMPTOMS OF THREATS

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Abstract: Worldwide tendency to decrease interest rates is a major threat to the Polish banks in the long term. In the future, the traditional way of conducting banking activities will have to be modified. The starting point for creating new strategies for Polish banks should be to depart from net interest income as the core model of generating banking income and embrace the prompt development of broadly understood non-interest activities such as private equity. Shift from typical of commercial banking sector loan-deposit to capital market activity may create many benefits for the Polish banking system.

Keywords: net interest margin, commercial banking system, private equity

INTRODUCTION

Since the early 1990s, Europe has seen the extension of the range of products in the banking market. The traditional financial services based on the transformational function of banks, such as providing credit and offering deposits, started to generate smaller profits and began to decline [Koeppen J. 1999 and Schildbach J. 2008]. In turn, the more profitable, individual consultancy services focused on solving the clients' problems became increasingly widespread in the financial market. Moreover, the practice of investing banks' own funds as well as those of their clients in the capital market has spread. [Dębski W. 2005]. This is the effect of the deregulation processes observed in the early 1990s. Monetary integration and the policy of a low, stable interest rate pursued by the European System of Central Banks provided new impulses for a further reduction of margin, which was also triggered by the increasing competition in the banking sector [Baka W. 2005]. Consequently, Europe has seen institutional transformations leading to the gradual disappearance of the division into commercial and investment banking [Solarz J.

1997 and Ostrowska E. 2005]. At the same time, the position of the securities market has grown while the banks' financing of businesses through credit flow has declined. This is a characteristic tendency called the "disintermediation" of banking services. [Korenik D. 2005]. It should be anticipated that this tendency is going to continue as according to a view widespread in the European Union, an efficient capital market is *raison d'état* for every modern country [Korenik D. 2005 and Czechowska D. 2004].

The author shares these views. However, as regards the Polish financial market, this kind of behaviour is not confirmed by business practice, which is shown in the analysis of data presented in the further part of the paper.

The condition of the financial sector is of particular importance in every country, as it is the venue where both economic entities and households keep or invest their savings. Moreover, without the flow of credit the development of modern countries is hardly conceivable. Thus, it is little wonder that in developed countries the value of assets amassed by this sector is many times their GDP [Schildbach J. 2008].

In many countries, Poland included, the functioning of the banking sector for the most part depends on the situation of the banks, which have been the most prominent actors in the financial market to date¹. Due to the huge gap between socialist and free market banking systems, the Polish banking sector has undergone dramatic transformations and has become a modern and profitable sector in terms of organizational solutions. Its stability has now been proven by withstanding the world banking crisis. In contrast to many more developed countries, the Polish financial sector, at least in the first several months of the crisis, did not witness collapsing banks or drastic actions by the government or the Central Bank aimed at preserving its stability.

However, even before the crisis, some symptoms of potential difficulties to the development of this sector had surfaced. Furthermore, these phenomena do not seem to disappear in the future; just on the contrary, they might intensify after the end of the worldwide events started by the subprime crisis in the USA. The author believes that the potential threats are rooted in the income structure of the sector and will increase in the future. The main goal of this study is to illustrate these problems. This article focuses on analysis of banks' net interest income and net interest margin.

ANALYSIS OF BANKING PERFORMANCE

Net interest income is the difference between the value of interest earned by a bank (mostly from its lending activities) and the value of interest paid on the capital it borrows in the financial market. In this article, this difference in absolute terms shall be called "net interest income", while in relative terms, whenever it

¹ Sytuacja finansowa banków w 2006 roku. p. 35.

refers to measures such as the volume of a bank's assets or earning assets, it shall be called a net interest margin (given in the form of a percentage).

Table 1. Breakdown of banking income by type of income in Polish commercial banks in the years 2001-2007, in %

	Specification	2001	2002	2003	2004	2005	2006	2007	Mean
1	Net interest income	51.6	53.3	55.0	55.5	57.6	58.2	57.8	55.6
2	Non-interest income	48.4	46.7	45.0	44.5	42.4	41.8	42.2	44.4
3	Fee and commission income	21.2	22.5	27.5	27.9	23.5	25.9	26.7	25.0
4	Foreign exchange income	18.8	14.9	12.6	10.8	13.2	9.2	8.9	12.6
5	Income from financial operations	6.3	8.0	3.2	4.5	3.0	3.3	4.1	4.6
6	Income from shares and securities	2.0	1.3	1.7	1.3	2.7	3.4	2.6	2.1
7	Income from banking activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: own work on the basis of synthetic data from *Sytuacja finansowa banków za lata 1998-2006 National Bank of Poland Warsaw 1999-2007* and *Raport o sytuacji banków w 2007 roku Polish Financial Supervision Authority Warsaw 2008*.

The structure of income of Polish commercial banks is shown in Table 1. Every year in the period under study, net interest income was the prevalent source of generating banking income in Poland. The table presents a gradual decline of its share in banking revenues in the years 1998-2001 (down from 69.7% to 51.6%)². Starting with 2002, this manner of generating banking income has been slightly but systematically growing. Its share in banking income at the end of the period under study was 57.8%.

Total non-interest income constitutes less than half of banking income in Poland, which is shown in Chart 1.

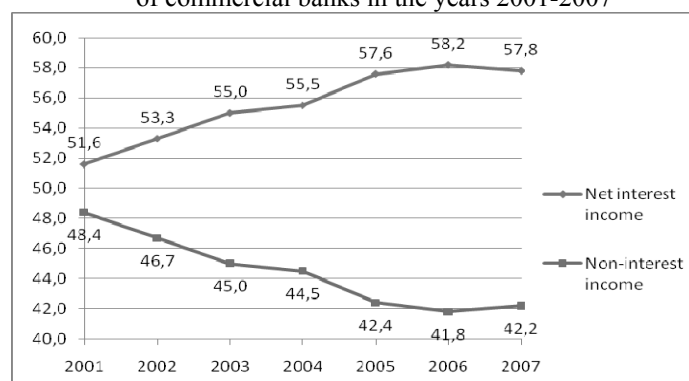
The amount of net interest income is subject to two factors. First of all, it depends on the large spread of interest rates on loans and deposits as well as on a large turnover, *i.e.* even at a low difference between the interest rates sizable net interest income may be generated by a substantial volume of transactions.

In terms of revenues, the core part of net interest income is constituted by receivables from the non-financial sector which form the greatest share of assets. They are the most profitable part of assets in Poland. Double-digit interest rates on loans are now widespread, while interest on interbank deposits barely exceeds 6%.

² Not shown in the table see *Sytuacja finansowa banków za lata 1998-2007 National Bank of Poland Warsaw 1999-2008*.

In the years 2004-2006, interest rates on one year deposits were approximately 4%. If one takes into consideration the so-called “Belka tax” (a capital gains tax), income from depositing money in banks by both individual and institutional clients has been largely marginalized in Poland.

Chart 1. Percentage share of interest and non-interest income from the banking activity of commercial banks in the years 2001-2007



Source: own work on the basis of synthetic data from Sytuacja finansowa banków za lata 1998-2006 National Bank of Poland Warsaw 1999-2007 and Raport o sytuacji banków w 2007 roku Polish Financial Supervision Authority Warsaw 2008.

Table 2 shows the relationship between net interest income and total banking income in reference countries³.

Table 2. Share of net interest income in total bank income in 2006, in %

Specification	Germany	Sweden	Portugal	Poland	Finland	Czech Republic	Ireland	Slovakia	Great Britain	Hungary	Greece	EU25
Indicator value	48.2	52.5	54.7	58.2	59.2	61.1	62.3	63.1	63.7	67.8	69.1	52.5
Position in the population under study	5	8	10	13	15	16	18	19	20	22	24	

Source: Own work on the basis of Schildbach J. European banks: The silent (r)evolution Deutsche Bank Research Frankfurt am Main Germany 2008, p. 30. Data on the basis of publications by the European Central Bank, International Monetary Fund, Swiss National Bank. The study covers EU25 countries + Switzerland. Maximum – Malta (72.9%), minimum – Switzerland 28.6%. The data calculated by the author are weighted means, where the weights are the relative sizes of the banking sectors

³ Data reported by the National Bank of Poland and the European Central Bank differ by 0.4 percentage points for unknown reasons, which translates into a relative error of 0.7%.

in the selected countries. The abbreviation EU25 means European Union states without Bulgaria and Romania.

The leaders in this classification are countries not shown in the table, *i.e.* Switzerland, Luxembourg, France and Belgium, whose shares are 28.6%, 33.3%, 36.8% and 47.5%, respectively [Schildbach, 2008]. Poland, with its share of slightly below 60% comes 13th in a sample of 26 elements, and 4th in terms of reference countries.

These data throw some light on the situation in Poland and Europe, but a clearer picture emerges upon analyzing the weighted mean of the share of net interest income in total bank income in selected groups of countries. The weights are the volumes of assets amassed in particular banking sectors in the population of countries under study. This is shown in Table 3.

Total population in the study includes EU25 and Switzerland. In this group of countries, the share of net interest income weighted by the size of banking sector assets was 51.3%. The European Union has a slightly worse result, which is due to the fact that Switzerland has an extremely low share of net interest income in generating bank income (28.6%) and the share of Switzerland's banking sector assets is relatively high in the population (over 5% of total assets), which puts this country in sixth place in Europe.

Table 3. Share of net interest income in total bank income weighted by the size of the banking sector in the European Union in 2006, in %

Specification	EU25+ Switzerland	EU25		6 European countries with the largest assets in the banking sector		5 countries with the lowest share of net interest income
		with GB	without GB	with GB	without GB	
Share of net interest income in %	51.3	52.5	48.6	50.6	44.8	42.1

Source: Own work on the basis of Schildbach J. *European banks: The silent (r)evolution* Deutsche Bank Research Frankfurt am Main Germany 2008, p. 30. Data on the basis of publications by the European Central Bank, International Monetary Fund, Swiss National Bank. The study concerns EU25 countries + Switzerland. The data calculated by the author are weighted means, where the weights are the relative sizes of the banking sectors in the selected countries. The abbreviation EU25 means European Union states without Bulgaria and Romania.

The other two indicators in the next two columns cover the twenty five countries of the European Union. The first indicator, marked with the note "with GB" (with Great Britain) covers EU25. In this population, the average share of net interest income in total income of the EU banking sector (EU25) was 52.5%.

However, as Great Britain has the largest banking sector in the European Union (24.8%), its high indicator strongly influences that for the whole population of EU25. Furthermore, Table 3 shows that Great Britain has one of the largest shares of net interest income in total bank income. If the influence of this country on the European indicator is omitted, its value will decrease to 48.6% (the column with the note “without GB”).

Following a similar train of thought, indicators were calculated for top 6 countries in terms of assets involved in the banking sector in the population under study. With Great Britain included, the indicator was 50.6%, while without it the indicator dropped to 44.8%. In the case of reference countries with and without Great Britain, the result was 57.4% and 51.7%, respectively.

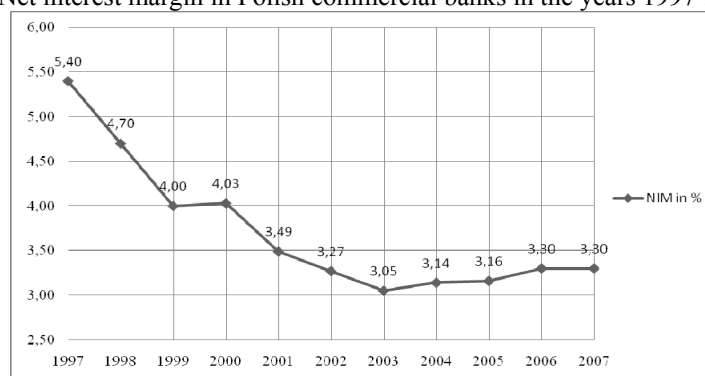
The last column presents the mean calculated for five countries with the lowest share of net interest income in total banking income in Europe, the indicator value being 42.1%.

The Polish banking sector as compared to indicators for the various groups of countries (58.2%, see Table 3) diverges significantly from the European figures, which are invariably lower than those in Poland. Therefore, in contrast to the leading banking sectors in Europe, Poland reveals a substantial, high prevalence of net interest income as the main source of banking income.

ANALYSIS OF NET INTEREST MARGIN

Net interest margin is defined as the relationship of net interest income to the average net assets (minus due interest on problem receivables) of the banking sector [Sytuacja 2003]. Its values over the period 1997-2007 are shown in Chart 2.

Chart 2. Net interest margin in Polish commercial banks in the years 1997-2007, in %

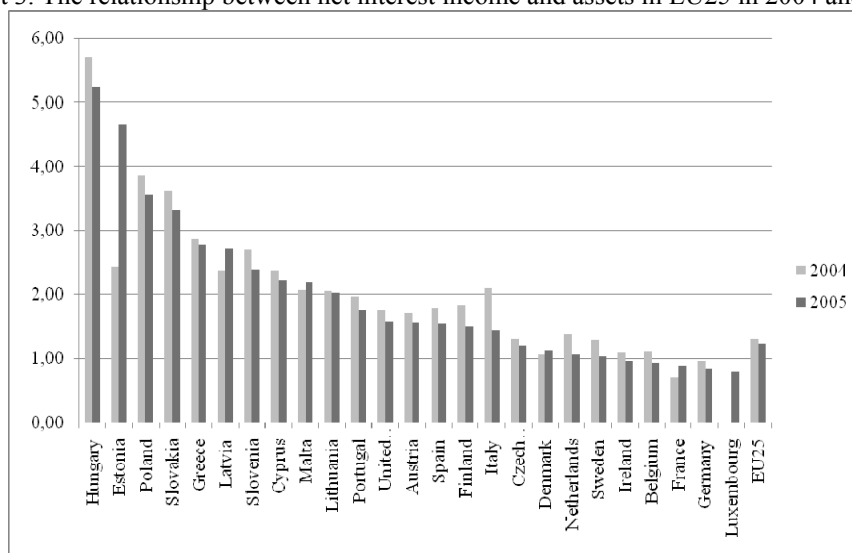


Source: own work on the basis of synthetic data from Sytuacja finansowa banków za lata 1998-2006 National Bank of Poland Warsaw 1999-2007 and Raport o sytuacji banków w 2007 roku Polish Financial Supervision Authority Warsaw 2008

In the period under study the net interest margin decreased substantially, although since 2003 it has been gradually gaining.

For the purpose of comparison of Polish margins with other European countries, data from the European Central Bank are cited. Unfortunately, the net interest margins quoted were calculated in a different way than in Poland. Thus, the indicators cited for Poland are not exactly the same as those given by the National Bank of Poland. However, the complete set of countries and their margins shown in Chart 3. enables a comprehensive overview of these phenomena in Poland as compared to other European countries⁴.

Chart 3. The relationship between net interest income and assets in EU25 in 2004 and 2005



Source: own work on the basis of EU Banking Sector Stability European Central Bank October 2005, pp.42-52 and EU Banking Sector Stability European Central Bank November 2006, pp. 52-60.

Poland is among countries with the highest net interest margins. Poland's net interest margins give it second place among reference countries and third in EU25. This situation shows that Poland is particularly dependent on lending, which is at the core of net interest income. At mostly double-digit interest rates on loans and at relatively low financing costs for banks, this situation creates a perfect handicap for the banking sector to achieve high profitability.

⁴ The Author hasn't gained access to the latest data in this area covering the whole EU. Certainly interest margins change from year to year in the individual countries but taking into consideration EU means they are rather stable in a longer period, keeping a slightly lowering trend, which may be observed in various ECB reports

In 2005, net interest margin in Poland was three times higher than the weighted average for the banking sector in the entire European Union. Among the reference countries, better conditions for banks in this respect are only found in Hungary. The other countries (including the Czech Republic) have lower or much lower margins.

In Europe, and especially in countries with the largest banking sectors, the erosion of net interest margins has long been observed, which has been reflected in successive European Central Bank reports [EU Banking 2005]. These reports mention the formidable challenges to the banking sector poised by the economic environment. As the Table shows, in many countries the existing circumstances do not even make it possible to maintain the difference between interests received and paid with respect to the volume of assets at a relatively stable level in subsequent years. In particular, this situation is true of loans, which are old, mature financial products. In the quoted report, analysts of the European Central Bank advance the thesis that this important source of banking income might become exhausted [EU Banking 2006].

Thus, the only way to preserve the margins is to increase the volume of credit, as due to fierce competition in the financial market raising the difference between the interest on receivables and liabilities of the bank would not be feasible. It seems that in order to sustain the profitability of the banks it is also necessary to increase their activity in generating profit other than net interest income: increasing income from fees and commissions, generating profit from selling various capital market products in order to take advantage of the development of the financial markets, and extending loans outside their domestic markets to the fast-growing economies, where margins are still high [EU Banking 2006]

CONCLUSION

In terms of the Polish banking sector, the question is to what degree the above-mentioned trends might apply to Poland. In the author's opinion, they might strongly influence the future shape of the Polish commercial banking sector.

The years 2003-2007 are characterized by stagnation or even a small increase in net interest margins (see Chart 2.), which conflicts with the European tendencies. In a market economy, competition should lead to a further decrease in margins. One could thus argue that the level of competition in the Polish financial market is not yet strong enough for banks to forfeit their comfortable stance. The situation is compounded by the substantial indebtedness of the State to the banking sector, which drains money out of the banking market and effectively increases loan prices.

In the time horizon of the next several years, net interest margins are not likely to decrease very fast and high interest rates will remain the central bastion of the banks' profitability. This thesis requires some substantiation and consideration of the problem in the short and long term. European Union regulations enforced a

free flow of capital, which theoretically should have triggered a rush of foreign lending institutions to the Polish financial market to seek high margins. However, this has not been the case. The western banks have penetrated the Polish market rather poorly to date. The number of branches of foreign lending institution has increased from 3 in 2004 to 14 in 2007, and the share of their gross assets in that period increased from 0.6% to 4.3% [Raport o sytuacji 2008].

Many banks that have opened their branches in Poland are companies not very well known to Polish customers [Sytuacja 2007]. The number of branches is certainly going to increase, but only in a longer time horizon. On the other hand, those banks which have been operating for a long time in the Polish financial market are certainly satisfied with their margins, which are substantially higher than in their countries of origin. Consequently, it seems that foreign banks are not going to substantially change net interest margins: they are realizing high profits and their number is still relatively small.

Furthermore, international banking is not very likely to decrease net interest margins any time soon, either. Even though nominal loans abroad have lower interest rates, their real cost in Poland may still be much higher due to higher premiums on risk demanded by foreign banks extending loans to Polish borrowers. Another factor increasing risk for both parties is exchange rate volatility, although Poland's accession to the Euro zone in several years will decrease these threats. Consequently, Polish citizens and companies do not use foreign lending services very often, they are not likely to start using them more in the near future.

A larger influx of foreign banks, forcing changes in the Polish market, will be very gradual and will take place over a longer time horizon. Therefore, in the long term the relatively high and stable margins acceptable to the Polish banks are eventually going to come to an end. The European economy will exert a strong competitive pressure on the market, which is going to necessitate changes in the prices of banking services in Poland. The openness of our economy will not make it possible for such an enclave to continue in the European or global financial market.

In summary, one may argue that the tendency to decrease interest rates is a major threat to the banks in the long term. In the future, the traditional way of conducting banking activities will have to be modified. The starting point for creating new strategies for Polish banks should be to depart from net interest income as the core model of generating banking income and embrace the prompt development of broadly understood non-interest activities potentially creating substantial incomes such as private equity. In the common opinion it can be a risky business. In fact such a consciousness may be the main reason of the phenomenon that this activity is almost given up in the Polish commercial banking sector. Private equity does not fit the banks' traditional rules because every case may be different, and this may be one of the most important reasons for its reluctance. On the other hand nobody expects a bank to provide 100 per cent of the funds in a risky project and there are wide opportunities for the diversification of risk.

Taking into consideration western experiences, process of expanding possibilities of earning money is obviously profitable for banks which are one of the main players in the European private equity market⁵. Following a similar train of thought there is no reason in rejecting these activities in Poland. Therefore shift from typical of commercial banking sector loan-deposit to capital market activity may create many benefits for the Polish banking system in the future.

BIBLIOGRAPHY:

- Baka W. (2005) *Bankowość europejska* Wydawnictwo Naukowe PWN Warszawa.
- Czechowska D. (2004) *Procesy integracji sektora bankowego i ubezpieczeniowego* Wydawnictwo Uniwersytetu Łódzkiego Łódź.
- Dębski W. (2005) *Rynek finansowy i jego mechanizmy. Podstawy teorii i praktyki* Wydawnictwo Naukowe PWN Warszawa.
- EU Banking Sector Stability European Central Bank November 2006.
- EU Banking Sector Stability European Central Bank October 2005
- Eurostat 2009.
- EVCA Yearbook 2008 Zaventem Belgium.
- Koepfen J. (1999): *Strategie banków Europy CeDeWu* Warszawa.
- Korenik D. (2005) *Ważniejsze przemiany w środowisku działania banku w: Karpus P. [red.], Węclawski J. [red.] Przekształcenia rynku finansowego w Polsce Instytucje finansowe i mechanizmy ich funkcjonowania* Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej Lublin.
- Ostrowska E. (2005) *Banki na rynkach kapitałowych PWE* Warszawa.
- Raport o sytuacji banków w 2007 roku, Polish Financial Supervision Authority Warsaw 2008.
- Schildbach J. (2008) *European banks: The silent (r)evolution* Deutsche Bank Research Frankfurt am Main Germany.
- Solarz J. (1997) *Zarządzanie strategiczne w bankach Poltext* Warszawa
- Sytuacja finansowa banków w 2002 roku. Synteza National Bank of Poland Warsaw May 2003.
- Sytuacja finansowa banków w 2006 roku. Synteza National Bank of Poland Warsaw May 2007.

⁵ Banking sector's fund raising amounted 17.7% of the total funds raised in the years 2000-2007 in the Europe (the second rank). Higher contribution came from pension funds - 23.1%, see EVCA Yearbook 2008 Zaventem Belgium

Analiza wyniku działalności bankowej w polskich bankach komercyjnych. Symptomy zagrożeń

Streszczenie: Ogólnoświatowa tendencja spadku stóp procentowych w długim okresie jest poważnym zagrożeniem dla polskich banków komercyjnych. W przyszłości tradycyjny sposób prowadzenia działalności bankowej w Polsce musi więc ulec zmianie. Punktem wyjścia powinno się stać odejście od dochodu odsetkowego netto, jako podstawowego źródła tworzenia dochodu, na rzecz szybkiego rozwoju szeroko rozumianej działalności pozaodsetkowej, w tym zwiększenia zaangażowania banków w operacje private equity. Przesunięcie akcentów z typowej jak do tej pory w polskich bankach działalności depozytowo-kredytowej w kierunku szerszego, niż dotąd, wejścia na rynek kapitałowy powinno w przyszłości przysporzyć polskiemu sektorowi bankowemu wielu profitów.