УДК 33 DOI 10.21661/r-553800

### Джере Т.

## Сравнительный анализ двух немецких банков

#### Аннотация

В работе, посредством метода анализа финансовых соотношений, описаны результаты сравнительного анализа, нацеленного на оценку производительности двух крупных банков Германии. Основными определяющими факторами послужили показатели платежеспособности и ликвидности, которые позволяют оценить поведение в условиях риска до и после финансового кризиса. В настоящем исследовании было допущено, что поведение немецких банков зависит от определенных параметров банка, которые непосредственно влияют на кредитную политику определенного учреждения. Универсальные банки Германии можно поделить на три основные категории: коммерческие, государственные, кооперативные. В исследовании принимались во внимание описанные выше категории банков. Deutsche Bank и Commerzbank представляют категорию коммерческих банков. Каждый банк рассматривался по отдельности для выявления сходств и различий в вопросах производительности. В приведенном анализе предложены результаты наблюдения за этими банками в период с 2015 по 2019 гг.

Ключевые слова: банк, финансовый кризис, прибыльность, анализ финансовой производительности.

Jere T.

# **Comparative Analysis of Two German Banks**

#### **Abstract**

This article explains results of a comparative to test the performance of two top banks in the German banking industry analysis using a financial ratio analysis method. The main determinants considered are solvency and liquidity indicators, which make it possible to observe the risk behaviour of banks before and after the financial crisis. The hypothesis of the study is that the behaviour of German banks depends on bank-specific variables that affect the institution 's loan policy. The universal banks in Germany can be divided into three main types of institutions: commercial, public sector and cooperative banks. The analysis is carried out on banks of the same category in a decomposed manner. Deutsche Bank and Commerzbank representing the commercial/Private sector. Checking each Bank separately is carried out to detect the similarities or differences that each bank may have in terms of bank performance. The empirical analysis involves a sample of these German banks observed during 2015–2019.

**Keywords:** bank, profitability, financial crisis, financial performance analysis.

Introduction

ccording to international standards, the most important and prominent feature of the German banking system is that it is still a three-pillar system today. The banking system is composed of three parts. Correspondingly, the three important bank groups (or types) are also very different in terms of institutional structure, and they are also fiercely competing for market share.

The first pillar consists of private credit institutions, depending on its legal form and ownership structure. Since they are mainly private owners, it can be assumed that they obviously also pay more attention to profits than banks belonging to the other two categories. The organization of private credit institutions is very different. It includes several subgroups. One of them is the so-called «big banks», which maintain a large network of branches and provide various banking services to many customers in Germany and around the world.

Then, in official statistics, there are quite a few small banks called «regional banks and other commercial banks." In terms of total assets, the first pillar accounts for about 40% of the entire German banking system; two-thirds of them are funded by large private banks and one-third are funded by other smaller credit institutions.

The second pillar is the savings bank group. It also consists of two parts: the local savings bank and the regional bank called Landesbanken. In terms of total assets, the size of the entire savings bank group is about the same as the total size of private credit institutions, and the total assets of local savings banks and Landesbanken are almost equal.

The third pillar is the cooperative banking group. Compared with the other two categories, it contains more independent institutions, and in terms of total assets, it is only half of the other two pillars. The cooperative banking group can also be divided into two parts, one of which is a

local cooperative bank, and the other is its central financial and non-financial institutions.

Strictly speaking, the German banking system surpasses three pillars, because there is a fourth group, called «other banks." These include mortgage banks, construction and loan associations, and so-called special-purpose banks, including promotional banks, such as the government-controlled German Renewal Credit Bank, which is currently the second largest bank in Germany. Since the fourth group is so heterogeneous, it is not called the fourth pillar. In the following, we do not consider this group.

Theoretical information of the banks

Deutsche Bank AG

(Deutsche Bank AG) is a global financial services company with an important capital market franchise, combined with a retail and corporate bank, the bank maintains a solid market position in Germany and throughout Europe, while other businesses (such as trading banks, assets and wealth management) increased diversity and in-depth joining.

Deutsche Bank's rating is supported by its established global franchise, which includes a strong position within Germany, and Postbank integration is strengthening this position. DBRS also noted the bank 's strong balance sheet fundamentals and well-managed credit and market risks. Major adverse factors have alleviated this situation, including the decline in investment bank market share and continued low profitability, and the need for DB to demonstrate the need to strengthen internal controls and processes.

DB provides services to wealthy, high-net-worth and ultrahigh-net-worth individuals and families. Services include wealth structure, wealth transfer, charity services, customized investment solutions, investment advice and financing solutions. Deutsche Bank can also obtain structured loans, private and public investment opportunities through mergers and acquisitions, initial public offerings, private placements and similar institutions, and cooperate with CIB to conduct transactions and hedging to meet the needs of customers' institutions and companies.

Asset management (AM)-2018 net income of 2.2 billion euros Deutsche Bank has a considerable asset management business, which ranked 12th globally in 2017. As of the end of 2018, its assets under management (AUM) amounted to 664 billion euros and remained core banking. Although the asset management scale is very diverse, about 43% of the asset management scale belongs to low-margin products (effective fixed income and effective cash). Traditionally, asset management has been a stable, high-margin business with low capital requirements. However, in recent years, the industry has experienced profit erosion, asset outflows, and unfavourable market development in 2018. Deutsche Bank failed to stop this unfavourable trend and announced that it will further cut costs in 2019.

AM completed its initial public offering (branded as DWS) in March 2018 and is now listed on the Frankfurt Stock Exchange. The reason for conducting some IPOs is to unlock business potential by enhancing autonomy.

Commerzbank

Strategy and business model

Commerzbank is a leading international commercial bank with branches and offices in nearly 50 countries. The bank's two business units-private and small business customers and corporate customers-provide a comprehensive portfolio of financial services tailored specifically to the needs of its customers. Commerzbank accounts for about 30% of German foreign trade and is the market leader in German corporate banking. The bank provides industry expertise to German and foreign corporate clients and is a leading provider of capital market products. Its subsidiaries Comdirect in Germany and mBank in Poland are the two most innovative online banks in the world. Commerzbank has about 800 branches and is one of the densest branch networks in Germany. The bank serves more than 11 million private and small business customers nationwide, and serves more than 70,000 corporate customers, multinational companies, financial service providers, and institutional customers worldwide. Its Polish subsidiary mBank S.A. has approximately 5.6 million private and corporate customers, mainly in Poland, but also in the Czech Republic and Slovakia. In 2018, the total revenue of Commerzbank was 8.6 billion euros and it had approximately 49,000 employees.

Commerzbank is consolidating their position as a leading bank for SMEs and are investing to establish their front desk. They do this by cooperating more closely with small and medium-sized enterprises and develop more customer business by focusing on the competitive development of Germany. Also, in the Eurozone, they intend to use our proven expertise in SME banking and promote business dealings with SME customers. In addition, they will expand successful industry methods to facilitate business dealings with large companies in Germany and Europe. they are expanding our front desk capacity in Germany and have chosen the location of the Eurozone and hopes to achieve profitable and sustainable growth.

Digitalization is changing the banking industry. Therefore, Commerzbank wants to complete the work starting from «Commerzbank 4.0»: the modernization of IT systems and structures and the establishment of an agile and efficient delivery organization. Under the new strategy, they plan to invest heavily in technology. The evolution of this strategy is intended to help the Bank achieve revenue growth by 2023 with the further growth of customers and assets, even when the market environment is still deteriorating.

Comparative Financial ratio analysis of the Banks 3.1 Deutsche Bank

to Deposit Ratio (%)	87.68	NA	NA	99.26	98.32
Gross margin TTM				52.94%	
Gross Margin 5YA			1-1	56.4	1%
Operating margin TTM			-11.37%	9.48	3%
Operating margin 5YA			-4.53%	0.83	3%
Pretax margin TTM			-11.37%	9.47	7%
Pretax margin 5YA			-4.53%	0.8	3%
Net Profit margin TTM			-22.72%	9.65	5%
Net Profit margin 5YA			-8.95%	-0.66	3%

Net Loan

# **Economics**

		LCOHOIIIC
Return on Equity ⊤⊤M	-8.96%	9.41%
Return on Equity 5YA	-4.64%	-4.04%
Return on Assets TTM	-0.4%	0.49%
Return on Assets 5YA	-0.18%	-0.04%
Return on Investment TTM	-	3.24%
Return on Investment 5YA	-	4.5%
P/E Ratio TTM	-	139.3
Price to Sales TTM	0.57	1.3
Price to Cash Flow MRQ	-	4.8
Price to Free Cash Flow TTM	-	21.4
Price to Book MRQ	0.22	0.6
Price to Tangible Book MRQ	0.25	0.7
Revenue/Share TTM	10.92	20.92
Basic EPS ANN	-2.71	-0.71
Diluted EPS ANN	-2.71	-0.72
Book Value/Share MRQ	29.29	38.58
Tangible Book Value/Share MRQ	25.89	31.9
Cash/Share MRQ	66.59	28.75
Cash Flow/Share TTM	2	3.64
Efficiency ~		*********
Asset Turnover TTM	2	0.34
Inventory Turnover TTM	_	-
Revenue/Employee TTM	2	351.15K
Net Income/Employee TTM	_	12.57K
Receivable Turnover TTM		6.01
3.2 Commerzbank Quick Ratio MRQ		
Current Ratio MRQ	-	
LT Debt to Equity MRQ	154.15%	195.48%
Total Debt to Equity MRQ	154.15%	328.4%
rotal Bost to Equity links	101.1070	020.170
Gross margin TTM		52.94%
3	10.5	56.4%
Gross Margin 5YA	-	30.47
	11.51%	
Gross Margin 5YA	- 11.51% 10.22%	9.489
Gross Margin 5YA Operating margin TTM		9.489 0.839
Gross Margin 5YA Operating margin TTM Operating margin 5YA Pretax margin TTM	10.22%	9.489 0.839 9.479
Gross Margin 5YA Operating margin TTM Operating margin 5YA Pretax margin TTM Pretax margin 5YA	10.22% 11.51%	9.489 0.839 9.479 0.89
Gross Margin 5YA Operating margin TTM Operating margin 5YA Pretax margin TTM	10.22% 11.51% 10.22%	9.48% 0.83% 9.47% 0.8% 9.65%
Gross Margin 5YA  Operating margin TTM  Operating margin 5YA  Pretax margin TTM  Pretax margin 5YA  Net Profit margin TTM	10.22% 11.51% 10.22% 7.77%	9.48% 0.83% 9.47% 0.8% 9.65%
Gross Margin 5YA  Operating margin TTM  Operating margin 5YA  Pretax margin TTM  Pretax margin 5YA  Net Profit margin TTM	10.22% 11.51% 10.22% 7.77%	9.48% 0.83% 9.47% 0.8% 9.65% -0.66%
Gross Margin 5YA Operating margin TTM Operating margin 5YA Pretax margin TTM Pretax margin 5YA Net Profit margin TTM Net Profit margin 5YA	10.22% 11.51% 10.22% 7.77% 6.79%	9.48% 0.83% 9.47% 0.8% 9.65% -0.66% 20.92

## Экономика

Book Value/Share MRQ	23.45	38.58
Tangible Book Value/Share MRQ	21.01	31.
Cash/Share MRQ	53.07	28.7
Cash Flow/Share TTM	1.41	3.6
Return on Equity TTM	2.3%	9.419
Return on Equity 5YA	2.06%	-4.04
Return on Assets TTM	0.16%	0.499
Return on Assets 5YA	0.14%	-0.049
Return on Investment TTM	-	3.249
Return on Investment 5YA	-	4.59
Efficiency ♥		
Asset Turnover TTM	15.	0.34
Inventory Turnover TTM	15.	
Revenue/Employee TTM	15	351.15
Net Income/Employee TTM	15.	12.57
Receivable Turnover TTM	9-	6.0
<b>v</b>		
P/E Ratio TTM	6.08	139.39
Price to Sales TTM	0.41	1.36
Price to Cash Flow MRQ	ie.	4.85
Price to Free Cash Flow TTM	197	21.45
Price to Book MRQ	0.14	0.64
Price to Tangible Book MRQ	0.15	0.77

Liquidity

Liquidity analysis focuses on cash flows and measures the company's ability to meet short-term debt. Liquidity measures the rate at which assets are converted into cash. In the case of banks, the liquidity ratio can also measure the ability to repay short-term debt: With regards to Banks the loan-to-deposit ratio (LDR) is usually used.

By comparing a bank 's total loans with its total deposits over the same period, the loan-to-deposit ratio (LDR) can be used to assess bank liquidity. LDR is expressed as a percentage.

If the ratio is too high, it means that the bank may not have enough liquidity to meet any unforeseen funding needs. Conversely, if the ratio is too low, the bank may not be able to obtain the income it deserves. Therefor in this comparative analysis Commerzbank has a slightly better liquidity with at an average of about 85% compared to Deutsche Bank at an average of about 90%.

Profitability analysis

Profit Margin Ratio

The profit Margin Ratio shows the percentage of profitability of a business from its operations. Calculated by dividing net profit by net interest income. The comparative analysis of the two banks shows that the German commercial bank enjoys a high level of profitability, with a positive 5-year average, while Deutsche Bank 's 5-year average is negative.

Return on shareholders' equity

This ratio shows the profitability relative to shareholders' equity. A high ratio indicates an increase in shareholders'

profitability and may lead to an increase in the level of dividends. Compared with Deutsche Bank, German Commerzbank has a relatively high ratio and should attract more investors to invest in its operations

Return on assets:

Return on assets shows the profitability of using assets. A high ratio implies that there is effective use of assets in profit generation of a company. A lower ratio may indicate that the bank has invested too much money in its assets. According to the analysis, both banks have similar average levels. However, the variability of this ratio indicate that the profitability of Commerzbank once again exceeds Deutsche Bank, whose 5-year average is negative.

Share Performance/ Earnings indicators Sales ratio

To evaluate this section, we take for instance the price to sales ratio, often called the P/S, the price-to-sales ratio (Price/Sales or P/S) is calculated by taking a company's market capitalization (the number of outstanding shares multiplied by the share price) and divide it by the company's total sales or revenue over the past 12 months. The lower the P/S ratio, the more attractive the investment.

In this case Commerzbank has a more positive indication due to the fact that it's P/S is lower than that of its counterpart.

EPS (Earnings per share)

Earnings per share: Earnings per share (EPS) is a key indicator used to determine the share of ordinary shareholders

in the company's profits. Earnings per share measures the profit distribution of common stock relative to the company's total profit.

There are two different types of earnings per share: basic earnings and diluted earnings per share. Basic earnings per share need to be reported because it can improve the comparability of earnings between different companies. Diluted EPS is needed to reduce moral hazard issues. Without diluting earnings per share, management is more likely to mislead shareholders about the company's profitability. This is done through the issuance of convertible securities (such as bonds, preferred stocks, and stock options). These convertible securities do not require immediate issuance of common stock, but may be issued in the future.

Conclusion

In this comparative analysis Commerzbank has once more positive figures for both the simple and diluted whereas deutsche bank as negative 5-year average figures.

The central concern of the paper has been to conduct a comparative performance of two banks in Germany for the period of 2004–2009. five groups of parameters have been used to measure liquidity level, profitability level, management capacity, capital structure and share performance. the findings show that both banks cannot boast of a financially viable future as both have shown signs of lack of appropriate application

of financial management tools and policies to manage their organizations and to adapt with their environment, in order to become more competitive and maximizing their profits.

The liquidity level in Deutsche Bank is less than in its competitor bank. The research findings also show that Commerzbank possesses high profitability level with high level of instability. As far as management capacity ratios, the analysis declared that Commerzbank use its assets more efficiently than its competitor bank, while deutsche bank allocated more money to its investments overall.

Moreover, commercial deutsche bank managed to earn its interest revenue with the less level of expenses. in addition, the analysis showed that Commerzbank has strong financial structure than its competitor bank. Finally, the overall analysis of the share performance stated that Commerzbank is better off in relation to the most important ratios, market value and earnings per share than its competitor bank.

At the time of this research, it has been reported that the shares of Deutsche Bank have plummeted to a record low even in comparison to the 2008/2009 Financial crisis, this is attributed mainly to the Corona virus, however its counterpart Commerzbank has unsurprisingly kept a more positive and stable change during the pandemic.

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