FRI-2G.404-1-EM2-04

FEE AND COMMISSION INCOME OF THE BULGARIAN AND EUROAREA BANKING SECTORS – A COMPARATIVE STUDY

Pr. Assist. Prof. Elizar Stanev, PhD
Department of Economics and International Relations,
Faculty of Business and Management
University of Rousse “Angel Kanchev”, Bulgaria
Tel.: +359 082 888 557
E-mail: eastanev@uni-ruse.bg

Abstract: *The paper presents a short comparative study of data on the structure and key ratios of fee and commission income within the Bulgarian and euro area banking sectors. In the expose we also attempt to measure the relative effectiveness of fee and commission income in and between the selected regions. Both goals are aiming to supply enough data and evidence to draw trends and conclusions concerning central bank regulatory practices and macroprudential risk management. The topic might also be considered of high societal interest currently, because of recent changes in Bulgarian legislature regarding lessening the banking fee burden of citizens.*

Keywords: *Bulgarian banking sector, euro area banking, fee and commission income, fee and commission banking regulation*

JEL Codes: G21, E58

INTRODUCTION

Amidst new legislative and environmental challenges, the Bulgarian banking sector in 2023 comprises of a shrinking list of 24 banks (recent buyouts and mergers have dwindled that number). 17 of those hold a local license and the remaining 7 are branches of foreign banking entities registered for supplying their services in the country. The sector recovered from the COVID pandemic rather quickly, with profits measuring over 2bln. BGN from the start of the year up to the end of July, 2023, increasing profits by 68% when compared to the same period of 2022.

A major branch of banking revenue - the fee and commission income – has been the subject of some academic interest, but is a topic that is relatively understudied compared to the remaining income sources (mainly income from interest). There are some studies that address fee and commission income as a subcomponent of banking revenue structure (ECB, 2000) (Coffinet, 2009). Relevant data has also been aggregated for the needs of meta-reviews for costs of retail payments (Junius, 2022) and many analyses done regarding macroprudential stress-testing methodology (Kok, 2017) (Coffinet, 2009). But in terms of addressing the dynamics of fee and commission income of the Bulgarian banking sector – studies are relatively scarce, although the raw data is available through the income statements of the private banks and structured according to the respective international accounting standards before received by the Bulgarian National Bank.

EXPOSITION

Within this paper we explore the structure of the Bulgarian banking sector income, mainly focusing on fee and commission income and on key ratios concerning this particular revenue stream. The relevance of fee income came into the spotlight during the more economically turbulent years – namely starting around the 2000’s, but peaking during the global financial crisis of 2008 and the consecutive COVID-pandemic. Traditionally, fee and commission income of universal private banks has always lagged behind in size compared to interest income before the aforementioned crises, but the trend is shifting and the proportion of banking income in European economies shows an obvious tendency of non-interest income equalizing in the long run. This

 Copyrights© 2023 ISBN 978-954-712-925-2 (Print); e-ISBN 978-954-712-926-9

has significant implications for banking stability and poses new challenges of macroprudential regulatory practices, as most crises of insufficient demand are usually accompanied by a drop in consumption, which is posed to partially reduce fee and commission income generated, which – on the other hand – pushes bank management to over rely on routine and maintenance fees on their services to compensate. Bulgarian banks are no exception – the steady increase of bank fees and commissions in order to maintain healthy profit rates has come under the scrutiny of governmental regulation, with several changes in legislature expected to force banks to offer some basic services free of additional charges when dealing with retail customer salaries or other basic income. The changes in legislature came into effect in September 2023 and the effects are unclear yet, but Bulgarian economists have expressed concerns that providing a segment of their services free of charge will cause banks to raise their fees on the remaining ones to compensate, with an attempt to protect profits. This poses a few questions regarding the relative level of Bulgarian banking fees and commissions, the structure of banking income and the level of reliance of the sector on this type of income.

Data, Methodology, Restrictions and Analysis

In this study we will focus on the performance and key indicators of fee and commission income in the banking sectors of Bulgaria and the euro area. In order to compare the relative reliance on fee income that private banks exhibit in the selected regions, we employ statistical data from both the Bulgarian National Bank (BNB) and the European Central Bank. Data for the euro banks has been collected from a quarterly sample offered by the ECB data portal, mainly from the CBD2 dataset. In order for the data to be comparative, we use the CBD reference sector breakdown that includes data for domestic banking groups and stand-alone banks, including branches of foreign banking entities in the euro area. On the Bulgarian side, we approach the subject through the monthly bulletin of the BNB, which includes a detailed income statement of banks, aggregated into groups according to the size of their assets, or aggregated for the whole banking system. The latter is used in the comparison, as it corresponds to the observed euro area data, after imposing a transformation of the data series from monthly to quarterly, using summation for cash flows (e.g. the different types of income) or a simple average for asset value.

The chosen period for the comparative analysis is loosely focused on the years during and after the COVID19-pandemic, starting from Q1 of 2020 and stretching to Q1 of 2023. Differences in governmental approaches to dealing with this exogenous shock were different and might have influenced the results provided in this study.

In order to perform the study, some key indicators are brought forward and an attempt is made to introduce a new ratio for the measurement of the economic efficiency (profitability) of fee and commission income is proposed in order to better understand the level of economic sense they make for the banks themselves.

Table 1. Data and indicators used

Data:	Calculated indicators:
fee and commission income	net fee and commission income/assets (%)
fee and commission cost	net fee and commission income/net total operating income (%)
net fee and commission income	fee efficiency ratio
net total operating income	
assets	

Fee and commission income is reported to each central bank in their respective banking systems and the data is available. Fee and commission cost is provided in the BNB aggregated income statements, but in the case of the euro area banks it had to be derived from the difference between the basic value and the net fee and commission income. Net total operating income is a closely monitored value – it includes the main income channels from the most basic activities that banks perform, minus the operating costs. As such it consists of two main components –

income from interest operations and non-interest income. Non-interest income, on the other hand, is made up of the gains from dividends and other financial instruments or investments held by the bank, the income from fees and commissions and others. Out of these categories, universal banks generally exhibit income from fees and commissions being structurally representative for non-interest income, as it makes up the larger part of it (typically 2/3 to 3/4).

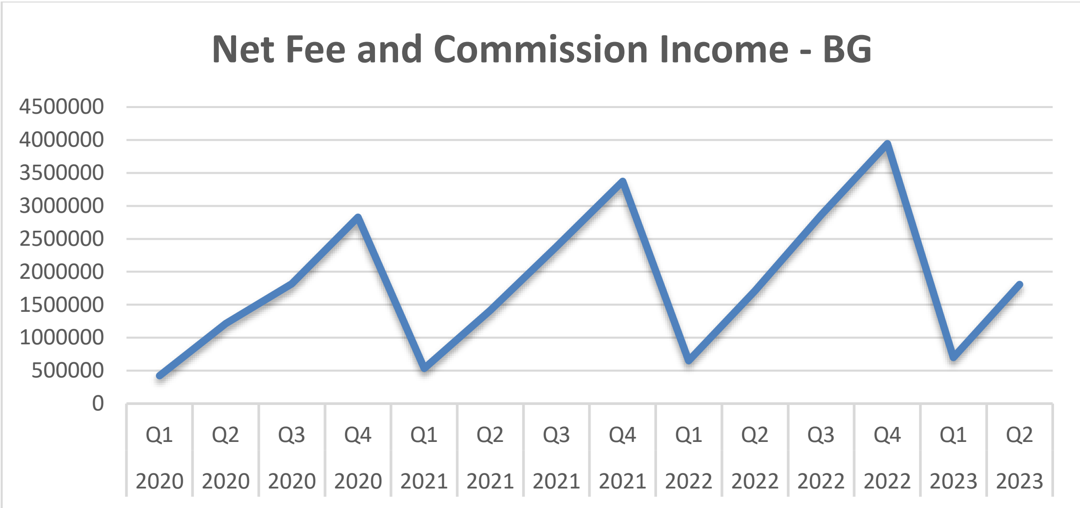


Figure 1. Net fee and commission income in the Bulgarian banking system (quarterly, Q1 2020- Q1 2023; thousands of BGN; author’s calculations)

Seasonality is endemic to banking income data, as the nature of service use and accounting practices dictate a cyclical pattern within each year. Aside from that, fee and commission income has been on the rise in Bulgaria, peaking at close to 4 bln. BGN (2 bln. EUR) in the fourth quarter of 2022, with even higher peaks forecasted for 2023, coming up to around a 1% size of the whole euro area bank fee income for the same quarter.

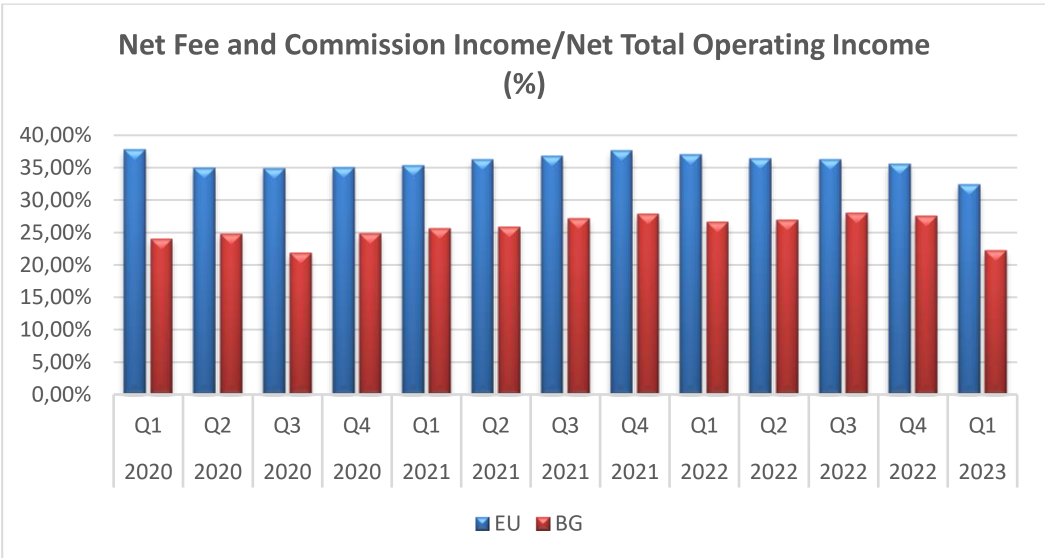


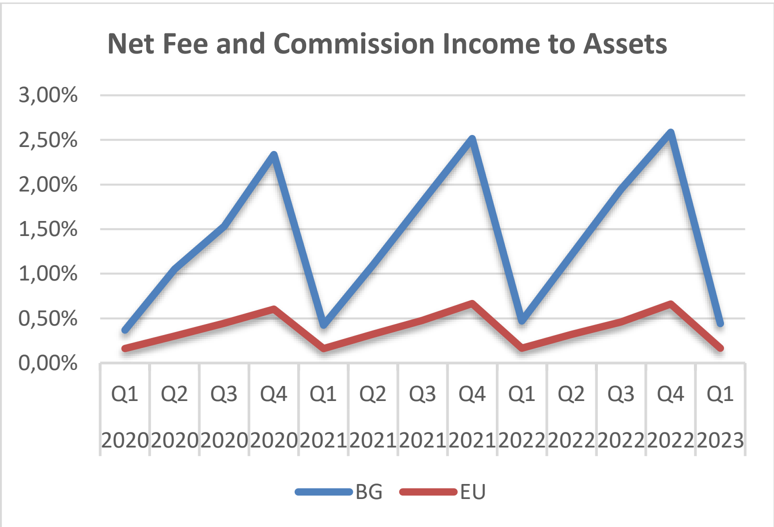
Figure 2. Net fee and commission income over total operating income for Bulgaria and the euro area (Q1 2020- Q1 2023; percentage, respective currencies; author’s calculations)

Net fee and commission income over net total operating income can be used as an indirect indicator of the reliance of banks on fees as a major revenue stream. Concerns about bank system stability have led to a dichotomy of opinions regarding the size that this and similar indicators should gravitate towards. Some authors claim that with a high enough ratio, fees might prove to act as a secure revenue buffer against the cyclical nature of the economy, as crises may drag

 Copyrights© 2023 ISBN 978-954-712-925-2 (Print); e-ISBN 978-954-712-926-9

interest income down in the lower parts of the cycle. Others recommend a more cautious approach, as fees are also beholden to economic activity, and the drops in economic cycles have clearly illustrated the effect that crises have on the size of this revenue stream. The author of this study subscribes to the latter view. An overreliance on fees and commissions sidesteps the basic function of the banking system as an intermediary between points of money surplus to points of deficit and demand – accompanied by the underlying risk-and-reward mechanism of credit - and recalibrates it to situate banks in the role of a very conservative and simple financial service suppliers or transactional notary entities.

Aside from the seasonality of bank income data that is synchronous across both regions, the calculations of net fee and commission income as a percentage of the net total operating income differ drastically, with an average difference of 10.25 percentage points the Bulgarian share of fee to total operating income is lagging behind euro area values. This major difference is an argument for the confirmation of a hypothesis that states that Bulgarian banks are less reliant on fees when it comes to their income compared to the average bank system in the euro area. This point can further be sustained by the fact that fees and commissions constitute around 30-38% of net revenue, but on average contribute around two-thirds of euro area banks' total non-interest income. Bulgarian banks, on the other hand, have very limited security portfolios and thus their fee income proportion to non-interest income is larger than their euro equivalents.



year	quarter	BG	EU
2020	Q1	0,37%	0,16%
2020	Q2	1,05%	0,30%
2020	Q3	1,53%	0,45%
2020	Q4	2,33%	0,60%
2021	Q1	0,43%	0,16%
2021	Q2	1,10%	0,32%
2021	Q3	1,81%	0,48%
2021	Q4	2,52%	0,67%
2022	Q1	0,47%	0,16%
2022	Q2	1,21%	0,32%
2022	Q3	1,95%	0,46%
2022	Q4	2,59%	0,66%
2023	Q1	0,44%	0,16%

Figure 3. Net fee and commission income to assets for Bulgaria and the euro area (Q1 2020- Q1 2023; percentage, respective currencies; author's calculations)

Authors Kok and Mirza (Kok, Mirza 2017) prove through robust econometric analysis that fee and commission income over assets varies along with the economic and financial cycle and stands in relation with real GDP growth, the lagged short-term interest rate, the stock market returns and also possesses a certain inertia (varies along its own lag). We might add that raw data on this measurement is, again, strongly seasonal, but the data spread appears to show no major distressful events during the chosen period (even considering the pandemic) and the proportion remains consistently in the lower spectrum - within 0.37-2.59% for Bulgaria and 0.16%-0.66%. When seasonally adjusted, the data on net fee income to assets shows greater volatility in the Bulgarian banking system, but euro area banks remain stable. In terms of calculating the ratios for the chosen regions, we observe values that closely approach one another in the lower seasonal variations, but generally split up, with the Bulgarian banking system having a consistently higher ratio. This observation is the cause of differences in relative asset sizes of the average European and Bulgarian banks, as is evident by the previous key indicator (net fee income to net total operating income).

In terms of the efficiency of fee and commission income we propose a simple cost/benefit ratio, which we calculate and compare for both Bulgaria and the euro area. The results of the calculations and the comparative analysis are provided below and show the relative cost of 1 unit of currency gained through fees and commissions. The expenses for fees and commissions of the euro area are derived from the difference between net and gross fee and commission income.

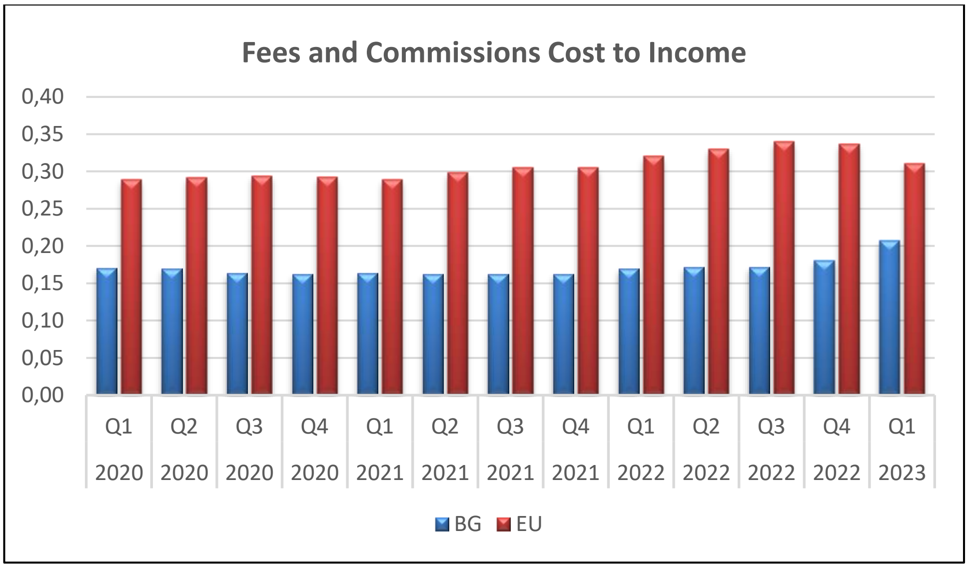


Figure 4. Fees and commission cost to income ratio in Bulgaria and the euro area
(Q1 2020- Q1 2023; ratio – higher is worse; author's calculations)

Although premature in terms of the amount of data and the size of the period surveyed, there is a conjecture argument to be made that Bulgarian banks are more efficient in terms of their fees and commissions based on the formulated ratio.

CONCLUSION

In terms of non-primary revenue sources, fees and commissions are a critical component of the income structure of modern banking systems. Regulators should follow key indicators such as income from fees and commissions in relation to total or net operating income approaching the 50% mark in order to assure the continuation of the fundamental functions of banking institutions. This continuous observation can further be supported by monitoring of fee and commission income to assets, especially if irregular fluctuations appear suddenly and do not coincide with the economic and seasonal cycles. In fact, macroprudential guidelines would eventually benefit from including brackets for the aforementioned indicators depending on bank specialization and profile. With the transition towards electronic money and the advent of CBDC's, banks will play a major role of a required medium of transactions, even more so than now. The more cash is phased out the greater the need for regulation concerning fee affordability, as predatory practices may arise from mandatory money digitalisation.

And finally, private banks should segment the costs and revenue of fees and commissions in a separate analytical category of their own, and strive for decreasing the fees and commission cost to income ratio, as a measurement of efficiency.

ACKNOWLEDGMENTS

The paper is an output of implementing a research project of the Faculty of Business and Management 2023-BM-01 "Exploring the options for transition to green and circular economy" financed under the Scientific Researches Fund.

REFERENCES

Bulgarian National Bank, *Data from balance reports and quarterly bank income statements*. URL: https://www.bnb.bg (Accessed on 29.09.2023)

Coffinet, J., Lin, S., Martin, C., (2009). *Stress Testing French Banks' Income Subcomponents*, Banque de France Working Papers. URL: https://publications.banque-france.fr/sites/default/files/medias/documents/working-paper_242_2009.pdf (Accessed on 23.09.2023)

European Central Bank (2000). *EU Banks' Income Structure*. URL: https://www.ecb.europa.eu/pub/pdf/other/eubkincen.pdf (Accessed on 23.09.2023)

European Central Bank (2014), *Financial Stability Review*. URL: https://www.ecb.europa.eu/pub/financial-stability/fsr/focus/2004/pdf/ecb~a67f952cb4.fsrbox200412_11.pdf (Accessed on 23.09.2023).

European Central Bank (2016), *Financial Stability Review*, pp 147-157. URL: https://www.ecb.europa.eu/pub/pdf/fsr/financialstabilityreview201611.en.pdf (Accessed on 24.09.2023)

European Central Bank, ECB Data Portal - *data from key indicators regarding fee and commission income*. URL: https://data.ecb.europa.eu/ (Accessed on 29.09.2023)

Junius, K., Devigne, L., et. al (2022). *European Central Bank Occasional Paper Series: Costs of Retail Payments - an Overview of Recent National Studies in Europe*. URL: https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op294~8ac480631a.en.pdf (Accessed on 23.09.2023)

Kok, C., Mirza, H., Pancaro, C. (2017). *Macro Stress Testing Euro Area Banks' Fees and Commissions*, European Central Bank Working Paper Series. URL: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp2029.en.pdf (Accessed on 25.09.2023)