

GROWTH POTENTIAL FOR PRIVATE BANKING IN HUNGARY

*Eszter Kazinczy*¹

ABSTRACT

Private banking advisors and managers at financial institutions are in charge of managing their wealthiest clientele's savings. Private banking has seen remarkable expansion in Hungary since the mid-1990s. Nevertheless, there is room for further improvement in the sector. The paper gives a rough estimate of the market's potential size. The analysis also provides information on the main characteristics of the market. It raises a range of questions that should be answered in the upcoming years. The research has been conducted by reviewing the relevant tendencies and statistics on inequality and financial wealth. The paper finds there is considerable growth potential for the private banking sector, which has not been captured yet.

JEL codes: D63, G21, G24, N24

Keywords: Private banking, Hungarian private banking, inequality

1 INTRODUCTION

By traditional definition, a private banker is one who owns and manages their own private bank. Still, even at the early stages, some private banks focused their activities on wealth management. In time, traditionally family owned "private" banks disappeared during the turbulent history of the twentieth century or became publicly owned. Most of them were acquired by large universal banks. Some "traditional" private banks – such as Pictet – or "former" private investment banks – e.g. Morgan Stanley or Goldman Sachs – were redesigned. Private banking (PB) revived in the 1980s with a somewhat different focus. The term "private banking" had become distinctive as one among various current banking activities, and certain banks specialised in the wealth management of the top segment (*Cassis–Cottrell, 2015*). Henceforward, private banking has been used to refer to the activity of financial experts who manage the private financial assets of a specific clientele.

¹ *Eszter Kazinczy*, Assistant Professor at Széchenyi István University. E-mail: kazinczy.eszter@sze.hu.

PB serves a crucial clientele, i.e. account holders with the largest financial savings. Because revenues on them are higher than on mass retail clients and their loyalty is essential, they are provided with additional services on top of the range offered to the segments with lower financial wealth. Private bankers continuously have to face various challenges in terms of product range, the regulatory system, IT developments, the services' profitability or the advisors' up-to-date knowledge. The list can be continued. But there is a further question that all private banks strive to answer; namely, how big the pool they can fish in is. Answering this question is crucial for long-term business planning in general, as the management of all financial institutions sets annual client and "net-new-money" acquisition targets for PB staff. The size of the clientele has a direct impact on profitability and may help in improving overall efficiency, as a larger client base holds the possibility of increased efficiency. This drives PB managers to increase their clientele on yearly bases.² Thus, the potential size of the clientele is a core question for PB managers, as it can be used for the baseline for business planning. However, as society's wealthiest are partially invisible for authorities and they represent a narrow group only, the question cannot be easily answered. In recent years the Hungarian private banking market has seen a rather modest growth rate especially in terms of client numbers. As to the growth of financial assets, PB growth rate has failed to significantly outperform that of households in general. Consequently, the relevant articles³ suggested that the market has expanded to near its potential limit or the private banking business line has already acquired the bulk of potential clients.

The primary goal of the paper is to challenge that assumption and to give a rough estimate of the potential target group's size. Henceforward, when referring to the potential target group, we measure and discuss two indicators: the potential client number and the value of the potential Asset under Management (AuM) in terms of HUF. As for the latter indicator, the term AuM is used in private banking for the total amount of the clientele's financial savings, i.e. the clientele's financial wealth managed by private bankers. When calculating AuM, the total market value is used. The definition of financial wealth implies that "physical" saving instruments – such as real estate or valuable paintings – do not belong to AuM. AuM is estimated by households' total financial assets omitting financial liabilities.

Turning to client numbers, at this initial stage, two factors need to be clarified. First, an individual might have a PB account in multiple banks. However, in line with relevant statistics, we treat client numbers and the number of accounts as equal. Second, the basic statistics for our estimation rely on households, not in-

2 One might even refer to the "economies of scale", which applies to the decreasing cost per unit of output, while increasing the scale of operation.

3 See *Portfolio.hu's* latest articles on private banking.

dividuals. As a result, there might be households, in which more than one individual is able to open a PB account. In both cases we indicate the potential consequence during the analysis if the respective indicators' difference is relevant.

Throughout the paper we primarily analyse the two key indicators – namely client numbers and AuM – but within specific sections the focus might shift to one or the other. Still, they remain the two interrelated measuring sticks for the clientele's size from different perspectives. Those two variables are among the key performance indicators of PB. As a result, they are part of annual business plans and the relevant published statistics. Both indicators are directly related to a private bank's profitability. They also provide the basis for various further sub-indicators, such as client numbers per advisor. Based on the current paper's applied methodology, we intend to prove that there is further room for PB growth regarding both key indicators. Thus, the core question of the paper – is there further room for private banking – can be firmly answered. A secondary aim of the paper is to provide a brief overview on the Hungarian private banking market's development and current state. This serves better understanding, but also clarifies the applied terminologies.

The academic literature on private banking is quite limited and, in the case of Hungary, is missing. Nevertheless, certain relevant statistics and articles are available. More studies exist on the topic of inequality, which is strongly related to private banking. This paper contributes to the literature on financial services, more specifically to the literature on private banking and its growth potential. This work focuses on the Hungarian market and merely touches upon global or EU tendencies for purposes of comparison.

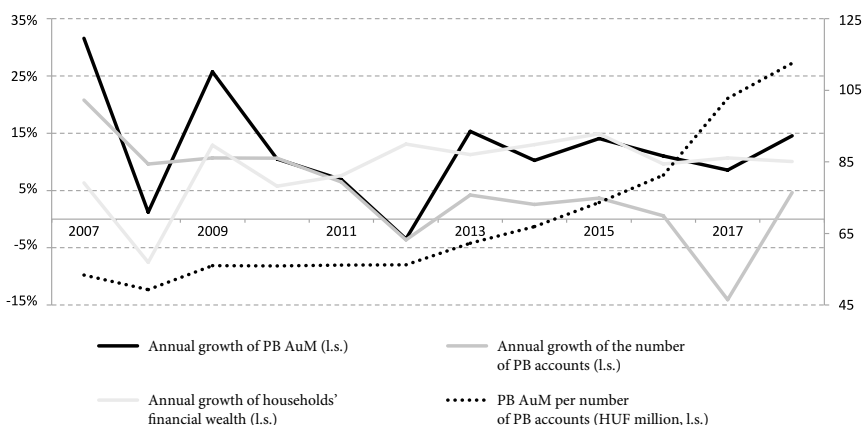
The paper is structured as follows. *Chapter 2* gives an overview of the main features of the Hungarian private banking sector. It also reflects on its diversity, the size of the market, its concentration, and growth tendencies. The chapter serves to understand the Hungarian private banking sector's history. A subsection lists the most important challenges, which can be linked to the PB market's size and efficiency. The list even carries the possibility of further analyses. *Chapter 3* discusses the tendencies of inequality, and then provides relevant information on Hungarian financial wealth. These topics help to underpin the findings and expectations of this paper. *Chapter 4* contains three subsections. The first explains why the PB target group cannot be precisely measured. We highlight the shortcomings of certain methodological approaches. The next subsection is dedicated to reviewing the methodology applied in this paper. *Subsection 4.3* provides a rough estimate of the potential private banking pool by using the presented methodology. The aim is to answer the question whether there is further growth potential for the PB business line. The final chapter concludes and underlines the main messages. The paper includes an Appendix demonstrating the results of a curve fitting tool.

2 HUNGARIAN PRIVATE BANKING - GENERAL FEATURES

2.1 A diverse market

This subsection describes the current state of the Hungarian private banking market based on time series and the latest statistics of 2018. A further subsection lists the most important challenges for the PB business line. They must be mentioned, as they can all be linked to the PB client numbers and AuM in terms of efficiency. Figure 1 illustrates the development of the key indicators.

Figure 1
Relevant growth figures of private banking



Note: Based on the statistics referred to, growth rates and “PB AuM per number of PB accounts” ratios have been calculated by the author.

Source: *Portfolio.hu*; Private banking, MNB Statistics, own calculations

Now, we can turn to the latest statistics. In 2018, the total financial wealth of Hungarian households amounted to HUF 53,835 billion (MNB Statistics). *Table 1* indicates that around 9% of that total financial wealth was covered by the private banking market. Its percentage gradually increased, as in 2006 it had been a mere 6% (MNB Statistics; *Portfolio.hu*, 2007). This is particularly remarkable taking into consideration increasing segmentation limits.⁴ In *Figure 1*, it is reflected by

⁴ Segmentation is a predetermination of the minimum amount of total financial assets that private banking agents use for defining their potential clientele. For instance, if a private bank has a segmentation limit of HUF 50 million, they accept clients who own at least that amount of financial savings. One should note that certain private banks – and especially services for lower segments – use limits based on monthly income or the amount of total loans. There is a great variety of segmentation possibilities on an international level – see MAUDE (2006) or Euromoney (2018).

the occasional negative growth of the number of PB accounts and the increasing ratio of AuM per number of accounts.

Table 1
Main indicators of the Hungarian private banking market (2018)

Private bank	Segmentation limit (HUF mn)	Number of accounts	Total AuM (HUF bn)	AuM per numbers of accounts (HUF mn)	Number of PB advisors	Number of accounts per number of PB advisors
Bank Gutmann	320	n.a.	174	n.a.	5	n.a.
Budapest Bank	25	3 487	212	61	33	106
CIB	60	3 029	330	109	26	117
Concorde Securities	75	800	151	189	9	89
Equilor	25	347	28	81	2	174
Erste	70	2 915	475	163	24	121
Generali	10	209	17	81	4	52
HOLD Asset Management	80	648	165	255	8	81
K&H	100	1 243	178	143	18	69
MKB	100	1 750	545	311	26	67
OTP (Private Banking / Prestige Private Banking)	30/80	22 359	1 699	76	166	135
Raiffeisen	70	2 446	529	216	41	60
SPB	40	1 509	61	40	14	108
Takarék	20	870	48	55	9	97
UniCredit	100	1 550	245	158	13	119
Total / Average	75	43 162	4 857	108*	398	108

Note: * Bank Gutmann has been excluded.

Ratios, totals and averages reflect own calculations.

Source: *Portfolio.hu* (2018), own calculations.

The Hungarian private banking market has always been diverse from various aspects. Regarding segmentation, in 2006 the limits were between HUF 10 million and EUR 400,000 (*Portfolio.hu*, 2007), while the simple average of the limits amounted to HUF 42 million.⁵ Limits have generally increased over time, as most

5 The weighted average cannot be calculated, as the largest market participant – OTP Bank – operates two private banking business units. The first one uses a segmentation limit of HUF 30 million. The second unit is dedicated to individuals over the segmentation limit of HUF 80 million. However, OTP publishes the overall data only. In case we assume that OTP uses the lower limit

players have created an affluent⁶ service for the lower segment. Both steps have resulted in channelling client groups from the private banking segment to a lower segment. In 2018, the segmentation ranged from HUF 10 million to HUF 320 million, while simple average increased to HUF 75 million (see Table 1). However, in the same period, 39% of the private banking accounts held less than HUF 50 million in AuM (*Portfolio.hu*, 2018). There are various reasons behind this. First of all, it is the market average, while the specific service providers have average AuMs over the segmentation limits.⁷ It is also clear that many of the existing accounts are under these limits, but even those account holders are allowed to remain PB clients, due to good relationship or prestige, or due to the assumption that the missing AuM will “return” over time. Furthermore, many private banking clients hold their money at multiple banks for the sake of diversification or cherry-picking. Based on these facts, the available statistics referring to the private banking market should be viewed with great caution. Nevertheless, the growth of the market can be well detected. Although the number of accounts might even decrease due to one-off effects,⁸ AuM and AuM per the number of accounts are increasing, leading to high concentration (see *Figure 1*).⁹

The product and service portfolios offered are also diverse. Based on the reviewed institutions’ form, size and policy, different product and service packages can be categorised. Commercial banks cover the widest spectrum. In their case, one can find traditional banking products – for instance, current accounts or bank cards – but with different cost structures or added services. Generally speaking, private banking products are dominated by investment instruments and services. The investment possibilities include a wide and diverse product range, from various investment funds to art treasures. The products offered might serve different purposes, such as tax optimisation, currency diversification or retirement plans. The

only, the weighted market average is HUF 67 million, while if we calculate with the higher limit, the weighted market average increases to HUF 85 million.

- 6 Generally, the affluent segment stands between mass retail and PB group. Nowadays, all major banks in Hungary have built up specific services for the affluent segment, often affecting the client base of the private banking sector. More precisely, the segment limit of PB has been increased in many cases, while those clients who were under the new segment limit have been migrated to the affluent service.
- 7 SPB is currently an exception due to its new segmentation policy.
- 8 One-off effects usually consist of new segmentation limits – channelling private banking clients to affluent banking – mergers or acquisitions. Certain temporary possibilities also have effects on the overall numbers, as for example, the possibility of buying premium government bonds via Lombard loans or the tax preference for channelling offshore money back to Hungary. To view the yearly effects, visit *Portfolio.hu* for articles related to private banking.
- 9 The concentration of market participants is also high. In 2018, 57% of the total market’s AuM was managed by the three largest players (own calculation based on *Portfolio.hu*, 2019).

banks, their treasury departments or their asset management companies have their own investment products. In addition, private banks typically offer investment products of other domestic or international agents. Some private banks use such third-party investment providers in a “boutique” style, where all relevant products are available for the clientele, while others prefer cherry picking. As for services, the core element remains the personal investment advisor. This can be supplemented by various further services, such as succession planning or legal advice (Cassis–Cottrell, 2015; *Portfolio.hu*: Private banking).

One should clarify the difference between private banking and private asset management, as both refer to the financial wealth management of the richest individuals. However, in the case of the former, investment decisions are made jointly by clients and their personal private bankers. As for the latter, clients “hand over” a certain amount of savings for portfolio management and it is an investment banker who makes the allocation of the funds based on the client’s intentions and risk tolerance. Furthermore, private banking has a much wider service portfolio, usually with a different cost structure. The available PB statistics usually include private portfolio investment, as it is primarily the private banking clientele that require the service (*Portfolio.hu*: Private banking).

To continue, one should check the fee structures applied. Certain providers use a percentage of AuM, some charge transaction fees, while others prefer a fix monthly fee. In most cases PB providers use a combination of the options (*Portfolio.hu*: Private banking). Differences can also be found if you check the number of accounts an advisor manages. It does not correlate with the average AuM available on the accounts or with the segmentation limits (see *Table 1*).

All in all, the Hungarian PB market is diverse. It is increasing in terms of AuM, while the accounts reflect greater wealth concentration. It is the result of higher segmentation limits and higher growth of AuM compared to the number of accounts. Further differences can also be found if you check segmentation limits, product portfolios, the fee structures applied, or the number of accounts managed by advisors. All of the above underline the importance of the financial assets’ volume and the number of clients.

2.2 Current challenges for private banking

As for the future, private banks will have to cope with a number of challenges both at a domestic and an international level. The above issues affect both existing and future private banking clients and PB managers.

The need for digitisation and robotization is obvious on the market. The younger generation might not require physical meetings with their personal private bank-

ers, they are more likely to use electronic instruments or robo-advisors. Blockchain technology is also relevant.¹⁰ On the one hand, keeping up with the challenges requires huge financial investments by the private banking sector. On the other hand, as margins and profitability have shrunk the new technologies may increase business efficiency. For instance, one advisor can serve more clients.

As a further challenge, the introduction of MiFID 2 (Markets in Financial Instruments Directive) in the European Economic Area required huge efforts by financial institutions. The service structure needed to be reshuffled and the new conditions clarified with each and every client. Fulfilling the requirements of MiFID 2 also involved significant costs. Regularly changing EU or domestic regulations also require adjustments.

Charges and fees should be more transparent for clients. As a consequence, private banking management must work on “sharpening” value proposition and develop the areas supporting their distinctive features (McKinsey & Company, 2016). Furthermore, psychological aspects should be considered. “Wealth managers respond to the attitude and behaviour of HNWI¹¹ by shifting the focus from investment products and transactions to holistic investment and goal-based wealth management” (Li-Huang, 2017:1).

A specific level of uncertainty is always present on financial markets. Risks and uncertainties have become higher in various investment segments.¹² Parallel with it – as Janssen-Kramer (2015) stresses – even potential clients have an increasing number of questions regarding expected risks, returns and costs. Private bankers should meet those needs. They need to figure out how to offer clients investment strategies producing attractive returns, while minimising market and investment risk, and still fulfil the requirements of MiFID 2.

Last but not least, due to higher expectations and the need for “human touch”, private bankers must have extensive knowledge. At the same time, the recruitment, training and talent management of advisors has become a real challenge (McKinsey & Company, 2016). As a result, private banking management is open for solutions providing further room to increase the number of PB accounts per advisor.

Regarding the above topics, one should emphasise that the challenges are relevant to the banking sector in general, or more specifically, to the services related to

10 For more on the topic and the related challenges, see FILIPPI-WRIGHT (2018). For relevant data on digitisation, see World Bank (2018).

11 HNWI is the abbreviation for high-net-worth individuals. HNWI^s own the amount of financial assets that make them eligible for PB services.

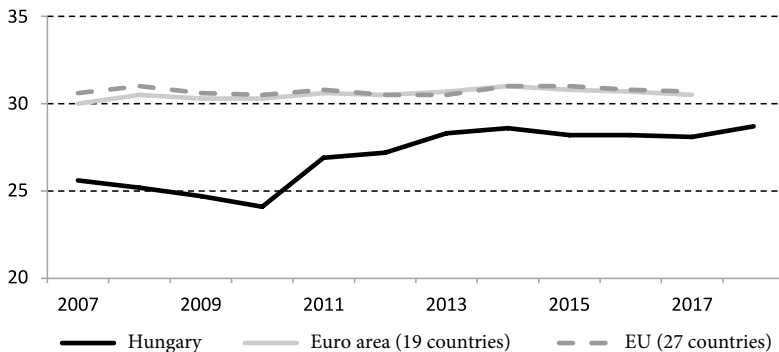
12 As an indicator, see the VIX index, dubbed as the “fear index” for financial markets.

financial investment. In private banking, the challenges require special attention due to the importance of investment advisory services. Nevertheless, due to the issue of efficiency, the topics are relevant and linked to the clientele's size, thus assessing the room for PB growth remains a core issue.

3 RELEVANT MESSAGES FOR HUNGARIAN PRIVATE BANKING

In this chapter we provide information on the tendencies of inequality and wealth concentration, which are relevant for estimating the market potential of private banking. They can also give an indication of both the potential number of PB clients and their AuM. First, we use a simple and widely used indicator, the Gini coefficient,¹³ to represent inequality. Though there is a debate about its usefulness it can be used as a simple indicator for our purposes. *Figure 2* compares the data for Hungary, the euro area and the European Union (EU).

Figure 2
Gini coefficient of equivalised disposable income (EU-SILC survey, %)



Note: The latest available data for the euro area and the EU refer to 2017.

Source: Eurostat

Figure 2 underlines the fact that the Gini coefficient of the euro area and the EU went hand in hand during the period reviewed, and could be considered quite stable, especially when comparing it to the Hungarian figures. In Hungary, inequality is below the level of the euro area or the EU. The 2008 crisis clearly brought a downturn, which then reversed, and the indicator increased from 2010. The pro-

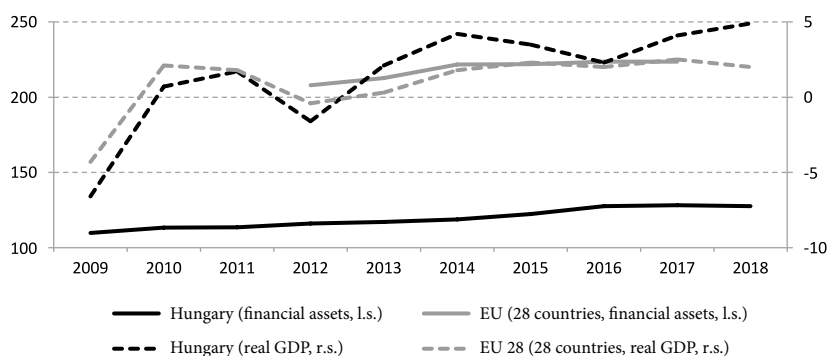
¹³ The value of 0 or 0% expresses perfect equality (everyone has the same income or wealth in the society), while 1 or 100% reflects the maximum inequality (one person owns all of the income or wealth).

cess has been slowly converging to the EU average. If the process continues, you can expect higher wealth concentration in the richest social groups. The latter statement can be supported by various studies and statistics showing that increasing inequality is not only a result of the poorest becoming poorer, but the wealthiest getting wealthier (see *Figure 5*).¹⁴

Figure 3 compares the real GDP growth rates of Hungary and the EU and the ratios of the households' financial assets to nominal GDP. The former provides information on the real convergence process, while the latter reflects the weight of financial assets compared to the GDP. The percentage rate indicates a great gap between the Hungarian and the EU ratios. If there is reason to expect convergence in this aspect, financial assets have a significant growth potential. Despite of that, in recent years the Hungarian and the EU time series have failed to converge. On the other hand, in both cases the ratios show an upward tendency, which means that the growth of households' financial assets outperformed real GDP growth. Those tendencies show increasing possibilities for the whole financial sector.

Figure 3

Total financial assets of households* and real GDP growth rate**



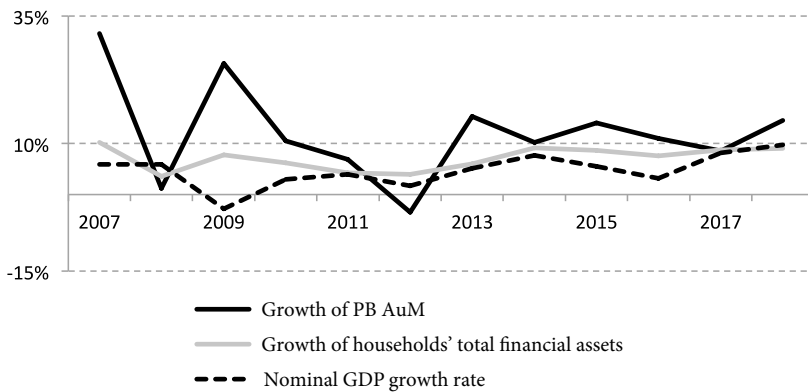
Notes: * %, relative to GDP, left hand scale: l.s.; ** % change on previous year, right hand scale: r.s. Statistics for households' financial assets for the "EU 28" are currently available for the period between 2012 and 2017.

Source: Eurostat

¹⁴ To support this statement and to read a broader study on inequality and its drivers in Hungary from the socialist era, see, for example, MAVRIDIS–MOSBERGER (2017). For further studies, see TÓTH–SZELÉNYI (2018) or MNB (2019). It is noteworthy that growing inequality is being reported also on a global level, though the background differs among countries. For an overview and political implications, see Stiglitz (2012). Growing private banking potential is also supported by Milanovic's so-called "elephant chart" (MILANOVIC, 2012).

Focusing on Hungary, *Figure 4* compiles three relevant indicators leading to the following conclusions. First, it is worth underlining the volatility of financial wealth, which can be explained by the economy's booms and busts, and the re-valuation of asset classes. The volatility of AuM managed by the PB market is larger compared to the total households' financial wealth. A further key point is that the pace of financial wealth growth is generally well above the increase of the relevant macroeconomic indicators, namely real GDP and nominal GDP. *Figure 4* uses the latter, as it is more relevant for the valuation of financial wealth. Real GDP has already been illustrated in *Figure 3*. Last but not least, certain financial wealth accumulation can be spotted even at the level of households in general.

Figure 4
Relevant growth figures



Note: The growth rates have been calculated by the author from the statistics listed.

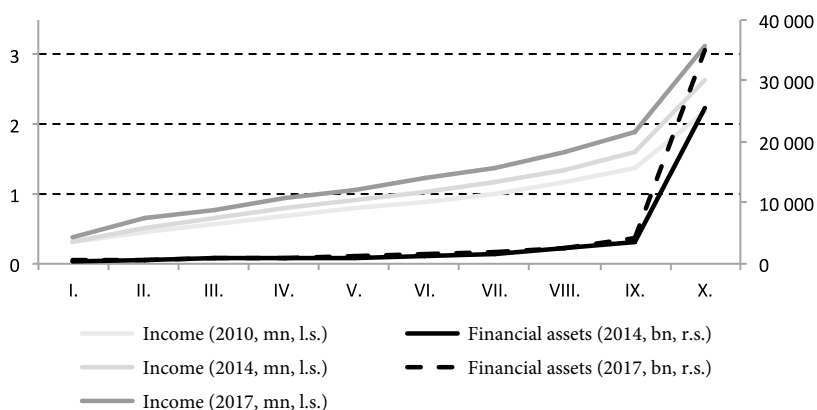
Source: KSH Statistics, MNB Statistics, Portfolio.hu: Private banking, own calculations.

We have already touched upon both terms, but one should clarify the relevant difference between the top decile from the aspect of income and financial wealth. This is important, because private banks normally use segmentation limits based on the latter. Starting with a significant characteristic of the group regarding financial wealth – as shown also by MNB (2017) – the top decile typically has interest in one or more firms. In connection with corporate investments, the respective wealth has typically been accumulated over several years. In contrast, the top decile in terms of income is less characterised by corporate ownership. Furthermore, those households can be “newcomers” to the elite club and might only become potential PB clients in the future. Thus, the two groups' composition is not completely the same. Nevertheless, it is the top 10% in terms of financial wealth and income that have the largest share of financial assets in the society. It

can be highlighted that financial wealth is even more concentrated than income in the top decile, showing greater inequality from this aspect.¹⁵

Figure 5 illustrates income and financial wealth by deciles. A few conclusions should be drawn. First, it is clear if you compare the curves for income and financial wealth the concentration in the top decile is much greater for the latter in the period reviewed. Second, the curve of income levels is less steep but there is a rise in the higher deciles, which is good news for the affluent and private banking services. It is also important to see that between 2010 and 2017 higher incomes concentrated in the higher deciles. The relevant curves have opened up and become steeper over time, which supports the statement of a slightly growing inequality. All in all, looking at the figures of Figure 5, the signs indicating inequality and the concentration of financial assets become marked.

Figure 5
Income and total financial assets figures by deciles (HUF)



Note: Data on incomes refer to annual, total, per capita net incomes. Statistics on financial assets refer to household deciles by total wealth in 2014 and by net worth in 2017.

Source: KSH Statistics, MNB (2017:68), MNB (2019:7).

¹⁵ For relevant data, see MNB (2017:48–49). Within this study one can find statistics on the age structure and the regional differences. The former underlines the importance of both inheritance management and the required focus on the younger generation. The latter shows wealth concentration in Budapest and its surroundings. Furthermore, it is noteworthy that almost all (potential) PB clients are already clients of the financial sector, thus the financial inclusion is almost complete. As for the composition of assets, a diversified financial saving structure is typical for the top segment. One can also notice that financial assets are much more concentrated in the society than real assets. The latter facts underpin the need for wealth management services, while private bankers have a pivotal role in the “education” of clients. (Related to the latter, HUNG et al. (2009) provides an overview on the importance of financial literacy.)

To sum up, greater wealth concentration in the top 10% implies that a larger group reaches various PB segmentation limits, implying increasing potential for PB client numbers. From another aspect, one can state that a great amount of financial wealth has been concentrated in the top 400 thousand households throughout the years, leading to higher potential PB AuM. Parallel with the accumulation of financial wealth, there is also a concentration of income. In some cases, the two groups – the top decile of financial wealth and income – overlap, but there are “newcomers” as well who embody the future target for private banking. One can conclude that in case the demonstrated tendencies continue, the potential size of the PB clientele may expand, both in terms of client numbers and AuM.

4 HOW MUCH ROOM IS THERE FOR PRIVATE BANKING?

4.1 Methodological concerns

It is an interesting and relevant question in most countries, how client numbers and the AuM of the potential private banking segment can be estimated. But why is it so difficult to estimate the private banking sector’s target group? Here are some relevant factors.

- In Hungary, for instance, there are no official statistics available on the financial wealth distribution within the top decile or the top percentile.
- *Westermeyer-Grabka* (2015) list a handful of statistical distortions when making an attempt to measure the number and wealth of the richest individuals. For example, in the case of relying on current income, one should be aware that the wealthiest individuals’ financial assets are far more inequally distributed than their current income. Our paper shows that it is not only valid internationally but also in Hungary. Thus tax-based statistics fail to cover the potential numbers of PB clients or AuM.
- Continuing with tax-based statistics, their use can be questioned for two main reasons. One is that they are part of an administrative process and are not tailored to our needs. Second, rich people particularly have a strong incentive to understate their taxable incomes (*Atkinson-Piketty*, 2010). One should take into consideration the size of the grey or black economy, which would distort any official statistics. Even the World Bank (2016) states in its report that the incomes of top-income households are underreported.
- An extreme form of tax dodging is leaving the country (*Atkinson-Piketty*, 2010). Exact estimates cannot be made for the amount of financial assets that are held abroad, for instance, in offshore tax havens. A starting point for “capital flight” can be the unexplained residual capital flows – net errors and

omissions – available in the balance of payments statistics (Atkinson–Piketty, 2010). But this leads merely to estimates.¹⁶ It is clear that there is a target group also in Hungary that prefers keeping (part of) their savings abroad.

- The statistics on private banking can help analyse the relevant tendencies. In Hungary, statistical data are available for the actual private banking sector – namely the service providers’ client numbers and the AuM. But comparing these numbers can be problematic for several reasons. First, private banks use different segmentation limits and even change them occasionally. Second, particular numbers might change as a result of mergers or acquisitions. Third, it is well known that a large part of these reported numbers covers private banking clients who are under the segmentation limit but still enjoy private banking services. Finally, some clients diversify their savings among two or more financial institutions, thus distorting client numbers.
- As a general problem, potential private banking clients hold their wealth in various instruments and occasionally make shifts within their portfolios. There are a number of wealthy individuals who own most of their wealth in real assets. For instance, they own valuable family firms or real estate. Are they potential private banking clients? How to assess existing clients who sell their financial instruments to buy real estate instead? Based on the limited statistics available, significant wealth has been channelled to real estate investments in Hungary in the last couple of years, indicating a clear upward tendency.¹⁷ As for PB, those who purchase real assets may not even remain private banking clients (or their PB AuM decrease), still they can be treated as potential targets for business lines targeting the high segment.¹⁸ The dynamics lead to greater complexity.

16 In the case of Hungary, via the introduction of a special bank account – offering preferential tax conditions – aiming to channel home offshore moneys, only 2,141 clients transferred HUF 155.6 billion back between 2014 and 2016 (Portfolio.hu: Private banking).

17 To see the overall growth of the real estate market, see KSH 2018b. In order to get a hint of the proportion of real estate purchased for investment purposes, see Duna House Barométer. It is noteworthy that the number of flats purchased by households over the value of HUF 50 million and HUF 100 million increased from 697 and 68 to 3,118 and 359 respectively between 2011 and 2017 (KSH, 2018a).

18 To reflect the international asset structure, in 2017 the wealth of billionaires (individuals owning wealth over USD 1 billion) had the following composition: 33.3% private holdings, 41.5% public holdings, 22.9% liquid assets (cash), 2.3% real estate and luxury assets (Wealth-X, 2018:19).

4.2 Applied methodology

Taking into consideration all the above-mentioned concerns and distortions, we build our estimation on a specific dataset by the Central Bank of Hungary (MNB). It is a part of the European Central Bank's (ECB) Household Finance and Consumption Survey (HFCS), but it carries post-survey adjustments.¹⁹ Our estimates are based on the financial assets figures from 2017 by deciles by net worth.²⁰ We assume that creating deciles by net worth is appropriate for our calculations. The 2014 statistics do include the amount of financial assets in the top 1% (MNB, 2017:68). They are important data as they help estimate the distribution within the top decile, which is relevant for private banking. On the other hand, the 2017 data on financial wealth refer to deciles only, while the top 1% is reflected merely in terms of the net worth of households (MNB, 2019:11).²¹ Thus we calculate the financial assets for the top 1% in 2017 by taking the respective data from 2014 and multiplying them by the growth rate for the top decile during the period reviewed. Based on the trend of growing inequality, this leads to a conservative valuation for the top 1% in 2017. The distribution or the median for the top decile's financial wealth is not available, although they would greatly serve our purposes. Thus, as a second-best option, the data on financial wealth are divided by the number of households²² to calculate the average financial wealth in the top decile. The average reached HUF 88 million in 2017 (see *Table 2*). In the same year, the non-weighted average segmentation limit on the PB market amounted to HUF 79 million (*Portfolio.hu*, 2018). We drop the lowest and highest values to avoid their distorting effects, and so we get a market average of HUF 68 million.²³ For the sake of simplicity, we use this latter number as the theoretical segmentation limit. The number is based on the different segmentation policies applied on the private banking market, but here it is used as a fixed dividing line. The two numbers – HUF 68 million and HUF 88 million – reflect two different approaches, but they signal where our

19 For more information on the methodology see MNB (2019).

20 For 2014, MNB grouped the households by total wealth, but this methodological shift does not cause significant difference, so the results of the two years are comparable.

21 As the latter also includes real assets beside financial assets, the data could be misleading for the private banking potential. For relevant values, see MNB (2019) or MNB (2017).

22 We use the statistics published by MNB (2019).

23 As it has been demonstrated in the footnote for the average in 2018, the weighted average cannot be calculated, due to OTP Bank's overall data. Again, in case we assume that OTP uses the lower segmentation limit (HUF 30 million) only, the weighted market average is HUF 67 million, while in case we calculate with the higher segmentation limit (HUF 80 million), the weighted market average increases to HUF 85 million. As a result of rounding and the lack of structural changes, the two values are the same as in 2018.

theoretical segmentation limit stands compared to the top decile's average. Comparing averages with segmentation limits offers the possibility of further assumptions. Namely, we can assume that in case a group's average value is well over our yardstick a large part of the group fulfils our criteria. Based on this logic, average values will be compared with the theoretically set segmentation limit.

Due to the lack of data, it is not possible to set a reliable function (see *Appendix*). Still, to get a better view on the distribution, the former chapters presented various time series on inequality and financial wealth. Based on the income and financial wealth statistics by deciles, we can state that the data are not normally distributed but skewed to the right. *Figure 5* shows it by total financial wealth amounts by deciles, while *Figure 6* in the *Appendix* shows it via the average financial wealth in the specific deciles.

Finally, we set a range for the potential PB clientele as the exact distribution is not known. It refers to both potential client numbers and the amount of their financial assets. As a conservative estimation, we rely on the data of the top 1%, as their average financial wealth is seven times that of our theoretical segmentation limit, thus assuming that all households in the top 1% own financial assets over HUF 68 million. For setting a range, we estimate the values for the top 2%. The relevant statistics provide the exact number of households. In order to estimate the size of the financial assets, we add one ninth of the value of the top 2-10% to the sum of the top percentile's financial assets. This final step assumes linearity. Based on the concentration of financial wealth and the applied methodology, the estimated range will cover the private banking clientele's potential size.

We believe this methodology serves our purposes the best. It is a new approach, which provides an approximate and simplified estimate. However, because of the above simplifications, the exact results must be treated with caution. They are merely estimates built on data – published by MNB (2017; 2019) – that are estimates themselves. Although the exact numbers can be a source of debate, the paper's primary question can firmly be answered. Furthermore, in case MNB's primary data are revised or new data are published, the methodology can be treated as reproducible. Finally, due to various business intentions, the theoretically set segmentation limit can be altered.

4.3 Findings

As discussed within the previous subsection on methodology, the starting point of our estimation and *Table 2* is the HFCS-based data by MNB on financial assets by deciles. The last row in *Table 2* helps to support the growing wealth concentration in the Hungarian society, which leads to growing room for private banking.

Table 2
Financial assets by groups

	2017				2014			
	IX. decile	X. decile	Top 2–10%	Top 1%	IX. decile	X. decile	Top 2–10%	Top 1%
Financial assets (HUF, million)	4 334 000	35 071 000	15 533 134	19 537 866	3 680 000	25 484 000	11 287 000	14 197 000
Number of households	400 422	400 422	360 380	40 042	412 837	412 837	371 553	41 284
Average financial assets (Groups' financial assets per the number of households in the group, HUF, million)	10.82	87.59	43.10	487.93	8.91	61.73	30.38	343.89
Share of financial assets (Groups' financial assets per the total amount of financial assets)	8.72%	70.56%	31.25%	39.31%	9.52%	65.90%	29.19%	36.71%

Source: MNB (2017:68), MNB (2019:7–11), own calculations.

As it is illustrated in *Table 2*, in 2017 the top decile – 400 thousand households – owned 71% of the total financial wealth or HUF 35,071 billion. Thus, we can calculate that the average amount for the decile was HUF 88 million, which is above the segmentation limits of most private banks. According to the applied methodology's conservative estimation, the top 1% owned financial assets in the amount of HUF 19,538 billion, which gives us an average of HUF 488 million for 40 thousand households. It indicates that 360 thousand households in the top 2-10% owned “merely” HUF 15,533 billion, giving an average of HUF 43 million. That is an indication of the level of concentration. Further information on the distribution within the top 10% is not available; thus, other limits cannot be set. The number of households in the top 2% is double that of the top 1%. According to the presented methodology, their estimated financial asset value is HUF 21,264 billion. Thus, the top 2%'s average financial wealth is HUF 266 million, which is still four times the theoretical segmentation limit of HUF 68 million.

Table 3
Estimation for PB potential and actual PB indicators (2017)

	Estimated top 1%	Estimated top 2%	PB indicators
(Potential) AuM (HUF, million)	19 537 866	21 263 770	4 240 000
Number of (potential) households	40 042	80 084	41 255
Average financial assets (HUF, million)	488	266	103

Note: The values of the second and third columns stem from the calculations described above. The PB indicators in the fourth column are from *Portfolio.hu* (2018) showing the PB AuM and PB client numbers in 2017. Average financial assets have been calculated by dividing the amount of financial assets by the number of households or client numbers in the specific groups.

Source: KSH Statistics, MNB (2017:68), MNB (2019:7), *Portfolio.hu* (2018), own calculations.

For a better overview, the cornerstones and the existing PB statistics for 2017 are summarised in Table 3. Based on the above demonstrated calculations, we provide an estimated range for potential PB client numbers (40-80 thousand) and AuM (HUF 19,538-21,264 billion) for 2017. It goes without saying that the specific numbers depend on the level of the chosen segmentation limit and the assumed distribution. With the help of Table 3, we highlight our main messages in the concluding chapter.

5 CONCLUSIONS

This paper is striving to fill a gap in the academic literature relating to the private banking business line and its growth potential in Hungary. The topic of inequality is a key point for the analysis. In Hungary, inequality has clearly risen after the fall of the socialist regime resulting in the accumulation of financial wealth in the top 10%. In the previous ten years certain volatility has been recorded, which could be related to the general economic booms and busts. Since 2013, inequality has slightly stabilised, though a slight upward trend remains visible. This leaves room for the acquisition of private banking clients of “fresh moneys”.

During the analysis of the current Hungarian PB market we could outline that 9% of the households’ total financial wealth has already been covered by PB service providers. The paper gives a brief overview on the market’s diversity. The growth of AuM and the AuM divided by the number of accounts reflects a clear financial

wealth concentration in the PB segment. Nevertheless, the lower growth of the number of PB accounts might indicate certain “saturation”.

The primary goal of the paper has been to estimate a range for the private banking business line’s potential size in terms of client numbers and AuM in Hungary. A theoretical segmentation limit has been set at HUF 68 million reflecting numbers from 2017. Due to the lack of information regarding the distribution or the median of the households’ top decile, only a wide range could be specified for both variables. Unfortunately, it is not possible to set a reliable function on the available data (see *Appendix*) and cut it at the specific limit. Thus, we followed a different methodology based on a unique dataset created by MNB (2017 and 2019), which incorporated various assumptions and conservative estimations. Relying on our findings, we can state the following for 2017:

- The number of households owning financial assets over our theoretical segmentation limit was in the wide range of 40 thousand to 80 thousand.
- However, based on the strong concentration seen in the top 10% and specifically in the top 1%, one can assume that the real value was closer to the lower limit of the range.
- Turning to the estimated financial wealth exceeding the segmentation limit, the amount was between HUF 19,538 billion and HUF 21,264 billion.

Again, due to the assumed distribution, the real number could have been closer to the lower figure. In case the described tendencies remain, the figures will certainly increase for two reasons. First, the overall growth of households’ financial wealth has been positive. Parallel with this, a slightly growing concentration has been recorded in the top decile in terms of incomes and financial wealth.

Even if we stick to 2017 with the above-mentioned ranges and compare them to private banking statistics – 41,255 clients with HUF 4,240 billion AuM – it is clear that there is ample room for further growth (see *Table 3*). The statistics show a stunning amount of financial wealth and moderate client numbers that have not been acquired by the PB business line. This message is still valid if we emphasise that the numbers are merely rough estimates based on a number of assumptions. When checking the PB market statistics for 2018 (see *Chapter 2*) the key message still holds.

In contrast to the potential growth of AuM, in terms of the number of PB clients, there might be some thousands of non-acquired households, but the room for further growth seems more moderate. However, the target base widens further when we take into account four factors. The first two are related to the PB statistics published, while the last two stems from our applied methodology. First, the current PB statistics do not reflect that some clients own more than one private banking account. Second, they do not show that some PB clients are below the

respective segmentation limits, thus the “real” PB client number is expected to be lower. Third, the household statistics and our methodology did not take into consideration that more than one individual can be eligible for a PB account in the same household.²⁴ Finally, the potential client base can be widened by lowering the applied theoretical segmentation limit. The four factors increase the potential gap between the number of “real” PB clients and the estimated target range.

There can be various explanations for the number of “uncovered” clients and their financial assets. One is the unreliability of the available statistics on the top segment. A further factor can be the high share of cash used in the Hungarian economy,²⁵ which can hardly be detected. Tracing cash is difficult, and the use of cash can be linked to the grey or black economy. Furthermore, significant sums of savings are assumed to be held offshore. Continuing the list of potential reasons, many households may prefer remaining in the mass retail or affluent segment they have got used to and are unwilling to be channelled to PB services. Some may choose other financial institutions, like, for instance, non-PB insurance companies. The list can be continued but because of the difficulties of a thorough examination of the wealthiest group discussed, one can only make assumptions and name the potential reasons.

To sum up, we can conclude that there is ample room for acquiring new PB clients, particularly in terms of financial wealth. One might challenge the methodology and estimates of this paper, but the primary role has been to see if there is further growth potential for PB and to give an overview on current private banking issues. The key message is not expected to change unless a radical restructuring occurs on the financial market. Furthermore, based on the overviewed tendencies of financial wealth concentration and inequality, the pool for private banking might even grow in the upcoming years.

(Cut-off date of data collection: 01.08.2019)

24 Related to the number of bank accounts, one should stress that 52% of the top decile is “more-than-two-person household” (MNB, 2019:5). To put it another way, in 2017 the average number of household members in the top decile was 1.8 (KSH Statistics). It is an implication that the number of potential PB accounts is expected to be somewhat higher when estimating the number of potential PB households. We did not estimate that difference in this paper.

25 In 2018, households held HUF 4,792 billion in cash (reflecting a 33% increase since the end of 2015) and HUF 9,006 billion in deposits, while HUF 731 billion was officially deposited abroad (MNB: Statistics). The cash per GDP ratio shows a clear upward trend since 2005, reaching 13% by 2016 (BELHÁZYNÉ ILLÉS–LESZKÓ, 2017:3). For certain explanations behind this tendency, see BELHÁZYNÉ ILLÉS–LESZKÓ (2017). The numbers refer to the total population, but the top 10% households with large amounts of cash can be seen as “fresh money” targets for the PB business sector. As for the wealthy households holding high deposit ratios, they might require further diversification and wealth management services.

APPENDIX

Using a statistical software's curve fitting tool we tried to determine the most appropriate function by including the ten deciles' and the top percentile's average financial wealth amount. We gained the following function, which includes two exponential components:

$$f(x) = a (\exp (bx)) + c (\exp (dx))$$

The coefficients with 95% confidence bounds are the following:

$$a = 3.9560 (3.3200 - 4.5910)$$

$$b = 0.9596 (0.7428 - 1.1760)$$

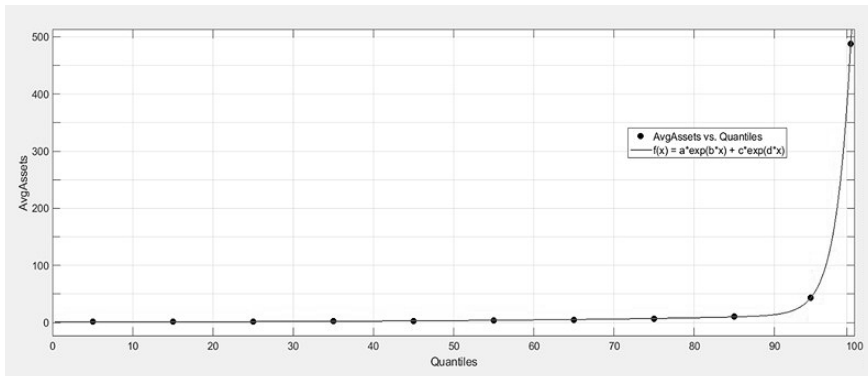
$$c = 7.959e-09 (1.702e-09 - 1.422e-08)$$

$$d = 17.7900 (17.2300 - 18.3500)$$

The R -square is 1. The dependent variable (or the vertical axis) is the amount of average financial assets in HUF million, while the independent variable (or the horizontal axis) represents the quantiles (see *Figure 6*).

Figure 6

Averages of financial assets by quantiles (HUF, million, 2017)



Source: MNB (2017:68), MNB (2019:7), own calculations.

One can conclude that certain coefficients in the function are too extreme and there is a strong possibility for errors. Unfortunately – due to the lack of data – the precise distribution within the top decile cannot be determined. Due to those shortcomings, we reject using this function for our purposes.

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