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Financial Products in Portugal¹

Abstract: The offerings of financial products to investors have evolved considerably over the last decades.

This study was undertaken to understand the importance of financial products in Portugal for banks and private clients. Different financial products can provide to banks an important role on their revenues and liquidity. For clients allows to invest their savings according the risk, complexity and potential return they pretend be exposed. Financial products can be divided into four groups: deposits, investment funds, securities, and insurance banking. The six largest banks with Portuguese headquarters were identified based on an analysis of net asset value, and the products offered were analyzed. It was found that on an overall basis, the offerings of financial products available in banks are rather diverse and, at the same time, uniform. It was also noted that investment decisions are dependent on investors and that there are financial innovations that attract differentiated savings.

Keywords: Banks, Financial Development, Financial Intermediation, Financial Markets, Savings Investment.

IEL Classification: O160

Introduction

This study contributes to the characterization of financial products in Portugal that are offered to private clients, describing the investing options and their dynamics, diver* School of Business and Economics and CEEAplA, Universidade dos Açores, Ponta Delgada, Portugal

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sity, risk, and complexity. It provides specific advantages of financial products to banks and private clients. Two factors motivated the study. First, Portugal's Financial Assistance Program EU/IFM, negotiated between Portugal and the European Commission, the European Central Bank (ECB), and the International Monetary Fund in May 2011, mandated that the largest banks would achieve a transformation ratio (defined as the ratio between credit and deposits) equal to or less than 120%. Fabris (2018) revealed the importance of these policies, within intervention of central banks, in order to provide the necessary solvency and liquidity to banks during a crisis. Second, after analyzing several papers, we identified only a few studies of specific financial products, including Tavares, Pacheco & Almeida (2015), Facó, Diniz & Csillag (2009), Borges (2010), Alves (2010), Ramos (2008), and Costa (2011).

The neoclassical vision supported a passive economic role for banking. According to Fama (1980), there is no added value in banking. Klein (1971) argues that the main goal of banks is to maximize profits, increasing credit until the marginal cost of their assets is equal the marginal cost of their liabilities. According to Tobin's new vision (1963), banks prefer to minimize the costs of illiquidity, and maximize profitability.

Keynes (1936) reveals that banks loan money they do not have, which generates deposits. According to Keynes's vision, the interest rate represents the reward for loss of liquidity. There are three kinds of investments available. The largest amount of net investments is in the monetary market, followed by third-party titles and loans to clients, which are the most profitable and have the lowest liquidity. When expectations are optimistic, banks will prefer profitability. On the other hand, when expectations are negative, banks will prefer liquidity. Keynes argues that banks have an elastic response to loan demand, as long as the increase is profitable.

Minsky (1986) shows that financial innovations appeared beginning in the 1960s, with new products or reinvention of the old ones. These new characteristics became a distinguishing factor in banking competition, and are described as "financial engineering" by Quelhas (1996). Fabris & Luburić (2016) presented the growing of complexity of financial products that justify the need to increase financial literacy in youth generation.

According to Minsky (1992), financial contracts exchange assurance for uncertainty. From a conservative point of view, the focus is on future income. In contrast, from a speculative vision, more importance is given to the collateral. The author shows that banks have an active role in generating funds to increase needed profit and liquidity.

Methodology

The primary goal of this study is to analyze the financial products available from the largest banks with Portuguese headquarters, consistent with previous studies such as Gautam (2012). The study focuses on the banks in the Portuguese Banks Association (APB), who represented 94% of the net asset value of banks in Portugal in 2012. Only 16 banks have Portuguese headquarters.

Concentrating on offer consistency of diversified financial products, Barradas, Lagoa & Leão (2011), selected six banks with the largest net asset values, representing 87.12% of the total net asset value. This concentration is also observed in other countries like Albania, as indicated by Shijaku (2017): "the 6 largest banks (systemic banks as defined by the Bank of Albania) hold nearly 80% of the market".

The banks analyzed in this study are Banco BPI, Millennium BCP, Novo Banco, Santander Totta, Caixa Geral de Depósitos (CGD) and Montepio. These banks, as we know them, are the result of several political, social, and economic events, as evidenced by Mendes (2002).

This study focused on the offerings for private clients, according to the online offerings of these six banks, from September 2016 to March 2017. It considered the group of private clients and corporate clients, according to banks websites and the document of Competition Authority created on the Public Offer for Acquisition from Bank BPI to Bank BCP, in 2006.

This study follows previous analyses, such as Allen & Gale (1994) and Merton (1995), in identifying the evident division, characterization, and grouping of various products. Despite the different terms used by these authors and the National Plan of Financial Literacy, the products can be divided into four groups: deposits, investment funds, securities, and insurance banking.

For this study, the Comissão de Mercado de Valores Mobiliários (CMVM) regulation was analyzed, with special attention to the MiFID—Markets in Financial Instruments Directive. The MiFID allows us to classify investors as eligible counterparties (who are the least protected), professional clients, and retail clients (the most protected.) These retail clients are classified according their knowledge, studies, estate, and goals as conservative, balanced, increasing, and dynamic. Financial products can also be classified as complex products and non-complex products, according to Regulation nº 2/2012 from the CMVM.

Deposits

Deposits have their capital guaranteed by the bank, and their conditions are expressed in the Standard Information Sheet. Since the economic crisis in 2011, this financial product has attained a distinct importance for banks. To accomplish the transformation ratio goal of equal to or less than 120% set by the Financial Assistance Program EU/IFM, banks needed to decrease credit and increase the amount of their deposits.

In financial crises, investors search for bank deposits and government treasuries—assets that are safer investments—as presented by Mora (2010). In this scenario, banks can provide investors with several options that will allow them to earn interest on savings accounts for a fixed period, with a previous note before raising money or without the option of withdrawing it before maturity. These savings accounts can be created in currencies other than the euro or adjusted to the Portuguese law, benefiting from special conditions.

It is important to identify the role of deposits in the money supply. "Bank deposits are a primary tool for investment and without them businesses would not be able to access funds from individuals at all" as referred by Lacoma (2011). These transfers of money from those that have it to those that need it support the passive behavior of banking presented by the neoclassical view.

| Table | 1: Depo | osits off | ered b | y each | bank |
|-------|---------|-----------|--------|--------|------|
| | | | | | |

| | BPI | ВСР | Novo Banco | Santander Totta | CGGD | Montepio |
|---------------------------------|-----|-----|---------------|--------------------|------|----------|
| Order deposits | Χ | Х | Χ | X | Χ | Χ |
| Deposits with notice | | | | | | |
| Time deposits | Χ | Χ | Χ | Χ | Χ | Χ |
| Non-movable saving deposits | | | Χ | | | Χ |
| Accounts in foreign currency | Χ | Χ | Χ | Χ | Χ | Χ |
| Savings account co ndominium | Χ | | | | Χ | |
| Savings account housing | Χ | Χ | Χ | Χ | Χ | Χ |
| Retirement savings account | Χ | Χ | Χ | Χ | Χ | Χ |
| Migrant savings account | Χ | Χ | | | Χ | Χ |
| Other savings accounts | Χ | Χ | Χ | Χ | Χ | Χ |

Deposits are protected by the Deposit Guarantee Scheme (DGS). The main goal is to protect resident and non-resident retail clients in case the bank is unable to refund deposits. The Depositor Information Sheet establishes the limit of this DGS-100.000 \in euros of the global balance for each client and bank.

Table 1 presents the deposits offered on each of the relevant banks' websites.

Investment funds

Investment funds are financial instruments that allow diversification of investments. Fund conditions are described in a Simplified Prospectus. Investments are made in units and the fund's fluctuations in value determine its gains or losses.

This financial instrument is quite relevant to today's investors and to banks. From a client's perspective, investment funds allow diversification of investments, as each fund has a stake in different assets worldwide, such as stocks, securities, or deposits. Moreover, the exposure to risk depends on the nature of the assets. This diversification, according to the Swedish Investment Fund Association, allows investors to participate in global growth and to contribute to this growth with their savings.

Investment funds may be seen as long-term investments for retirement. Today, investors can identify specific retirement savings funds that complement the social security retirement plan, have different fiscal policies, and invest in short-term securities.

From the banks' perspective, management funds represent a priority, and have a major role in bank activities. Marriage (2015) argues that "asset management divisions at global banks now contribute a much higher proportion to group profits and revenues, and the expectation is that the importance of their investment units will continue to grow".

Marriage (2015) noted that, in 2015, seven of the best-selling fund companies in Europe were bank owned. With changes in regulatory requirements after the financial crises, banks needed to hold more capital for their balances. This investment business represents an alternative way to invest in an activity with low capital requirements, but with stable fee income and with the capacity to expand to emerging economies.

Independent of the fund classification according asset nature, location, or earnings distribution, a bank's own investment fund company may create pressure for clients to invest in its internal funds, instead of offeri ngs that may be more suitable for clients.

Based on the nature of their assets, as presented in Table 2, funds are available on the websites of the six banks in this study.

Table 2: Investment funds supplied by each bank

| | BPI | BCP ² | Novo Banco | Santander Totta | CGD | Montepio |
|-------------------------|-----|------------------|---------------|--------------------|-----|----------|
| Real estate funds | Χ | | Χ | | | Χ |
| Money market funds | Χ | Χ | Χ | Χ | Χ | Χ |
| Cash funds | | | | | | |
| Stock funds | Χ | Χ | Χ | Χ | Χ | Χ |
| Bond funds | Χ | Χ | Χ | Χ | Χ | |
| Mixed funds | | Χ | Χ | Χ | Χ | Χ |
| Funds of funds | Χ | Χ | | Χ | Χ | Χ |
| Retirement saving funds | Χ | | Χ | Χ | | Χ |
| Stock savings funds | Χ | | Χ | | Χ | Χ |
| Guaranteed funds | | | | | | |
| Grouping of funds | Χ | | | Χ | Χ | |

² BCP only offers investment funds from external companies to the bank.

Securities

Banks allow private clients to invest in several securities, acting as financial intermediaries. This study presents those described by the CMVM and Associação de Empresas Emitentes de Valores Cotados em Mercado (AEM).

Cetorelli, Mandel & Mollineaux (2012) studied the evolution and challenges of intermediation by banks. They noted the remarkable capacity of banks to adapt to constant changes in intermediation, facilitating the supply and demand of securities. This constant learning can be seen by observing banks. The authors noted the growth in noninterest income of commercial banks in the United States. This proves the growing importance of intermediation services to banks' results.

We can distinguish and group different securities according to their complexity. Although they are of different genres, the simplest securities are commercial paper and bonds, followed by participation certificates. More complex, but without any guarantee of capital, are stocks and their featured rights, while securities that depend on credit include credit linked notes, securitized fund units, caps, and swaps. Two combined products are referred to as dual deposits.

If an underlying asset is added, the complexity is increased. Examples include indexed deposits, as well as certificates, reverse certificates, mandatory convertible securities, reverse convertibles, warrants, futures, options, structured bonds and notes. There are also securities that result from a contract between two or more investors, like contracts for differences. Exchange traded funds are different from the previously mentioned underlying asset securities because their main goal is to replicate an index or investment strategy.

The Investor Compensation System (ICS), under the responsibility of the CMVM, was created to guarantee the restitution or refund of financial instruments or cash up to the limit of 25,000 euros per retail client, according to their share of the account, in case the financial institution cannot provide the funds.

Table 3 presents the products described that are included in the website offerings of all six banks.

Table 3: Securities offered by each bank

| | BPI | ВСР | Novo Banco | Santander Totta | CGD | Montepio |
|-------------------------------------|-----|-----|---------------|--------------------|-----|----------|
| Bonds | Χ | X | | Χ | Χ | |
| Perpetual bonds | | | | | | |
| Subordinated Bonds | | | | | | |
| Commercial Paper | | | | | | |
| Stocks | Χ | Χ | Χ | Χ | Χ | Χ |
| Securitization Funds Units | | | | | | |
| Participation Certificates | | | | | Χ | |
| Warrants | | Χ | Χ | Χ | Χ | Χ |
| Featured Rights | | | | | Χ | |
| Certificates | | Χ | | | Χ | |
| Mandatory Convertible Securities | | | | | Χ | |
| Reverse Convertibles | | | | | Χ | |
| Credit Linked Notes | | | | | Χ | |
| Futures | | | | | Χ | Χ |
| Option | | | | | Χ | |
| Contracts for Differences | | | | | | |
| Dual Deposits | | | Χ | | | |
| Indexed Deposits | | | Χ | Χ | | |
| Caps e Swaps | | | | | | |
| Structured Bonds | Χ | | Χ | | | |
| Notes | | | | | | |
| Exchange Traded Funds | | | Χ | Χ | Χ | |

Insurance Banking

Insurance banking products, like savings plans and capitalization insurance, are managed by life insurance companies and are included in investment offerings of banks. Since the 1990s, synergies between insurance and banking have been better exploited; in 2004, banks had a 35% share of the total insurance market in Europe.

Casu, Girardone and Molyneaux (2006) revealed that insurance banking increased beginning in the 1980s, and there are several reasons for this growth. First, there is a cross-selling opportunity with these investment products. Second, as seen in investment funds and securities, banks search for investment

products that can guarantee non-interest income, which is especially important at a time of decreasing interest margins. The third reason is for risk diversification, allowing banks to present different options to their clients. This leads us to the final reason—they allow banks to be full service financial firms. Moreover, in Portugal these financial products have different tax treatment, as presented by Almeida (2017).

Table 4 presents the insurance banking products offered by banks, both with and without guaranteed capital.

Table 4: Insurance banking products offered by each bank

| | BPI | ВСР | Novo Banco | Santander Totta | CGD | Montepio |
|--|-----|-----|---------------|--------------------|-----|----------|
| PPR – guaranteed capital | Χ | Χ | Χ | Χ | Χ | Χ |
| PPR – United Link | Χ | Χ | | | | Χ |
| PPE – guaranteed capital | | | | | | |
| PPE – United Link | | | | | | |
| PPR/E – guaranteed capital | | | | | | |
| PPR/E – United Link | | | | | | |
| Capitalization Insurance – guaranteed capital | Χ | Χ | | | Χ | |
| Capitalization Insurance – United Link | Χ | | | | | |

Comparative Analyses

Using the information gathered, a quantitative analysis was performed to characterize and understand the different options available at these six banks. The results of the averages and standard deviations are presented in Table 5.

Table 5: Average and standard deviation of financial products by bank

| | Average | Standard Deviation |
|-------------------|---------|--------------------|
| Deposits | 7.33 | 0.82 |
| Investment Funds | 6.83 | 0.98 |
| Securities | 5.50 | 3.39 |
| Insurance Banking | 2.17 | 1.17 |

According to these results, we can see that deposit offerings are quite extensive and homogeneous, with the average offering consisting of 7 products from the 10 available.

In investment funds, banks offer more than half of the products available, and the distinction between banks remains very low.

The offerings of securities have a lower average and are more heterogeneous. Banks offered an average of 6 products out of the 22 available.

Insurance banking offerings average only 25%, making these products less conspicuous. However, like deposits and investment funds, the offerings are quite homogeneous.

Conclusion

The last decades, particularly the more recent years, have seen huge changes in the financial markets. These changes are the result of economic evolution, which created the need for banks to constantly adapt to new scenarios because of more demanding clients, the search for profitability, and new legal restrictions.

Over time, several authors have tried to explain different visions of the financial products offered. The different theories about banking intervention are complementary. Today we can verify the financial innovations presented by Minsky, but banks keep trying to increase profitability while maintaining their existing liquidity. Loans to clients have a significant impact on investors' savings but, at the same time, these clients are those who decide where to invest, so banks continue to have a passive role of transferring money from those who have it to those who need it (loans to clients).

We have also verified several legal changes made by the MiFID to protect retail clients with the correct adaptation of financial products and the protection systems of DGS and ISC.

We have shown and can conclude that there is diversity of financial products that we could characterize based on the various levels of risk and complexity, all with great importance to banks' activities. However, in the six banks studied, there are homogeneous offerings in deposits, investment funds, and insurance banking.

There is a vast offering of products with lower risk on banks' websites such as deposits, bonds, and banking insurance with guaranteed capital. In this context and with the need to reduce the transformation ratio with products that directly

affect banks' balances like deposits, it is understandable why the largest offerings are in products with guaranteed capital.

This study can help to understand how extensive the offer of financial products to private clients is in Portugal. It would be interesting to explore the offer of financial products to corporate clients and their contrasts.

References

- 1. Allen, F., and Gale, D. (1994). *Financial Innovation and Risk Sharing*, Massachusetts: The MIT Press.
- 2. Almeida, V. (2017). *Guia Fiscal 2017 Best Bank*. https://www.bancobest.pt/ptg/bestsite/best_docs/Best_Guia_fiscal.pdf (Accessed 20 February 2017)
- 3. Alves, A. (2010). Supply of automatic teller machines: an application of the aggregate supply with an correction factor. Master thesis, University of Azores, Ponta Delgada, Portugal.
- 4. Banco de Portugal (2011). *Portugal's Financial Assistance Program EU/IFM*. ISNB 978-989-678-093-7.
- Barradas, R., S. Lagoa, and E. Leão. (2011). The non-for-profit banks in Portugal: Specificities, social role and evolution. Working Paper N° 2011/06. DINAMIA'CET, ISCTE-IUL. [online] http://hdl.handle.net/10071/3685 (Accessed 12 September 2016)
- 6. Borges, R. (2010). *Main factors of adoption of homebanking*. Master thesis, University of Azores, Ponta Delgada, Portugal.
- 7. Casu, B., C. Girardone, and P. Molyneaux. (2006). *Introduction to Banking, Volume 10*, pp. 53-56, Pearson Education Limited, England.
- 8. Cetorelli, N., B. Mandel, and L. Mollineaux. (2012). 'The evolution of banks and financial intermediation: Framing the analysis', *Federal Reserve Bank of New York Economic Policy Review*, Vol. 18 No. 12, pp. 1–12.
- 9. Costa, F. (2011). *Mobility of customers in the banking sector*. Master thesis, University of Azores, Ponta Delgada, Portugal.
- 10. Autoridade da Concorrência (2006). *Decision of non-opposition with commitments of the Council of the Competition Authority. Process AC I 15/2006 OPA Banco BCP / Banco BPI*.
- 11. Fabris, N. (2018). 'Challenges for Modern Monetary Policy', *Journal of Central Banking Theory and Practice*, Vol. 7, Issue 2, pp. 5-24. [online] https://doi.org/10.2478/jcbtp-2018-0010 (Acessed 27 May 2018).
- 12. Fabris, N. and Luburić, R. (2016). 'Financial Education of Children and Youth', *Journal of Central Banking Theory and Practice*, Vol. 5, Issue 2, pp. 65-79. [online] https://doi.org/10.1515/jcbtp-2016-0011 (Accessed 27 May 2018).
- 13. Facó, J., E. Diniz, and J. Csillag (2009). 'The Process of Diffusion of Innovations in Banking Products', *Revista de Ciência e Administração*, pp. 177–208.
- 14. Fama, E. (1980). 'Banking in the theory of finance', *Journal of Monetary Economics*, Vol. 6 No. 1, pp. 39–57.

- 15. Gautam, V. (2012). 'An empirical study on financial products offered by Indian retail banks to assess the relationship between sale promotions, time to reward receipt, and customer preference', *Journal of Relationship Marketing*, Vol. 11 No. 4, pp. 233–247.
- 16. Keynes, J. (1936). *The general theory of employment, interest, and money*, Harcourt, Brace and Company, New York.
- 17. Klein, M. (1971). 'A theory of the banking firm', *Journal of Money, Credit and Banking*, Vol. 3 No 2, pp. 205–218. 9
- 18. Lacoma, T. (2011). 'The importance of bank deposits in the money supply', *Sapling* [online] https://www.sapling.com/8495140/importance-bank-deposits-money-supply (Accessed 25 July 2017).
- 19. Marriage, M. (2015). 'Banks embrace "the age of asset management", *Financial Times* [online] https://www.ft.com/content/40c39d3e-9440-11e5-b190-291e94b77c8f (Accessed 12 July 2017).
- 20. Mendes, J. (2002). 'The Banking Company in Portugal in the 20th century: Evolution and Strategies', *Gestão e Desenvolvimento*, Nº 11, pp. 39-56, ISSN 0872-556X.
- 21. Merton, R. (1995). 'A functional perspective of financial intermediation', *Financial Management*, Vol. 24 No. 2, pp. 23–41 [online] http://www.people. hbs.edu/rmerton/afunctionalperspective.pdf (Accessed 2 July 2017).
- 22. Minsky, H. (1986). *Stabilizing an unstable economy*, Hyman P. Minsky Archive, Paper 144 [online] http://digitalcommons.bard.edu/hm_archive/144 (Accessed 12 September 2016).
- 23. Minsky, H. (1992). *The financial instability hypothesis*, Working Paper No 74, The Jerome Levy Economics Institute of Bard College, New York, ISSN 1574-366X.
- 24. Mora, N. (2010) 'Can banks provide liquidity in a financial crisis?' *Economic Review Federal Reserve Bank of Kansas City*, pp. 31–41 [online] https://www.kansascityfed.org/MKmmZ/Publicat/Econrev/PDF/10q3Mora.pdf (Accessed 10 August 2017)
- 25. Quelhas, J. (1996). 'About the Recent Evolution of the Financial System (New "Financial Products")', *Boletim de Ciências Económicas*. Vol. 39, pp. 121–210.
- 26. Ramos, S. (2008). *Platform of Compound Products in the Financial Industry*. Project Report on Computer Engineering, University of Lisbon, Lisboa.
- 27. Shijaku, G. (2017). 'Does Concentration Matter for Bank Stability? Evidence from the Albanian Banking Sector', *Journal of Central Banking Theory and Practice*, Vol. 6, Issue 3, pp. 67-94. [online] https://doi.org/10.1515/jcbtp-2017-0021 (Acessed 27 May 2018).

- 28. Tavares, F., L. Pacheco and E. Almeida. (2015). 'Financing of small and medium-sized enterprises: analysis of companies in the district of Porto in Portugal', *Revista de Administração* (São Paulo), Vol. 50 No. 2, pp. 254-267.
- 29. Tobin, J. (1963). 'Commercial banks as creators of "money" *Cowles Foundation Discussion Paper*, N° 159 [online] https://EconPapers.repec.org/RePEc:cwl:cwldpp:159 (Accessed 22 September 2016).