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### THE ROLE OF THE EURO AS AN INTERNATIONAL CURRENCY FOR POLISH PRIVATE AND PUBLIC SECTORS – SELECTED ISSUES

**Abstract:** *The paper discusses the usage of the euro as a parallel currency in Poland. The aim is to assess the importance of the euro as an international currency for Polish residents, with particular emphasis on reserve and investment currency. The main stress is put on the assessment of the use of euro-denominated bank deposits and loans. The paper is based on the international literature and statistical data. Main sources of necessary data were taken from publications delivered by European Central Bank and National Bank of Poland.*

**Keywords:** *foreign reserves, central bank, bank instruments, international currencies*

**JEL classification:** *E44, E58, F32.*

**Paper type:** *Theoretical research article*

#### 1. Introduction

The development of a modern economy could not have been possible without the use of money, also at the international level. The internationalization of a currency begins when individuals or institutions residing in a country other than that of this currency accept or use it as a mean of payment, unit of account and store of value. International currency refers to the same three functions as domestic one, but it is important to

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distinguish between the official sector's use and the private sector's use (Chinn and Frankel, 2005). In private sector international currency is used as a vehicle currency (in goods exchange as well as in currency exchange), a quotation currency (for trade and financial transactions), an investment currency (portfolio allocation and indirect currency substitution) and in public sector as an intervention currency, a pegging currency (reference currency – an anchor of the other currency's exchange rate), a reserve currency (Hartmann, 1998). The official and private uses of an international currency are obviously closely related, but the influence of one on the other is not clear. The choice of an international currency is often said to depend mainly on its private uses and less on government decision but the official use of a currency might influence private market participants' choice (Galati and Wooldridge 2006).

The role of an international currency as a store of value acts as a reserve currency in which international reserves are held and investment currency in which deposits, loans, bonds and other securities are denominated (Kenen, 1983). Reserve currency and investment currency status is the main subject of this paper. The paper focuses mainly on this function due to the availability of relevant data in this area and incomplete data for other functions of money.

Creation of a single European currency is the most important event in the international monetary system since the adoption of flexible exchange rates in the early 1970s. This made the first real competitor for the US dollar since it surpassed the pound sterling as the main dominant currency over the XX century (Barkin and Cox, 1998). It also has an impact on the structure of the use of international currencies by Polish residents. Especially that being a member of the European Union with a derogation, the euro is a natural element of the further integration process. Additionally the holding of the euro by National Bank of Poland and major financial institutions reflects to a large extent a desire by households and firms to hold and use it as well (Viceira and Gimeno 2010). Papaioannou, Portes and Siourounis (2006) claim that monetary authorities tend to hold a high share of their reserves in the currency of their main trading partners and the currency composition of foreign debt is a significant factor in the allocation of central banks' reserve holdings.

This paper is a review and its purpose is to assess the importance of the euro as an international currency for Polish residents, with particular emphasis on reserve and investment currency. The paper is based on the international literature and statistical data. Main sources of necessary data were taken from publications delivered by European Central Bank and National Bank of Poland.

## **2. The determinants of the international use of currencies - literature review**

The main factors influencing the use of the national currency as an international currency include: the size of the issuer's economy and its position in global trade, confidence in the currency resulting from the economic policy and political conditions of the country or economic area issuing the currency. Efficient, liquid, safe and competitive financial market is also important as well as the external network effect (Pszczółka, 2020).

Galati and Wooldridge (2006) claim that the larger a country's share in world trade, the more likely that other countries will use its currency either as a monetary anchor or in support of external trade. The greater anchoring role of a currency might mean the larger weight in official reserves, this is due to two reasons. First, if the exchange rate of the domestic currency against a major currency plays an important role in the monetary policy framework, the central bank would typically hold this major currency to be able to intervene in the foreign exchange market. Second, if the country's liabilities are mainly in a major currency, the central bank is likely to hold a significant portion of its assets in that currency.

The second factor is a economic and political stability. This is a basic condition for ensuring a low and stable level of inflation, the significant increase of which may affect the use of a given international currency. An increase in inflation may adversely affect the use of a currency on debt markets due to an increase in interest rates and cause greater volatility of the exchange rate. The instability of the value of a currency increases the investment risk, causing the currency to cease to be an important store of value (Lim, 2006). The mere stability of a currency's purchasing power is not a sufficient factor in determining macroeconomic stability. Fiscal parameters, such as budget deficit and public debt, are also important for full financial stability. The effect of this stability is to build trust in the currency, which is crucial for strengthening the function of the investment currency performed by international money (Eichengreen and Mathieson, 2000). In addition, only a politically stable country or economic union can issue an international currency, as this stability is a factor supporting economic stability (Mundell, 1998). Monetary unions, where monetary integration is tied to political union, have historically been stable (like the United States). On the other hand, international monetary unions, where monetary integration is not tied to political union, have historically failed (Pszczółka, 2011).

A key element is also the developed financial market, which is characterized by the lack of restrictions when making transactions by residents from other countries. An overregulated financial market, characterized by restrictions on the free movement of capital, is ineffective, among others due to limited competition, which leads to overstating

transaction costs. The institutional side of the financial market with a strong central bank, supervisory institutions and a large financial sector is also important. A properly developed and liquid secondary market is also significant, allowing its participants to quickly build or liquidate large positions without fear of losing capital. A large and well-functioning financial market provides investors with access to a wide range of financial instruments, often unavailable on local markets. They are characterized by a diversity of issuers in terms of investment risk (Detken and Hartmann, 2000). It is also worth noticing that the more often a particular currency is used on the financial market, the more likely it is to continue to be used. An equally important element is investors' habit. The euro as an international currency allows the private and public sectors to maintain the value of accumulated savings. In case of private investors, it acts as an investment currency in which money is held, which allows to achieve an optimal balance between the rate of return and the rate of risk (Oręziak, 2008). Well-developed financial system is more likely to attract business from abroad, where financial markets may be less developed. This possibility makes it cheaper for market participants to borrow or invest abroad in an international currency rather than conduct the transactions directly at home in their own currency. On one hand, the introduction of the euro reduced diversification opportunities, so in principle one should have expected a fall in the euro share after 1999. But on the other hand, the euro market has become more liquid and deeper, and foreign exchange transaction costs for the euro have fallen (Papaioannou, Portes, and Siourounis 2006).

Finally, a key factor is "network externalities". This is a phenomenon associated with international currencies. A currency's status depends on others' use of it as a store of value, as a mean of payment and unit of account. The more a currency is used, the lower its transaction costs are and the higher its liquidity is, and hence the more attractive it becomes for new users, so the more a particular currency is used internationally, the more likely it is to continue to be used. The currency's international status tends to change slowly (Lim 2006). The example of this factor are commodity markets. These markets (oil, industrial metals, precious metals, agricultural products) use payments almost exclusively in dollars.

All the above conditions are met by the euro area which supports the process of internationalization of their currency (Pszczółka, 2011). This is mainly due to the advantage of the benefits over the costs of issuing international money. In this context, Chinn and Frankel (2005) indicate the benefits of seigniorage, liquidity discount and exorbitant privilege.

### **3. Use of the euro by Polish residents in selected areas**

Due to the lack of data on the use of the euro by Polish residents in terms of all functions of the international currency in both the public and private sectors, only a selected range will be analyzed. For example, ECB data on the share of the euro in the settlements of Polish trade are available until 2009. The share of this currency was 66.1% for exports and 54.8% for imports (ECB, 2018). The available data relate mainly to the foreign currency reserves of the National Bank of Poland (NBP), the use of euro-denominated bank loans and euro-denominated bank deposits in Poland, currency structure of Poland's international investment position and the currency structure of debt instruments.

The management of foreign exchange reserves is usually constrained by a set of investment policies which define the monetary authority's appetite for currency, credit, interest rate and other risks. Therefore, the relative attractiveness of different international currencies as a store of value will be influenced by the availability of financial instruments for gaining exposure to, or hedging, these risks. The common European currency offers such an opportunity (Pszczółka, 2011), therefore, the euro is one of the two most important currencies in the currency structure of Polish foreign exchange reserves.

The NBP reserve diversification process has led to a significant change in the importance of major international currencies within last two decades. Between 2005 and 2012, the share of the US dollar decreased from 50% to 36%, and the share of the euro from 40% to 32%. In 2007, the NBP decided to start the process of diversifying the currency structure of reserves by adding the Australian dollar (AUD) (at the expense of the US dollar). Continuing the diversification of the currency structure of reserves, in 2008 the Norwegian krone (NOK) was included, limiting the share of the euro. In 2010, the NBP once again decided to reduce the share of the US dollar by 2 percentage points, and Pound sterling (GBP) by 2 percentage points, in favor of the Australian dollar and the Norwegian krone (Pszczółka, 2018). In 2013, the NBP continued to diversify the currency structure of reserves by launching investments in assets denominated in New Zealand dollars (NZD), while reducing the share of assets in GBP by 3 percentage points (table 1).

A significant change in the reserve management policy was introduced in 2015. After analyzing the macroeconomic prospects of the world's major economies, forecasts of developments in global financial markets and the results of optimization and simulation analysis (NBP, 2016), the NBP decided to reduce the share of the common European currency in the currency structure by 3 percentage points to 29%, while increasing exposure to the US currency to 39%.

**Table 1. Currency composition of foreign exchange reserves for Poland in 2021-2021 (end of period, at current exchange rates)**

Year	EUR	USD	GBP	CAD	AUD	NOK	NZD
2021	20	41	12	10	8	6	3
2020	20	51	12	0	8	6	3
2019	20	51	12	0	8	6	3
2018	27	44	12	0	8	6	3
2017	27	44	12	0	8	6	3
2016	27	44	12	0	8	6	3
2015	29	39	12	0	10	7	3
2014	32	36	12	0	10	7	3
2013	32	36	12	0	10	7	3
2012	32	36	15	0	10	7	0

Source: (NBP, 2022, 2021, 2018).

In 2016 the NBP decided to move forward with the currency structure of foreign exchange reserves and reduce the share of EUR by another 2 percentage points, to 27%, AUD by 2 percentage points, to 8% and NOK by 1 percentage point, to 6%, with an increase in exposure to USD by 5 percentage points, up to 44%. In 2019, the NBP decided again to change the currency structure of the strategic benchmark (increase exposure to USD and reduce the share of EUR). Implementing the Foreign exchange reserves management strategy adopted by the NBP in 2020 (NBP, 2021), including continuing the currency diversification process, in 2021 the share of USD was reduced (by 10 percentage points) to make room for the Canadian dollar (CAD). The share of the euro was retained.

The diversification of the NBP reserves over the last decade has led to a significant decrease in the importance of the euro in the structure of these reserves, although the euro is still the second most important currency.

Another analysis concerns the area of unofficial substitution of assets and liabilities. The euro is important as a currency used in parallel by third-country residents to keep their savings in bank deposits and for financing consumption and investments. Euro-denominated bank loans and deposits dominate in European countries that are not members of the euro area, in particular those that are members of the European Union or are candidates or potential candidates for EU membership.

**Table 2. The use of euro-denominated bank loans in Poland in 2012-2021 (end of period)**

Year	Outstanding amounts of euro-denominated loans (in EUR millions)	As a percentage of total loans	As a percentage of foreign currency loans	Outstanding amounts of foreign currency loans (in EUR millions)
2021	26150	9.3	53.2	49164
2020	27593	10.3	52.4	52637
2019	28172	9,8	51.0	55212
2018	27538	10.2	48.8	56380
2017	25253	9.7	48.8	55244
2016	25644	10.8	41.9	61177
2015	25074	10.7	39.9	62772
2014	23530	10.8	39.4	59729
2013	21635	10.3	36.6	59155
2012	20568	10.0	33.2	61889

Source: (ECB, 2022, 2020, 2018, 2016).

In the analyzed period, outstanding amounts of euro-denominated loans in Poland grew steadily from over 20 billion euro in 2021 to over 26 billion euro in 2021. A similar trend is noticeable in the percentage share of loans in euro in total foreign currency loans. The dynamic increase in the share of loans in euro from 33.2% in 2012 to 53.2%<sup>2</sup> in 2021 is also due to the continuous decrease in outstanding amounts of foreign currency loans in Poland (table 2). This means that the euro is the most important international currency in which bank loans in Poland are denominated.

The Euro remains also the predominant currency of denomination for foreign currency deposits in Poland, and continues to be perceived as a preferable store of value relative to other currencies. The euro's share in total foreign currency deposits remained broadly unchanged compared with 2012 (over 68% in 2021). Outstanding amounts of euro-denominated deposits in Poland grew steadily from over 12 billion euro in 2012 to over 29 billion euro in 2021, this means almost tripling the value of these deposits within a decade. In the analyzed period, the outstanding amounts of foreign currency deposits in Poland changes in a similar way. It is also worth pointing out that euro-denominated bank deposits as a percentage of total deposits grew from 6.2% in 2012 to 8.5% in 2021 (table 3).

**Table 3. The use of euro-denominated bank deposits in Poland in 2012-2021 (end of period)**

Year	Outstanding amounts of euro-denominated deposits (in EUR millions)	As a percentage of total deposits	As a percentage of foreign currency deposits	Outstanding amounts of foreign currency deposits (in EUR millions)
2021	29361	8.5	68.4	43943
2020	23970	7.5	64.1	37375
2019	24399	7.9	67.9	35956
2018	21644	7.7	66.2	32672
2017	21328	8.0	65.6	32522
2016	17346	7.1	66.5	26100
2015	14748	6.3	65.3	22601
2014	13037	6.1	68.2	19110
2013	12391	6.1	65.4	18953
2012	12173	6.2	66.0	18449

Source: (ECB, 2022, 2020, 2018, 2016)

The last element of the analysis is the assessment of the change in the currency structure of Poland's international investment position separately concerning liabilities and assets.

Three currencies had the largest share in foreign assets of Poland's international investment position at the end of 2021: the euro - 32.3%, the US dollar - 27.3% and the Polish zloty - 15.6%. The total share of these three currencies in total foreign assets amounted to 75.2%. Compared to 2020, the share of the euro in foreign assets decreased slightly. It should be added that the currency structure of NBP reserve assets had a significant impact on the currency structure of foreign assets, its share in total foreign assets amounted to 43.5% (NBP. 2022). Analyzing the entire period from 2012 to 2021, the importance of the euro and the dollar remained stable, with a constant low predominance of the euro.



**Table 4. Currency structure of Poland's international investment position (liabilities and assets in %) in 2012-2021**

Year/currency	CHF	EUR	GBP	JPY	USD	Others	PLN
liabilities in %							
2021	1.0	30.6	0.7	0.4	4.6	1.6	61.1
2020	1.4	31.1	0.9	0.5	4.7	0.7	60.3
2019	1.4	29.4	0.7	0.5	5.4	0.6	62.0
2018	1.7	30.0	0.5	0.5	7.5	0.8	59.1
2017	2.0	30.0	0.1	0.5	7.4	0.7	59.3
2016	3.3	30.6	1.1	0.7	9.4	0.7	54.1
2015	4.0	30.3	0.6	0.7	6.9	0.7	56.9
2014	4.5	29.0	0.7	0.7	5.6	0.7	58.8
2013	5.1	28.0	0.9	0.7	5.4	0.7	59.2
2012	5.5	28.2	0.6	0.8	5.8	0.7	58.4
assets in %							
2021	0.4	32.3	5.6	0.1	27.3	18.7	15.6
2020	0.3	33.5	6.0	0.1	29.7	14.4	16.0
2019	0.3	33.1	5.7	0.1	31.1	14.2	15.5
2018	0.3	38.2	5.3	0.1	29.3	12.3	14.7
2017	0.3	38.7	4.4	0.0	29.1	11.6	15.8
2016	0.4	34.7	6.7	0.0	32.2	11.4	14.5
2015	0.5	35.5	6.2	0.1	28.6	13.4	15.8
2014	0.4	37.4	6.6	0.0	24.7	14.5	16.5
2013	0.4	35.8	7.3	0.0	24.3	15.4	16.6
2012	0.4	34.4	8.7	0.0	26.4	15.1	15.2

Source: (NBP, 2022b, 2021b, 2018)

In foreign liabilities of Poland's international investment position at the end of 2021, two currencies had the largest share: Polish zloty - 61.1% and euro - 30.6%. The total share of both currencies in total foreign liabilities amounted to 91.7%. Compared to 2012, the share of the euro increased slightly from 28.2% to 30.6%. The importance of the US dollar differs significantly from that of foreign assets, its share vary from 4.6% in 2021 to 9.4% in 2016 (table 4).

The currency structure of foreign assets, as well as liabilities, have been stable over the last ten years and it is not a subject to significant fluctuations. In both cases, the euro is the most important foreign currency in which the assets and liabilities of the Polish international investment position are denominated.

#### 4. Conclusions

The use of international currencies can take many forms. Foreign residents may hold international currencies to store their wealth or to use

for financing consumption and investments as well as to pay for imported goods and services. This is the situation in the case of Polish residents using the common European currency. The importance of the euro as a international currency in Poland is confirmed by the conducted analysis.

The main findings of this paper have shown that: i) despite the diversification of the NBP reserves and decrease in share of the euro in the structure of these reserves, the euro has kept its role as a second most important currency, ii) more than half of foreign currency bank loans in Poland are denominated in the euro, iii) over two-thirds of foreign currency bank deposits in Poland are denominated in the euro and, iv) the euro is the key foreign currency of the Polish international investment position, v) in Poland, the euro is preferable store of value relatively to other foreign currencies.

### Literature

1. Barkin N. & Cox A. (1998). EMU Explained, The Impact of the Euro, Kogan Page, London.
2. Chinn M. & Frankel J. (2005). Will the euro eventually surpass the dollar as leading international reserve currency, NBER Working Paper 11510, July.
3. Detken C. & Hartmann P. (2000). The euro and international capital markets, ECB Working Paper No. 19, April.
4. ECB (2016). The international role of the euro, July.
5. ECB (2017). The international role of the euro, July.
6. ECB (2019). The international role of the euro, July.
7. ECB (2021). The international role of the euro, July.
8. Eichengreen B. & Mathieson D. (2000). The currency composition of foreign exchange reserves: retrospect and prospect, IMF Working Paper 00131, July.
9. Galati G. & Wooldridge P. (2006). The euro as a reserve currency: a challenge to the pre-eminence of the US dollar?, BIS Working Papers No 218, October 2006.
10. Hartmann P. (1998). Currency competition and the foreign exchange market, Cambridge University Press.
11. Kenen P.B. (1983). The role of the dollar as a international currency, Occasional Papers 13, Group of Thirty, New York.
12. Lim E. (2006). The euro's challenge to the dollar: different views from economists and evidence from COFER and other data, IMF Working Paper 06/153, June.
13. Mundell R.A. (1998). What the euro means for the dollar and the international monetary system, Atlantic Economic Journal, Vol. 206, No. 3, September.
14. NBP (2016). Annual Report 2015

15. NBP (2018). Annual Report 2017
16. NBP (2021). Annual Report 2020
17. NBP (2022). Annual Report 2021
18. NBP (2018b). Międzynarodowa pozycja inwestycyjna Polski w 2017
19. NBP (2021b). Międzynarodowa pozycja inwestycyjna Polski w 2020
20. NBP (2022b). Międzynarodowa pozycja inwestycyjna Polski w 2021
21. Oręziak L. (2008). Euro – pieniądz międzynarodowy, Europejska Integracja Monetarna od A do Z, Bank i Kredyt, styczeń.
22. Papaioannou E. & Portes R. & Siourounis G. (2006). Optimal currency shares in international reserves: the impact of the euro and the prospects for the dollar, NBER Working Paper 12333, July.
23. Pszczółka I. (2020). Dolar amerykański i euro jako kluczowe waluty inwestycyjne na międzynarodowym rynku dłużnych papierów wartościowych, [in:] D. Kopycińska, J. Korpys (ed.), Współczesne problemy gospodarowania, Centre of Sociological Research, Szczecin.
24. Pszczółka I. (2018). Zmiany wysokości i struktury rezerw walutowych nbp na tle zmian zachodzących w rezerwach walutowych na świecie, Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, nr 352.
25. Pszczółka I. (2011). *Współczesne waluty międzynarodowe*, Cedewu, Warszawa.
26. Viceira L.M. & Gimeno R. (2010). The euro as a reserve currency for global investors, Documentos de Trabajo No. 1014, Banco De España.