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## THE HIGHER VALUATION OF INVESTMENT RISK AND MORE EXPENSIVE CAPITAL IN POLAND AS A THREAT TO THE DEVELOPMENT OF POLISH ENTERPRISES

For years, the cost of capital in Poland has been among the highest in the EU. While in 2005–2015, interest rates on long-term loans for enterprises in Czechia and Estonia were at levels similar to Germany, in Poland, rates were always higher – in 2009–2013, even twice as high. Throughout the 18-year analysis period, enterprises in Poland paid 35% more interest than those in Czechia, and 41% more than in Estonia. Over the entire period, Polish enterprises paid PLN 57 bn more interest than if rates had been the same as in Czechia, PLN 74 bn more than in Estonia, and PLN 118 bn more than in Germany. This has resulted in higher debt among Polish enterprises, along with lower levels of innovation, creditworthiness, competitiveness, salaries, tax base, and investment profitability, and thus slower development and weaker future development prospects for the Polish economy.

**Keywords:** interest rate, cost of the loan, corporates, credit rating, risk premium, investment risk

#### 1. INTRODUCTION

The reduction of interest rates on a global scale after the outbreak of the US financial crisis in 2008 and the progressive proliferation of capital (additionally reinforced by quantitative easing) led to a reduction in the cost of capital and facilitated access to it. Unfortunately, not for all to the same extent. This was also felt in Poland, when NBP (National Bank of Poland) also reduced interest rates to a historically low level (since mid-2013: 2.5%, in 2015: 1.5% and in 2020: 0.1%). Paradoxically, this made it difficult to objectively assess the level of the cost of capital in Poland in the past decade, and diverts attention from the key importance of successively strengthening the state's credibility in the era of globalization of financial markets and strong dependence on foreign financing – both economic, political, institutional, legal and others. It determines the inflow of foreign capital, determines its cost, and thus determines investments, the level of economic growth and the wealth of subsequent generations.

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Therefore, it should be emphasized that the market cost of capital in Poland has been one of the highest in the EU for years and, what is even more important, the difference in the level of this cost is vast – not only in comparison to the most reliable countries, but also to many CEE countries. In Poland, capital is borrowed expensively by all entities – the government, enterprises and consumers – fig. 1–3.

The Polish government has been one of the most expensive borrowing governments in the EU for years. In November 2022, only the governments of Hungary and Romania borrowed capital more expensive than Poland did. However, such a statement does not reflect the scale of the problem. Attention should be paid to the size of the difference in the cost of capital borrowed by the Polish government and most EU governments. Today, the Polish government borrows capital two or even three times more expensive than most EU countries – fig. 1.

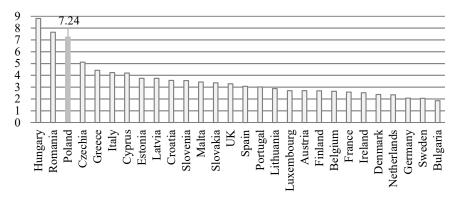
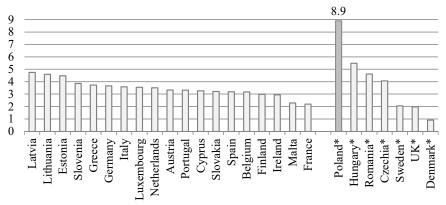


Figure 1. Long term government bond yields as of November 2022 (%) Source: own elaboration on tha basis of Eurostat (2023b).

It should be emphasized that the difference in the cost of debts incurred reaches 4–5 percentage points which, given the annual issuance of Treasury bonds in Poland reaching PLN 120-210 billion in recent years, gives even PLN 10 billion more expensive yearly cost of obtaining financing for public debt and more expensive its service in the years to come. What's more, because the Polish government has been one of the most expensive borrowing governments in Europe for years, the Polish taxpayer has for years been bearing the burden of public debt servicing, which is noticeably more expensive than in other EU countries, in the form of higher taxes and poorer subsidization of public services. It should be noted that with public debt currently amounting to almost PLN 1.5 trillion (Ministerstwo Finansów, 2023), each percentage point of more expensive capital means PLN 15 billion higher interest costs per year. Instead of wasting taxpayers' money on inflated interest on public debt, the credibility of the state should be strengthened and maintained, and the funds thus saved should be allocated to investments, better funding for education, or lower taxes.

However, this is only the tip of the problem. Unfortunately, not only the government, but all other economic entities borrow expensive capital in Poland. Mortgage interest rates in Poland are currently the highest in the entire EU and, what is particularly important, they are even three times higher than in most EU countries – fig. 2. It should therefore be emphasized that even in Romania and Hungary mortgage interest rates are about half lower than in Poland.

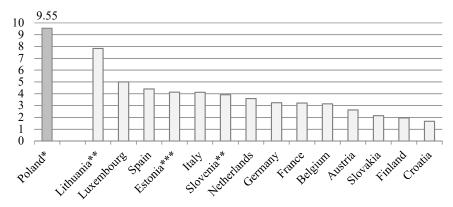


\* data concerns loans in local currency, different source of data

Figure 2. The average interest rate (%) of the Euro-denominated loans for house purchase as of January 2023 in the Eurozone and in Poland (of the PLN-denominated loans) and in UK, Sweden, Denmark, Czechia, Hungary, Romania (of the national currency-denominated loans; second quarter 2022 average)

Source: own elaboration on the basis of ECB (2023b); NBP (2023a); European Mortgage Federation (2022).

Companies in Poland also borrow expensive capital, which undoubtedly limits investments and development of Polish economy. Moreover, in the case of interest rates on corporate loans, the difference is significant compared to the interest rates on corporate loans in other EU countries – in particular those belonging to the euro zone. It should be emphasized that the difference in the level of interest rates on corporate loans between Poland and most EU countries is currently at least 2–3 times and reaches 4–7 percentage points – fig. 3.



- \* PL: data concerns loans in PLN, different source of data
- \*\* LT, SI: data for 12.2022; \*\*\* EE: data for 10.2022

Figure 3: The average interest rate (%) of the Euro-denominated loans for corporations as of January 2023 in the Eurozone (over EUR1 m) and in Poland (of the PLN-denominated loans over PLN4 m)

Source: own elaboration on the basis of ECB (2023c); NBP (2023a).

With the current level of liabilities of Polish enterprises to banks (PLN 404 billion, 01.2023; NBP, 2023b), this means PLN 20–30 billion higher costs of debt servicing each year compared to the situation if they paid interest at a level similar to that of most EU countries today (fig. 3, fig. 4).

Unfortunately, the ECB collects unified statistics on market interest rates only for the euro zone countries. In addition, due to statistical confidentiality, data are not available for all countries and for all years. This makes it difficult to compare the cost of the loan across the EU – especially with non-euro countries where statistics are compiled in different ways. For this reason, a comparative analysis of the level of interest rates on loans for enterprises in Poland and selected EU countries: outside the euro area (Czechia) and those belonging to the euro area (Estonia and Germany) is carried out in the further part of the study, in order to assess the scale of the difference in the level of cost of the loan, both in comparison with highly developed countries and those at a similar level of development.

The aim of the study was to compare the level of interest rates on loans to enterprises in Poland and other EU countries in 2005–2022 and the assessment of the credibility of individual countries, to assess the difference in the level of interest paid and the scale of the financial effects of these differences in the analyzed 18-year period for the level of debt and investments of Polish enterprises. For this purpose, a study of the literature on the subject was carried out, followed by a comparative analysis of statistical data using the tools of descriptive statistics, and finally, using the method of inductive reasoning, the results were evaluated and conclusions were synthesized. Due to the incompleteness of ECB data, the analysis also used data published by the national central banks (National Bank of Poland, Czech National Bank and Eesti Bank).

# 2. CREDIT RATING – CREDIBILITY VALUATION. LITERATURE OVERVIEW

In the era of highly developed IT technology, dynamic multiplication of capital and advanced globalization, the world of financial markets has become smaller, more transparent and transactions on it have become extremely fast (Redo, Gębska, 2020). As a result, competition is growing dynamically – investors compete with each other for more attractive investment opportunities. However, there is an underestimated turn to this situation. Growing competition in increasingly transparent financial markets also results in increased competition between entities seeking capital, as everyone needs more and more of it – both to finance economic development, but also to roll over the deepening debt that is common nowadays. It is the pursuit of profits that accelerates the functioning of (not only) the world of investments and – importantly – increases the demand for greater transparency of markets, i.e. processed standardized information. It is therefore not surprising that, over time, rating agencies have become very influential institutions and it seems that this process will continue.

The growing demand for capital in the face of increasingly transparent markets makes investors more sensitive to shocks, as technology and the availability of information make it easier for them to move capital quickly. Because of that stability, credibility and predictability are so crucial nowadays. Their continuous strengthening and striving for the mainstream level determines the inflow of capital to the country, the stability of access to it, and thus the investment risk and its market cost.

It is easy to see the relationship between the credibility assessment of recognized rating agencies and the cost level of capital in Poland and neighboring countries. Therefore, it

should be emphasized that Poland (and thus entities operating in it) has a much lower valued credibility than the so-called safe heaven countries – table 1. Poland is separated from the highest AAA credibility by as many as seven levels in the rating assessment (A–, A, A+, AA–, AA, AA+). This is why much less capital flows to Poland than to the most reliable countries (Leszczyńska, Puchalska, 2019), its inflow is less stable, and the price of capital is noticeably higher (fig. 1–3). Until we start strengthening Poland's stability – economic, political, institutional, legal and others – and build trust by strengthening predictability, then capital in Poland will always be more difficult to access and valued as more expensive (Redo, 2017).

Table 1. A sovereign credit ratings for EU countries by Standard&Poor's (as of 12.12.2022)

Denmark	AAA
Germany	AAA
Luxembourg	AAA
Netherlands	AAA
Sweden	AAA
Austria	AA+
Finland	AA+
Ireland	AA-
Belgium	AA
France	AA
Spain	A
Portugal	BBB+
Italy	BBB
Greece	BB+

AA-
AA-
AA-
A+
A+
A+
A-
BBB+
BBB-
BBB
BBB

Cyprus	BBB		
Malta	A-		

IJK AA		
7111	UK	AA

Source: own elaboration on the basis of S&P (2022).

However, since building credibility and stability at the level of the most credible countries requires not only diligent work but also time, for now we should compare ourselves with the credibility of similar countries to assess the effectiveness of economic policy in Poland – e.g. with the CEE countries which also changed their political systems 3 decades ago and joined the EU in the meantime. Compared to these countries, Poland presents poorly. Rating A– places Poland only in 7th place among CEE countries (table 1). Therefore, it should be emphasized that Slovakia, Lithuania and Latvia have a two-grade higher rating than Poland (A+), and Czechia, Estonia and Slovenia have a three-grade higher rating (AA–). In the case of the latter, the credibility rating is only slightly lower than that of, for example, the UK (AA). Czechia and Estonia are therefore perceived as almost equally credible. It is worth adding here that, according to the IMF and World Bank classification, all 6 CEE countries mentioned are regarded as advanced economies (along with the most credible highly developed countries in the world; IMF, 2022; Redo, 2018).

This is why capital in Poland is more expensive than in these countries (fig. 1–3). Poland's credibility is assessed noticeably lower. It should also be added that Poland's rating has not been increased since 2007. The process of stabilizing Polish economy and

strengthening confidence in it observed in the 1990s and 2000s was stopped, according to the markets' opinion.

Unfortunately, the relationship between credibility and access to foreign financing and its cost is underestimated in Poland. The importance of credit risk assessment and credit rating for the interest rate and capital inflow is confirmed by empirical research in many countries. Their results confirm the important role of macroeconomic factors and especially uncertainty in the macroeconomic environment for the interest rates. Awareness and understanding of these interdependencies is particularly important in the case of developing countries where the risk premium and interest rate spreads and, as a result, the interest rate levels are still much higher than in developed countries – see overview of interest rates in 140 emerging markets and developing economies (Feyen, Huertas, 2020), for Central and Eastern Europe: Claeys, Vennet (2008), Dumičić, Ridzak (2013), Berglöf, Bolton (2003), Riess et al. (2002), for Latin Amercia: Brock, Rojas (2000), Afanasieff et al. (2002), for Central Asia: Almarzoqi, Naceur (2015). These studies indicate the problem of high degree of information asymmetry and high risk premia in developing countries. Thus, they prove the need to pay more attention to the importance of broadly understood credibility of the country and the so-called credit rating for the level of interest rates on corporate loans, which determines economic development that is so important for developing countries. Although it should also be analyzed in highly developed countries - the econometric analysis confirms the importance of credit risk as relevant in the determination of bank's interest rates not only in less credible countries (e.g. Santos 2013) but also in the US (e.g. Claessens et al., 2018). Moreover, research shows that low-capital banks – which seems to correspond to the situation of the banking sector in developing countries (i.a. in Poland) – charge a higher premium for systematic risk than for other risks (Santos, Winton, 2019), and that a smaller, capital-constrained bank is characterized by strong sensitivity of interest rates on loans to enterprises to a deterioration in the rating (Claessens et al., 2018). This problem has been recognized for years in countries with lower credibility – even by some governments. It is worth paying attention to the Performance and Credit Rating Scheme (PCRS) implemented in India almost two decades ago by the National Small Industries Corporation (a body under the Ministry of MSMEs) to reduce the information asymmetry prevailing in the MSME (micro, small, and medium-sized enterprise) sector (Shankar, 2019). It contributed to higher amounts of loans issued, also at lower rates of interest in the next years (Mohapatra, 2012). It also resulted in other benefits for enterprises that get feedback through the rating process on their strengths and weaknesses, benchmark themselves with other MSMEs and track their progress over time by looking at the variation in their credit ratings. All this facilitates establishing economic cooperation and strengthens their market position. Similar solutions should be introduced in Poland. Creating a systemic solution promoting reliable, broader and standardized information about Polish enterprises would reduce the problem of information asymmetry and would strengthen the credibility of Polish enterprises - not only in the eyes of lenders and investors, but also business partners, facilitating their access and functioning on foreign markets.

The important role of credit rating in decision-making processes, which is to limit the phenomenon of widespread information asymmetry, is finally confirmed by the internal individual rating systems developed by banks for years (Treacy, Carey, 2000). That is why it is so important to understand the principles of operation of financial mechanisms that govern today's capital flows and the enormous power that credibility gives today. Without its continuous, reliable and consistent strengthening, the market cost of capital will not be reduced in Poland to the levels of more credible countries, and access to financing will not

be easier. And this means dooming Polish economy to less investment and consumption, i.e. slower economic development, and introducing subsequent generations of Poles to a faster increase in debt and lower level of wealth.

# 3. DIFFERENCE IN INTEREST RATES ON CORPORATE LOANS IN POLAND, CZECHIA, ESTONIA AND GERMANY

The negative effects of the lower valuation of Poland's credibility are also felt by Polish enterprises, as it reduces their competitiveness and hinders development, and also results in lower salaries and tax revenues. Unfortunately, these differences have persisted for years, so that the financial, economic and social costs for the Polish economy accumulate. Therefore, it should be emphasized that the cost of capital in Poland has been high for a long time. For the past 18 years, the average interest rate on long-term corporate loans in Poland has been practically always higher than in Czechia and Estonia (fig. 4). And although during the covid-19 pandemic interest rates on loans in Poland fell to historically low levels and equaled interest rates in Czechia and Estonia, at that time they were still noticeably higher than in the most stable countries – cf. the level of interest rates on corporate loans in Germany in 2020–2021 (fig. 4).

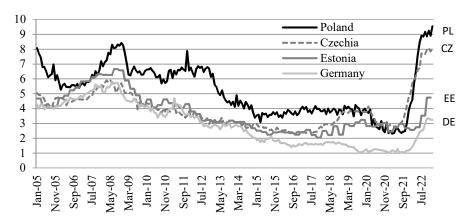


Figure 4. Bank interest rates on long-term loans to non-financial corporations in the period 01.2005 - 01.2023 (%)

Source: own elaboration on the central banks' data (NBP, 2023b; CNB, 2023; Eesti Bank, 2023; ECB, 2023c).

Moreover, attention should be paid to the differences in the level of interest rates on loans. While in Czechia and Estonia it was at a similar level in 2005–2015 and – what is especially important – at a level similar to Germany, in Poland it was practically always higher by min. 1 percentage point, and in 2009–2013 even by 2–3 percentage points – i.e. was then even twice as high as in the analyzed countries.

Throughout the analyzed period, the average interest rate on long-term loans for enterprises in Poland was 5.23%, while in Czechia it was 3.88%, in Estonia 3.70% and in Germany 3.01% – col. 1 table 2. This means that over the past 18 years, corporate loans in Poland were on average 35% more expensive than in Czechia, 41% more expensive than in Estonia and 64% more expensive than in Germany (col. 5 table 2).

Table 2. The average bank interest rates on long-term loans to non-financial corporations in the period 01.2005 - 01.2023 (%) and difference in the level of interest rates between Poland and selected countries (in percentage points, in percentage, in PLN billion, as a percentage of the current debt of enterprises in banks, as a percentage of the average annual investment level)

	Interest rates (01.2005 – 01.2023)		Over 18 years in Poland more exspensive by					
	average %	S(x) percen- tage point	V %	percenta- ge point (average per year)	% (average per year)	PLN bn (in total for 18 years)	as a percentage of loan debt (2022, NBP)	as a percentage of the average investment level in 2005–2021 (GUS)
	1	2	3	4	5	6	7	8
Poland	5.23	1.71	33				•	
Czechia	3.88	1.23	32	1.34	35	56.9	14	23
Estonia	3.70	1.29	35	1.51	41	74.5	19	31
Germany	3.01	1.42	47	1.94	64	118.2	30	48

Source: own calculation on the central banks' data (NBP, 2023b; CNB, 2023; Eesti Bank, 2023; ECB, 2023c).

This means that Polish enterprises have been paying 1/3 to 2/3 more expensive interest on loans every year for years than enterprises in other EU countries – i.e. on average from 1.34 to 1.94 percentage points per year more interest – col. 4 table 2. With the current debt of Polish enterprises in banks (PLN 398.1 billion, 12.2022; NBP, 2023b), each 1 percentage point of higher interest rate is equivalent to PLN 4 billion higher financial costs annually. Throughout the 18-year period of the analysis, taking into account the different level of interest rates in individual countries and the changing level of bank debt of Polish enterprises, they paid a total of PLN 56.9 billion more in interest than if the interest rates in Poland were the same as in the Czech Republic, PLN 74.5 billion more interest than if the interest rate in Poland was the same as in Estonia and as much as PLN 118.2 billion more interest than if the interest rate in Poland was the same as in Germany – col. 6 table 2. These amounts are huge financial resources for Polish enterprises and the entire Polish economy. Lower financial costs of Polish enterprises in the past two decades – at the level of Czechia or Estonia – would result in their lower debt, and thus higher creditworthiness, flexibility and development opportunities. The determined difference in total interest costs (col. 6 table 2) of Polish enterprises for the past 18 years corresponds to 14-30% of their current debt (col. 7 table 2). They could be so much less indebted today than they are. They could also allocate these funds, for example, to investments that the Polish economy needs tremendously to be able to catch up with the development gap when compared with highly developed countries. The determined difference in the total interest costs (col. 6 table 2) of Polish enterprises for the past 18 years corresponds to 23-48% of the average investment level in Poland in 2005–2022.

It is the lower stability and lower credibility that are two of the main reasons for the low level of investment in Poland compared to other EU countries – fig. 5.

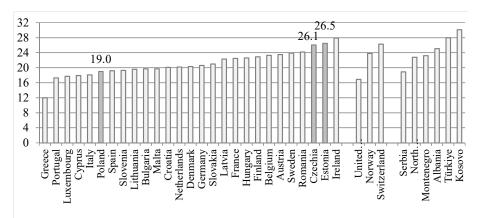


Figure 5. The average annual level of investment in 2010–2021 (% of GDP) Source: own elaboration on the basis of Eurostat (2023a).

Poland had the sixth lowest average investment level in 2010–2021 among EU countries. Investments accounted for an average of 19% of Poland's GDP in the analyzed period, while in 11 EU countries it was 22–28% of GDP, i.e. 3–11% of GDP more than in Poland – fig. 5. It must be noted that every 1% of investment in relation to GDP equals over PLN 30 billion annually. Thus, if investments in Poland had remained in the past 12 years at the level of the Czech Republic (26.1% of GDP) or Estonia (26.5% of GDP) as analyzed in the study, i.e. 7 percentage points higher, i.e. 37% higher on average, this would translate into faster economic growth in recent years, narrowing the development gap and creating much stronger competitive position of Polish enterprises (Żukrowska, 2012; Żukrowska, 2016; Bengoa, Sanchez-Robles, 2003; Chowdhury, Mavrotas, 2006).

Finally, it should be emphasized that more expensive capital in Poland, apart from higher costs, lower creditworthiness, faster increase in debt, also results in lower profitability of investments, which means that they are not implemented in Poland, but in other countries. What's more, due to the higher interest rate on capital in Poland, investments that are profitable in other countries turn out to be low-profit or even unprofitable in Poland. This is an additional reason for the relatively low level of investment in Poland compared to other countries.

It's worth stressing what a 1 percentage point higher loan interest rate means. With an investment loan of PLN 20 million taken out for 10 years (and repaid in equal installments), each additional percentage point means PLN 1.1–1.3 million more interest over the entire loan period – col. 2 table 3. So, if the current differences in interest rates persist in the next decade (fig. 4: current interest rates on long-term loans for enterprises in Poland: 9.5%, in Czechia: 8%, in Estonia: 5%, in Germany: 3%), then a Polish company would pay about PLN 11 million in interest on such a loan, PLN 9 million in interest in Czechia, about PLN 5.5 million in interest in Estonia, and PLN 3.2 million in interest in Germany. The difference is huge – almost PLN 8 million compared to the interest cost of a company from Germany (interest in Poland 3.5 times higher), PLN 5.5 million compared to an Estonian company (interest 2 times higher) and PLN 2 million compared to a company from Czechia (1/5 higher interest).

Table 3. Total interest (in PLN) for the entire loan period depending on the interest rate

annual interest rate	corporate loan PLN 20 million 10 years equal installments	mortgage loan PLN 500,000 30 years equal installments		
1	2	3		
10%	11 716 177	1 079 629		
9%	10 402 186	948 321		
8%	9 118 623	820 776		
7% 6%	7 866 035	697 544 579 191		
	6 644 920			
5%	5 455 724	466 279		
4%	4 298 833	359 348		
3%	3 174 579	258 887		
2%	2 083 229	165 315		

Source: own calculation.

It is worth checking the difference in the level of interest on mortgage loans in Poland and other EU countries by comparing the current level of interest rates on mortgage loans (fig. 2) with the difference in the total amount of interest for the entire 30-year loan period in the case of a loan for PLN 500,000 (col. 3 table 3). Each additional percentage point means over PLN 100,000 interest more over the entire 30-year loan period. So if the current differences in mortgage interest rates persist in the coming decades, a Pole will pay several hundred thousand more in PLN for the same loan than citizens of most EU countries.

#### 4. SUMMARY

The market cost of capital in Poland has been one of the highest in the EU for years and, what is even more important, the difference in the level of this cost is huge – not only in comparison to the most reliable countries, but also to many CEE countries belonging to the EU.

The difference in the level of interest rates on corporate loans between Poland and most EU countries is at least 2–3 times today and reaches 4–7 percentage points. With the current level of liabilities of Polish enterprises to banks (PLN 404 billion, 01.2023; NBP, 2023b), this means PLN 20-30 billion higher costs of servicing this debt each year compared to the situation if they paid interest at the same level as in most EU countries today. More expensive interest rates reduce the profitability of Polish enterprises, and thus their competitive position, creditworthiness, i.e. the current level of investment and economic development in Poland. What's more, it additionally lowers the development prospects, which additionally discourages from investing also in the next years. In addition, the higher interest rate on capital in Poland means that investments that are profitable in other countries (where capital is cheaper) turn out to be low-profit or even unprofitable in Poland. This is an additional reason for the low level of investment in Poland compared to other countries. More expensive capital in Poland also reduces the degree of innovation of Polish enterprises and their technological advancement. All this translates into a slower increase in wages and a slower increase in the level of wealth of Poles. What's more, it also lowers

the tax base, and thus makes it impossible to improve the quality of public services in Poland and to reduce public levies, which is necessary to speed up the catch-up process.

It should be added that other business entities also borrow expensive capital in Poland. For years, the Polish government has been one of the most expensive borrowing governments in the EU. The difference in the cost of debts is 4–5 percentage points, which, with annual Treasury bond issues in Poland reaching PLN 120–210 billion in recent years, makes it even PLN 10 billion more expensive annually to obtain financing for public debt and its servicing in the coming years, which will be more expensive by another billion zlotys. It is the Polish taxpayer who bears the burden of servicing public debt, which is noticeably more expensive than in other EU countries, in the form of higher taxes for years and worse subsidization of public services (than they could be if the cost of capital was lower and on the level similar to most EU countries). This additionally lowers the chances of reducing labor costs in Poland, without which there will be no noticeable acceleration in the development of Polish enterprises in the coming decades. Loans for households are also more expensive in Poland – the interest rate on mortgage loans in Poland is the highest in the entire EU and, what is particularly important, it is up to three times higher than in most EU countries. More expensive loans reduce the level of consumption, and thus the sales of Polish enterprises, which additionally inhibits investments and development.

In the era of high and growing transparency of globalized financial markets, the time to make investment decisions is getting shorter and the importance of credibility assessment in calculating the investment risk premium is growing. This is confirmed by the difference in the level of the cost of capital between Poland and not only the most reliable countries, but also CEE countries with a higher rating. Poland (A-) has credibility 7 ratings lower than the countries with the highest rating and 3 ratings worse than Czechia, Slovenia and Estonia (AA-) and 2 grades worse than Slovakia, Lithuania and Latvia (A+). In all these countries, capital is cheaper than in Poland by even several percentage points. At the end of the third quarter of 2022, the total amount of public debt in Poland, corporate loans and household loans amounted to PLN 2.7 trillion, which means that each 1 percentage point of higher interest rate is equivalent to an additional PLN 27 billion in interest per year. Therefore, a few percentage points more expensive capital in Poland means that the Polish economy allocates a multiple of this amount each year to paying interest instead of investing and consumption. As a result, the level of wealth of Poles, both present and future generations, is lower than it could be if Poland had built a higher credibility (economic, political, institutional, legal, etc.) and gradually strengthened it. This is the result of the underestimated relationship between credibility and the availability of foreign financing and its cost in Poland.

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