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# THE ROLE OF FINANCIAL SECTOR IN DRIVING ECONOMIC GROWTH

Jan Chmielewski\*, Sebastian Wawrzak\*\*

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#### THE ROLE OF FINANCIAL SECTOR IN DRIVING ECONOMIC GROWTH

#### **ABSTRACT**

The purpose of the article. This study verifies whether multidimensional financial-sector development – measured with the IMF composite indices of depth (FDI), access (FMI) and efficiency (FII) – influences key macroeconomic and social outcomes in ten high-income EU economies between 2010 and 2023.

**Methodology**. Standardized annual data was taken from the World Development Indicators and the IMF Financial Development Index Database. Pearson correlation coefficients were calculated for each country and variable pair. The statistical findings were then interpreted case-by-case to capture both short-term relationships and structural patterns.

**Results of the research**. Greater financial depth proved positively related to price stability and to an expansion of private-sector credit. In the short run, however, it showed no significant effect on GDP growth and coincided with a fall in household saving rates and a temporary rise in unemployment — evidence of the nonlinear, stage-dependent nature of the finance-growth nexus. The findings imply that policy makers in advanced economies should focus on balancing further financial deepening with safeguards that counteract labor-market frictions and excessive consumption growth.

**Keywords:** economic growth, financial sector, credit, inflation, savings, unemployment.

JEL Class: C33, E44, O16, O47.

<sup>\*</sup> MSc Eng., SGH Warsaw School of Economics, <a href="https://orcid.org/0009-0009-5671-5172">https://orcid.org/0009-0009-5671-5172</a>, E-mail: <a href="jan.stanisław.chmielew-ski@gmail.com">jan.stanisław.chmielew-ski@gmail.com</a>

<sup>\*\*</sup> PhD, SGH Warsaw School of Economics, https://orcid.org/0000-0001-6897-490X, E-mail: swawrz@sgh.waw.pl

#### Introduction

Stable and efficient capital allocation is regarded as one of the key mechanisms driving long-term economic growth. Although the role of the financial sector has long been a subject of debate in the economic literature, there remains no clear consensus as to which channels of financial transmission to real economic activity are of greatest significance, nor how they differ across countries at various stages of development. Previous research has focused primarily on individual indicators, such as stock market capitalization or the volume of bank credit, while neglecting the comprehensive dimension of the financial sector, which encompasses both capital markets and financial intermediation institutions.

The aim of this article is to fill this gap by providing an empirical assessment of the relationships between multidimensional financial development and selected macroeconomic and social variables in a group of ten high-income European Union member states. Drawing on the most recent composite indicators from the IMF: the Financial Development Index (FDI), the Financial Markets Index (FMI), and the Financial Institutions Index (FII), the authors formulate six research hypotheses relating, among others, to price stability, credit availability, the structure of savings, and demographic dynamics.

The methodology is based on Pearson correlation analysis applied to standardized annual series for the period 2010–2023, sourced from the World Development Indicators and the Financial Development Index Database. This time horizon makes it possible to observe both the consequences of the financial crisis and the post-pandemic phase.

The article consists of four parts. Section One presents a review of the literature, outlining competing theories of finance and growth. The second section describes the data and the construction of variables. Part Three presents the results of correlation tests, together with the interpretation of the individual hypotheses. Section Four discusses the implications for economic policy and directions for further research. This structure allows the reader to follow the logical flow of the argument from theoretical foundations, through the research procedure, to practical conclusions.

#### The financial system and its sectors in the economy

The financial system forms the foundation of the functioning of modern economy, enabling efficient capital allocation, risk management, and the stabilization of macroeconomic processes. It can be defined in various ways depending on the adopted research perspective and the objectives of analyzing financial markets and institutions (Levine, 2005, p. 32). In the literature, several approaches to its definition are distinguished: the institutional (focusing on types of institutions and regulations), the monetary (treating the system as a mechanism of money issuance and circulation), the intermediation-based (emphasizing capital transfers between entities), the functional (analyzing the structure of markets and financial instruments), and the systemic (considering internal linkages and the holistic character of the system) (Matysek-Jędrych, 2007, p. 40).

In its broadest sense, the financial system encompasses all institutions and markets engaged in the processes of accumulating, transferring, and multiplying financial resources, as well as in providing protection against risks – credit, interest rate, or currency risks (Sławiński, 2010, p. 27–29). Its structure includes, among others, commercial and investment banks, central banks, investment funds, insurance companies, pension funds, leasing firms, and other financial intermediaries (Mishkin, 2013, p. 45–48).

The primary function of the system is to efficiently match entities possessing capital surpluses with those that demand capital. This promotes the optimal allocation of resources and supports economic growth (Mishkin, 2013, p. 49–50). In addition, the system performs stabilizing functions and enables both risk diversification and flexible capital placement (Brigham & Houston, 2009, p. 72–76). Owing to its systemic nature and its significance for economic security, the sector is subject to strict regulation and state supervision (NBP, 2020, p. 14–15).

### Core roles of the financial system

The financial system performs key functions in the economy, enabling efficient capital allocation, risk management, and the safeguarding of financial stability. The literature identifies several fundamental roles that the financial system plays in shaping economic dynamics:

- allocative function providing financial resources to economic entities, particularly
  enterprises investing in technological development, infrastructure, and human capital. Such
  activities lead to higher productivity and the creation of new jobs (Brigham & Houston,
  2009, p. 90–93),
- stabilizing function commercial banks, through deposit and credit operations, ensure access to capital and counteract payment gridlocks, thereby supporting economic stability. This role becomes more pronounced under crisis conditions and is reinforced by the actions of central banks (Sławiński, 2010, p. 40–42; Mishkin, 2013, p. 105–108; Patterson, 2015, p. 48),
- capital allocation function in financial markets capital markets enable the issuance and trading of securities, which supports enterprise development and allows investors to allocate resources across a variety of assets (King & Levine, 1993, p. 717–737; Saunders & Allen, 2010).

Nevertheless, the risks associated with the functioning of the financial system should not be overlooked. Insufficient supervision and excessive credit expansion may lead to crises, as was the case in 2007–2009 with the U.S. subprime bubble and the lack of regulation in the derivatives market (Reinhart & Rogoff, 2009, p. 1–3; Shiller, 2015, p. 88–91).

## The financial technology sector as a modern branch of the financial system

The financial system encompasses a number of interconnected sectors: commercial and investment banking, insurance, capital markets, pension funds, and brokerage services (Góra, 2003; Sułkowska, 2014). Each of these plays an important role in the economy, however, this study devotes particular attention to the financial technology sector – a dynamically developing branch that gained prominence following the financial crisis of 2007–2008 (Reinhart & Rogoff, 2009, p. 1; Sławiński, 2010, p. 31–35).

The 2007–2008 financial crisis exposed weaknesses in the banking system, including insufficient oversight of derivative instruments and irresponsible credit policies pursued by financial institutions, which ultimately led to a loss of public trust (Reinhart & Rogoff, 2009, p. 1–3; Shiller, 2015, p. 88–91).

A significant share of clients began to perceive banks as institutions acting solely in their own interest, pointing to the lack of transparency in product offerings, hidden fees, and ambiguous lending conditions (NBP, 2020, p. 15). Under such circumstances, space emerged for new players-financial technology companies offering simpler and more accessible financial products (Hedley et al., 2015, p. 51–58).

The development of the sector has primarily resulted from shifting customer expectations with respect to mobility, personalization, and transparency of services, as well as from the ongoing digital transformation, which has enabled innovation in payments, credit, and investment (Brigham & Houston, 2009; Worthington & Welch, 2011; Mishkin, 2013).

Between 2018 and 2023, the number of active payment and lending platforms increased by more than 60%, while the value of digital transactions nearly doubled (NBP, 2023). The decline in cash usage has also contributed to the continued expansion of the sector (Jaroszek & Kołodziej, 2023).

#### The nature and importance of economic growth

Economic growth is one of the central issues in economics, constituting the foundation of socio-economic development and the improvement of living standards (Acemoglu, 2009). In the literature, it is conceptualized as a multidimensional phenomenon encompassing not only increases in production but also technological, institutional, and social transformations. This chapter presents the definition of growth, its main determinants, and a review of theories – from the classics, through the Solow model, to the endogenous approaches of Romer and Lucas.

#### Key definitions and theories of economic growth

Economic growth is not merely a statistical increase in GDP but a process of expanding the productive capacity of the economy, encompassing technological, institutional, and social changes (GUS, 2025, p. 2; Samuelson & Nordhaus, 2010, p. 545). It is accompanied by improvements in

employment, infrastructure, and overall welfare. It is important to distinguish growth from economic development, which also includes qualitative changes such as the enhancement of human capital or innovativeness (GUS, 2025, p. 2).

The mechanisms of growth are explained by three main groups of theories. Classical theories (Smith, Ricardo, Malthus) emphasize the importance of capital accumulation and specialization (Smith, 1776; Meredyk, 2003). Neoclassical theories, with the Solow model at the forefront, highlight the role of savings and exogenous technological progress (Solow, 1956; Barro, 1997). Endogenous growth theories (Romer, Lucas) internalize the sources of growth, pointing to the significance of human capital, innovation, and knowledge as public goods (Romer, 1990; Lucas, 1988). The Keynesian approach stresses the role of demand and state intervention, particularly in times of crisis (Keynes, 1936).

Although GDP remains the primary measure of growth, it does not fully reflect quality of life, omitting, among other things, environmental costs and unpaid work (Stiglitz et al., 2009). For this reason, complementary measures are increasingly used, such as GDP per capita, GNI, TFP, and well-being indicators (OECD, 2022; Meadows et al., 1972). Depending on the purpose of the analysis, different indicators are applied – for example, real GDP in stabilization policy, and purchasing power – adjusted indicators in international comparisons (Krugman & Wells, 2020; Mankiw & Taylor, 2016).

#### **Determinants of economic growth**

The key determinants of sustainable economic growth rest on two pillars: technological progress, which raises the marginal productivity of labor, and capital accumulation, which enables the scaling of production (Solow, 1956, p. 65). The combination of new production techniques and an increasing stock of capital leads to the gradual substitution of routine labor with physical capital, thereby enhancing the technological endowment of labor and increasing real wages (Smith, 1776, p. 23). Effective income convergence, however, requires the complementarity of these factors with an institutional environment conducive to investment and innovation (North, 1990, p. 84).

The most frequently distinguished growth factors include:

- human capital the number of workers, along with their qualifications and motivation, determines the economy's capacity to absorb new technologies and enhance productivity (Lucas, 1988, p. 35; Gruszewska, 2007, p. 341–356),
- physical capital the pace of physical capital accumulation (machinery, infrastructure) defines the short-term dynamics of growth and the potential for enterprise modernization (Solow, 1956, p. 70),
- natural resources the availability and quality of raw materials shape comparative advantages, particularly in resource-intensive sectors, although their importance diminishes with ongoing technological substitution (Barro & Sala-i-Martin, 2004, p. 399),

- technological level innovativeness and effective science–business linkages drive long-term per capita output growth; investments in R&D generate positive externalities across the entire economy (Romer, 1990, p. 72; Olszewska, 2008, p. 119–136),
- pro-development institutions regulations protecting property rights, an efficient financial system, and organizations supporting entrepreneurship reduce transaction costs and mobilize capital for innovative projects (Barro & Sala-i-Martin, 2004).

The most recent data from Statistics Poland (GUS), released in January 2025, indicates that despite the post-pandemic slowdown, Poland has maintained an average GDP growth rate above 3%, underscoring the importance of the synergy between human capital and innovation for sustainable development. It is worth noting that in 2023 GDP growth was markedly lower, amounting to only 0.1%, whereas in other years covered by the GUS report – 2021 (6.9%), 2022 (5.3%), and 2024 (2.9%) – economic growth was significantly higher (GUS, 2025, p. 2).

#### Variables of economic growth

This subsection presents the set of variables used for the empirical analysis of the relationship between financial sector development and economic growth in ten high-income EU countries (IMF, 2023, p. 5). These countries are Belgium, the Czech Republic, Denmark, France, Germany, Poland, Portugal, Spain, Slovakia, and the Netherlands. The data was drawn from the World Development Indicators, the Financial Development Database, and IMF resources (World Bank, 2023, p. 3; Ashenafi & Dong, 2022, p. 376–387).

Dependent variables (macroeconomic):

- international trade (% of GDP),
- gross savings (% of GDP) a proxy for the country's capacity to finance investment,
- annual GDP per capita growth the basic measure of economic growth dynamics,
- credit to the private sector (% of GDP) an indicator of financing availability for enterprises and households,
- CPI inflation (annual %) a measure of price stability,
- population growth (annual %) a demographic factor (World Bank, 2023, p. 5).

Independent variables – financial development:

- Financial Development Index (FDI) a composite indicator of the entire financial system (IMF, 2023, p. 4),
- Financial Markets Index (FMI) the depth and efficiency of capital markets,
- Financial Institutions Index (FII) the scale and quality of the activities of banks and other intermediaries (IMF, 2023, p. 6).

The time series covering 2010–2023 were cleaned of missing values through linear interpolation and standardized; the relationships were then assessed using Pearson's correlation coefficient in order

to determine the direction and strength of linear relationships between financial indicators and macroeconomic variables (Barro, 1991, p. 451).

### Analysis of the relationship between the financial system and economic growth

In this study, six research hypotheses were formulated to examine the impact of financial system development through key indicators. These hypotheses were developed on the basis of literature review and previous studies pointing to the significant role of the financial system in shaping the economic and social situation worldwide.

To investigate the relationship between the level of financial system development and economic growth, the study applies correlation analysis. This method makes it possible to assess both the strength and direction of relationships between the examined variables. Detailed results of the correlation analysis will be presented in the subsequent sections of this chapter.

### Research methodology

The verification of the selected hypotheses was carried out using the Pearson correlation coefficient, which assesses the relationship between the development of the financial sector (measured by the three IMF indices) and the variation of macroeconomic and social indicators in high-income EU countries (King & Levine, 1993, p. 719).

#### Research hypotheses:

- Hypothesis 1 A higher Financial Development Index (FDI) increases the share of foreign trade in GDP (Beck, 2002, p. 425),
- Hypothesis 2 Growth in FDI boosts private sector credit activity (% of GDP) (Levine, 2005, p. 870),
- Hypothesis 3 FDI is positively correlated with the level of gross savings (Pagano, 1993, p. 614),
- Hypothesis 4 The Financial Markets Index (FMI) reduces CPI inflation (price stabilization channel) (Fry, 1997, p. 689),
- Hypothesis 5 A higher Financial Institutions Index (FII) accelerates annual GDP per capita growth (Levine & Zervos, 1998, p. 563),
- Hypothesis 6 FDI has a positive impact on population growth (annual %) (World Bank, 2023, p. 7).

# **Empirical analysis**

To examine the relationship between development of financial sector and macroeconomic variables, a classical method of linear correlation was applied. This approach makes it possible to determine both the direction and the strength of co-movements between two numerical features (Greene,

2018, p. 47). Before calculating the coefficients, each series was checked for outliers and transformed into logarithmic annual dynamics, which reduces heteroskedasticity and limits the risk of spurious correlation in macroeconomic time series (King & Levine, 1993, p. 719).

The empirical material was drawn from two recognized international sources: the World Bank's World Development Indicators and the IMF's Financial Development Index Database. The time span of 2010–2023 (13 annual observations) captures both cross-country variation and short-term trends in the interactions of the studied variables (World Bank, 2023, p. 3; IMF, 2023, p. 4).

The analysis used the Pearson correlation coefficient (r), which ranges from -1 to 1 (IMF, 2023, p. 5):

r > 0 – positive dependence: an increase in one variable coincides with an increase in the other, r < 0 – negative dependence: an increase in one variable coincides with a decrease in the other,  $|r| \approx 0$  – no significant linear dependence.

Following Cohen's criteria, values of |r| > 0.5 are considered strong, 0.3–0.5 moderate, and 0.1–0.3 weak (Cohen, 1988, p. 22). Statistical significance was assessed using a two-tailed t-test at  $\alpha = 0.05$ . Despite the relatively limited sample size, this procedure provides a preliminary quantitative picture of co-movements between the financial sector and economic activity.

To visualize the results, a heatmap was constructed showing the correlations between the selected financial indicators (FDI, FMI, FII) and the key macroeconomic variables.

Figure 1

Correlation matrix heatmap

	Financial Development Index	Financial Institutions Index	Financial Markets Index	Trade (% of GDP)	Population growth (annual %)	Inflation, consumer prices (annual %)	Gross savings (% of GDP)	Domestic credit to private sector (% of GDP)	GDP growth (annual %)
Financial Development Index	1,000	0,999	0,989	-0,497	0,379	-0,215	-0,629	0,543	-0,004
Financial Institutions Index	0,999	1,000	0,991	-0,517	0,403	-0,248	-0,633	0,546	-0,032
Financial Markets Index	0,989	0,991	1,000	-0,470	0,380	-0,316	-0,576	0,480	-0,020
Trade (% of GDP)	-0,497	-0,517	-0,470	1,000	-0,469	0,158	0,836	-0,863	0,597
Population growth (annual %)	0,379	0,403	0,380	-0,469	1,000	-0,456	-0,260	0,170	-0,537
Inflation, consumer prices (annual %)	-0,215	-0,248	-0,316	0,158	-0,456	1,000	-0,029	0,171	0,292
Gross savings (% of GDP)	-0,629	-0,633	-0,576	0,836	-0,260	-0,029	1,000	-0,974	0,429
Domestic credit to private sector (% of GDP)	0,543	0,546	0,480	-0,863	0,170	0,171	-0,974	1,000	-0,424
GDP growth (annual %)	-0,004	-0,032	-0,020	0,597	-0,537	0,292	0,429	-0,424	1,000

Source: own elaboration based on the World Bank and IMF data.

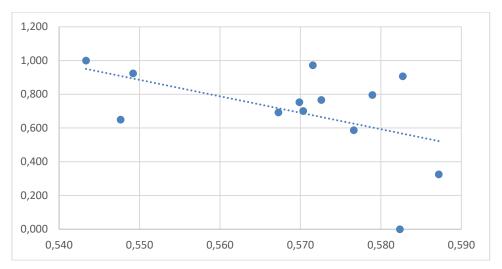
## Verification of the adopted hypotheses

# Hypothesis 1 – financial sector development and international trade

The results ( $r \approx -0.5$ ) did not confirm the hypothesis, indicating a negative relationship between the FDI and the share of international trade in GDP (IMF, 2023).

The scatter plot in Figure 2 illustrates the relationship between the level of financial sector development (FDI, X-axis) and the share of international trade in GDP (Y-axis) in the examined EU countries for the period 2010–2023. Each point represents a single observation (country-year). The points reveal a clear downward trend, and the negatively sloped regression line suggests that a higher level of financial sector development is associated with a lower share of international trade in the economy.

Figure 2
Scatter plot for FDI and trade (% of GDP)



Source: own elaboration based on the World Bank and IMF data.

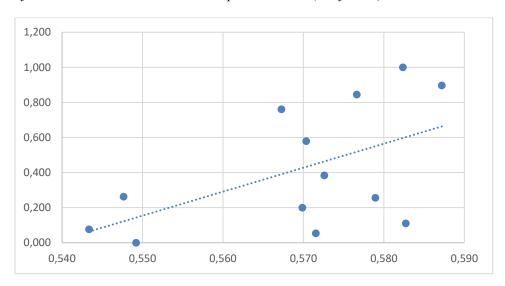
The negative correlation may result from the fact that in highly developed economies with an advanced financial sector, the role of services and production aimed at satisfying domestic demand increases, which reduces the need for exports and imports. At the same time, a well-developed technological and production base decreases dependence on foreign goods and, consequently, the share of trade in GDP (Beck, 2002, p. 110). The negative sign of the coefficient does not contradict the complementarity of finance and trade; rather, it suggests that the relationship is nonlinear and strongly dependent on the level of development and the structure of a given country's economy. The obtained result indicates the need to apply nonlinear models or sample segmentation in order to more accurately capture the differentiated dynamics between financial system development and the intensity of international trade.

## Hypothesis 2 – financial sector development and credit availability

The results ( $r \approx 0.54$ ) confirmed the hypothesis, demonstrating a positive relationship between the Financial Development Index (FDI) and private sector credit (King & Levine, 1993, p. 726).

The scatter plot illustrates the relationship between the level of financial sector development (FDI, X-axis) and the share of private sector credit in GDP (Y-axis) for the years 2010–2023. Each point corresponds to a specific country and year. The points form an upward pattern, and the positively sloped regression line confirms the positive correlation: higher FDI is associated with a greater share of private credit in the economy.

Figure 3
Scatter plot for FDI and domestic credit to the private sector (% of GDP)



Source: own elaboration based on the World Bank and IMF data.

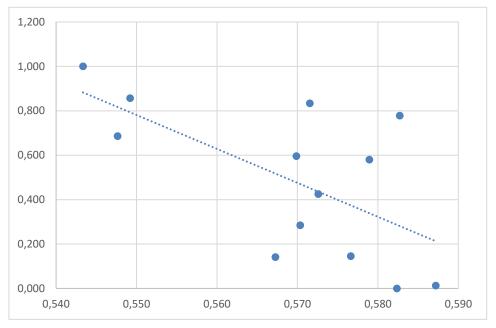
A possible explanation for the observed positive correlation is that in economies with a well-developed financial infrastructure, banks and financial institutions allocate capital more efficiently. Through more accurate risk assessment and more effective asset management, they expand the supply of credit available to both enterprises and households. The broad range of financial products ranging from consumer and mortgage loans to investment financing fosters more intensive reliance on external sources of funding. This, in turn, translates into higher credit activity and substantiates the observed positive relationship between financial sector development and the scale of credit provision (King & Levine, 1993, p. 726; Bukowski, 2012, p. 39–55).

### Hypothesis 3 – financial sector development and national savings

The analysis revealed a weak but statistically significant negative correlation ( $r \approx -0.62$ ) between financial sector development and the level of gross savings relative to GDP. This suggests that

the higher the FDI, the lower the share of savings, which can be explained by the fact that in mature financial systems households tend to replace traditional capital accumulation with cheaper credit (Pagano, 1993, p. 616). The scatter plot illustrates the relationship between financial sector development (FDI, X-axis) and the level of gross savings relative to GDP (Y-axis). Each point represents a single observation (country-year). The downward-sloping trend line clearly confirms the calculated correlation: the higher the FDI, the lower the level of gross savings. This relationship is illustrated in the figure below.

Figure 4
Scatter plot for FDI and gross savings (% of GDP)



Source: own elaboration based on the World Bank and IMF data.

A possible explanation for the negative correlation is that in economies with a highly developed financial sector, both households and enterprises increasingly replace traditional saving with easily accessible credit, which lowers the overall level of savings relative to GDP. At the same time, a more stable macroeconomic environment and a wide range of financial services reduce the need to accumulate precautionary reserves, further diminishing the propensity to save.

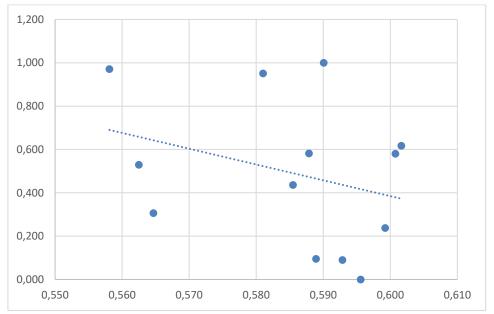
## Hypothesis 4 – financial market development and inflation

The negative correlation ( $r \approx -0.32$ ) confirms that deeper capital markets contribute to price stabilization through more efficient resource allocation (Fry, 1997, p. 691).

The scatter plot presented in Figure 5 illustrates the relationship between financial market development (FMI, X-axis) and the annual CPI inflation rate (Y-axis) in the period 2010–2023. Each

point represents a single observation. The slope of the regression line suggests that a negative relationship-higher FMI is associated with lower inflation.

Figure 5
Scatter plot for FMI/Inflation, consumer prices (annual %)



Source: own elaboration based on the World Bank and IMF data.

A possible explanation of the negative correlation assumes that developed financial markets stabilize the economy through more efficient capital allocation, reducing the risk of excessive demand and financial instability, which naturally alleviates inflationary pressures. At the same time, access to a broad range of financial instruments enables enterprises to manage resources more precisely, enhance productivity, and curb increases in production costs, thereby lowering the overall price level.

## Hypothesis 5 – development of financial institutions and economic growth

The near-zero correlation ( $r \approx -0.03$ ) indicates a neutral short-term impact of FII on GDP; potential effects may only become visible over a longer horizon (Levine & Zervos 1998, p. 540).

Figure 6 presents a scatter plot illustrating the relationship between the development of financial institutions (FII, X-axis) and the annual growth rate of GDP per capita (Y-axis) in the years 2010–2023. The points align along an almost horizontal line, with each point representing a single observation (country–year). This indicates the absence of a significant short-term correlation.

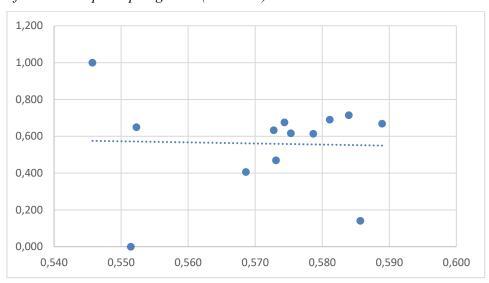


Figure 6
Scatter plot for FII/GDP per capita growth (annual %)

Source: own elaboration based on the World Bank and IMF data.

A possible explanation for the neutral correlation is not straightforward. Annual GDP dynamics depend on a wide range of factors – from fiscal and monetary policy, through the level of investment and foreign trade, to the pace of technological progress. The development of financial institutions is only one element of this system, and its impact may be weakened by other variables. Moreover, the effects of improved capital allocation and higher investment typically materialize over the long term, which is why in the short run the relationship with GDP growth may remain statistically neutral.

## Hypothesis 6 - financial sector development and population growth

The results of the correlation analysis confirmed this hypothesis, showing a positive relationship between these variables ( $r \approx 0.38$ ). This indicates that higher levels of financial sector development are associated with stronger population growth dynamics (World Bank 2023, p. 78).

The scatter plot presented in Figure 7 illustrates the relationship between financial sector development (FDI, X-axis) and the annual population growth rate (Y-axis). Each point represents a single country-year observation for the period 2010–2023. A clear positive correlation can be seen – higher levels of FDI are accompanied by higher rates of population growth.

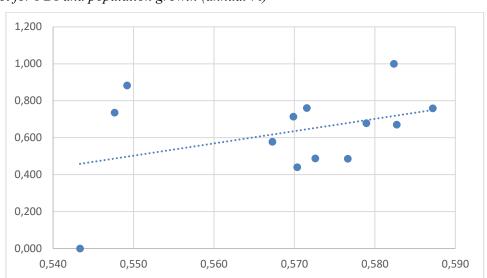


Figure 7
Scatter plot for FDI and population growth (annual %)

Source: own elaboration based on the World Bank and IMF data.

A possible explanation for the observed positive correlation is that a well-developed financial sector facilitates capital mobilization for investments in healthcare and education, which improves life expectancy, reduces infant mortality, and enhances the quality of maternal care, thereby naturally increasing birth rates and lowering mortality. At the same time, greater macroeconomic stability associated with advanced financial markets reduces cyclical fluctuations and unemployment risks, providing households with stronger income security and encouraging long-term decisions such as family expansion.

The correlation analysis carried out for each of the six hypotheses, designed to illustrate the relationships between financial sector development and key economic and social variables, revealed that these interactions are complex and strongly dependent on both the level of development of the examined countries and the structure of their financial systems. The results confirmed the positive role of deepened capital markets in price stabilization and improved credit availability but also demonstrated a neutral short-term effect of financial institutions on GDP growth, a decline in traditional saving practices, and a temporary increase in unemployment in advanced economies, where capital shifts toward high-productivity and automated sectors. In emerging economies, financial deepening delivers more immediate growth benefits, whereas in mature economies such benefits materialize only in the longer term and are counterbalanced by structural adjustments. Ultimately, financial sector development emerges as a multidimensional factor: on the one hand, it strengthens macroeconomic stability and mobilizes capital, while on the other, it requires balanced policies that minimize risks to the labor market and the savings-investment equilibrium. Future research should therefore employ nonlinear models and country segmentation to more precisely capture the diverse mechanisms linking finance with the real economy under varying institutional conditions.

#### Conclusion

The purpose of this article was to analyze the impact of financial sector development, measured by the IMF indices (FDI, FMI, FII), on key macroeconomic and social variables in ten high-income EU countries during the period 2010-2023. The study employed Pearson correlations calculated for standardized data drawn from the World Development Indicators and the Financial Development Index Database, with the results supplemented by case analysis. The findings indicated that financial deepening contributed to price stabilization and increased credit availability for the private sector, while the short-term effect on GDP growth remained neutral. In advanced economies, a higher level of financial development was associated with declining traditional savings and a temporary rise in unemployment, confirming the nonlinear and context-dependent nature of the finance-growth nexus. A key added value of the study was the demonstration that the effects of financial sector development depend on the level of advancement and structural features of individual economies, implying the necessity of differentiated financial policies tailored to national conditions. The conducted analysis confirmed the complex and multidimensional character of the relationship between the financial sector and economic growth. The empirical results are largely consistent with the findings of King & Levine (1993), Pagano (1993), Fry (1997), and Levine & Zervos (1998). At the same time, observed deviations from the literature-particularly the absence of a significant relationship between financial institutional development and GDP dynamics-suggest that these effects materialize only in the longer term, which falls beyond the scope of the analyzed period.

An added value of this study lies in demonstrating that the impact of the financial sector depends on the level of development and the structural characteristics of individual economies, which implies the necessity of differentiated financial policies tailored to national conditions. Future research should employ more advanced econometric methods, such as panels or dynamic models, to better capture causality and long-term effects. Expanding the sample to include middle- and low-income countries would also make it possible to verify whether the observed findings are universal in nature or rather specific to highly developed economies.

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