

The determinants of financial economy: inhibiting and encouraging factors

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Journal of
Economic Studies

347

Received 27 December 2024
Revised 5 February 2025
Accepted 12 February 2025

Abstract

Purpose – In this paper, financial growth is observed in the context of Minsky's theory. Based on literature review, it is possible that large financial depth could eventually entail financial instability. The size of the financial enlargement with potential threats of instability could be defined by the volume and accessibility in credit. For this purpose, the macroeconomic determinants of financial depth are empirically investigated by using annual time series data for a specific group of countries from the Balkan and the Eastern European region.

Design/methodology/approach – The economic system has become a matter of controversy. Most economies are currently functioning in an interdependent, globalized system. The amplification of the financial sector at the international level and the high degree of integration have rendered the debate on financial instability solemnly significant.

Findings – The goal is the identification of those factors with the greatest impact on the financial growth and, more precisely, those that stimulate credit as a key variable of financial enlargement. The impact is not only restricted to the positive movement.

Originality/value – All selected countries intentionally belong to a homogeneous group of economies in transition. Hence, a model based on panel data is constructed over a period from 1990 to 2020.

Keywords Financial growth, Credit, Minsky, Financial instability, Transitional economies, Capital flows, Economic growth

Paper type Research paper

1. Introduction

Financialization and globalization are closely interconnected concepts in the contemporary era. A notable definition of financialization, as proposed by Epstein (2005), refers to the increasing role of financial motives, financial markets, financial actors, and financial institutions in the functioning of both domestic and international economies. The implication of financialization is that its development has occurred at the expense of traditional economic sectors, resulting in a relative shift of capital from the real economy to the financial sector (see Table 1).

Recent phenomena of financial distortions have underscored the inadequacy of mainstream economic theory in offering sufficient explanations for the causes and frequency of these distortions. Alternative economic theories may contribute valuable insights, complementing traditional theory and leading to a more coherent and robust understanding. Minsky, an influential economist, made significant contributions in this regard. He posited that financial instability, though not immediately apparent, could coexist with a seemingly stable financial system. Therefore, early detection of such instability, through the observation of specific indicators, could serve as a warning, enabling precautionary measures to shield the economy from potential financial disruptions.

Although there has been some debate regarding whether financial deepening could lead to instability, the existing literature and historical instances of financial crises have largely demonstrated this tendency. According to the prevailing literature, financial depth is not necessarily beneficial for economic growth and could, in fact, result in instability. Minsky's analysis provides a framework for understanding this dynamic. Consequently, the key features



Journal of Economic Studies
Vol. 53 No. 2, 2026
pp. 347-358
© Emerald Publishing Limited
e-ISSN: 1758-7387
p-ISSN: 0144-3585
DOI 10.1108/JES-12-2024-0865

JEL Classification — B26, C33, E44, F43, G01, G41, F65, F32, F34, F36

Table 1. Regression analysis results

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>			
				F(9, 14)	=	34.29
Model	7889.58929	9	876.621032	Prob > F	=	0.0000
Residual	357.935658	14	25.5668327	R-squared	=	0.9566
				Adj R-squared	=	0.9287
Total	8247.52494	23	358.588041	Root MSE	=	5.0564

<u>dCred</u>	<u>Coef.</u>	<u>Std. Err.</u>	<u>t</u>	<u>P> t </u>	<u>[95% Conf. Interval]</u>	
BroM	.5074399	.1053816	4.82	0.000	.2814188	.7334611
bnpl	1.882003	.3157288	5.96	0.000	1.204832	2.559174
BCAR	6.06861	1.183018	5.13	0.000	3.531289	8.605931
TR	-.4593867	.4013813	-1.14	0.272	-1.320264	.4014905
FDI	1.110276	.5158947	2.15	0.049	.0037922	2.21676
IntR	1.058014	.3543678	2.99	0.010	.2979712	1.818058
CurAB	-1.635558	.2862074	-5.71	0.000	-2.249412	-1.021704
Capdc	-.6062476	.1120525	-5.41	0.000	-.8465763	-.3659189
TDS	.6628327	.2882528	2.30	0.037	.0445919	1.281074
_cons	-68.72556	12.61626	-5.45	0.000	-95.78475	-41.66636

Source(s): Author's own work

of Minsky's theory are outlined, followed by a review of the relevant literature. Minsky's financial theory emphasizes the crucial role of finance in the real economy while acknowledging the potential risks it poses.

In this context, the paper explores the factors that inhibit or encourage financial growth, particularly within a group of countries characterized by a similar economic profile, where finance is regarded as a vital tool for fostering growth. An econometric model is presented to investigate the macroeconomic determinants of financial expansion, utilizing annual time series data. The selected countries have undergone a transitional economic phase since 1990. The goal is to identify the most influential factors affecting credit expansion. The findings punctuate the significance of the current account balance.

2. Minsky's main insights

Like many post-Keynesian economists, Minsky challenges several traditional economic assumptions. He rejects the efficient market hypothesis and the conventional view that consumer choice is central to economic activity, replacing these with the perspectives of entrepreneurs and bankers. Minsky emphasizes the dynamic interaction between industrial capitalism, banks, other financial institutions, governments, workers, and consumers, all

within the context of an uncertain future. In his framework, a financial incident that impacts the real economy is a significant concern. Minsky (1986a, b) argues that the financial system affects investment by determining the demand price for investment goods. He perceives the actual economy as driven by the pursuit of financial profits, where production precedes market exchange and finance precedes production. External financing contributes to production and investment costs by creating liabilities that must be repaid in the future. As a result, the expected returns from production and investment must be sufficient to meet the incurred debt. Given the uncertainty inherent in economic activity, the assurance of adequate profits is never guaranteed, which increases the risks associated with both borrowing and lending. Ultimately, these risks reduce both the supply and demand for investment goods, thereby influencing investment levels.

Minsky's theory highlights the cyclical nature of the economy and identifies a series of evolving stages that lead to successive phases of economic cycle. The modern economy begins with negotiations between financial institutions and entrepreneurs to finance investments aimed at generating future profits. This could be perceived as an exchange of present capital for future capital, where current investments in production are financed with capital that will be repaid through future profits. In his renowned phrase, "Where is the cash flow?" (1986), Minsky underscores the long-term consequences of past financial commitments on the present and future trajectory of the economy.

Financial institutions play a critical role in fueling the economy with credit. A key focus of this analysis is not only the volume of liabilities, loans, and credit structures but also their long-term implications. This aspect is particularly important because the transition of the economy toward fragility and imbalance does not occur abruptly; rather, it is the result of accumulated events over time.

Minsky's Financial Instability Hypothesis provides a foundational understanding of the financial system's inherent instability, particularly during periods of euphoria. He argues that "financial stability" itself can become a source of instability, as economic agents develop overly optimistic expectations when the financial cycle is on the upswing. During such periods, economic growth accelerates, and the perception of stability becomes entrenched. As a result, indebtedness increases due to these euphoric expectations. Minsky's theory identifies three categories of financial units: hedge, speculative, and Ponzi. The shift from hedge to these riskier positions can occur easily during euphoric times, as risk aversion diminishes and margins of safety are reduced, especially when short-term credit is readily available. In such an environment, there is a strong incentive to refinance debt with additional credit rather than reduce existing liabilities. As the economy expands, firms are implicitly encouraged to increase their debt levels, expecting higher profits. Consequently, this practice becomes widespread, and firms increasingly rely on debt-financed investment based on leverage.

According to Minsky, the financial system progresses to the speculative finance phase, where borrowers are only able to service interest payments but cannot repay the principal. As a result, they must roll over their debt with additional loans. This situation escalates to the Ponzi finance phase, where agents and firms are compelled to borrow more simply to cover interest payments on their existing liabilities (Minsky, 1982, pp. 22–23, pp. 66–67, pp. 105–106; and 1986, pp. 206–213). At this point, credit becomes increasingly restricted, liquidity declines, and deleveraging begins. Highly indebted firms and agents find themselves unable to meet their obligations, leading to defaults. As a result, a period of moderate prosperity can swiftly transition into a period of rapid contraction, culminating in a deep recession (Minsky, 1986a, b, 1992a, b). This process is known as the "Minsky moment," when it becomes apparent that indebtedness has reached its peak and repayment is no longer feasible.

3. Related literature

The interplay between financial instability and various macroeconomic factors has been widely discussed in literature, with numerous scholars contributing significantly to the

understanding of the dynamics at play. Financial instability is often considered a potential byproduct of globalization, the free movement of capital, enhanced international financial interdependence, and deregulation. During periods of credit expansion, phenomena such as irrational exuberance, leniency in financial regulation, and an abundance of available credit could exacerbate risks to the stability of the international financial system.

McKinnon and Pill (1997) describe this tendency as the “Over-borrowing Syndrome”, while Krugman (1998) argues that excessive lending and borrowing lead to moral hazard concerns. Sau (2010) asserts that the inherent complexity of the financial system makes it prone to instability, where group dynamics can fuel speculative bubbles and attitudes toward risk that ultimately contribute to financial instability. Borio and Disyatat (2011) link financial distortions to “excess elasticity” in the system, wherein the inability to limit the expansion of credit and asset prices results in financial instability. Furthermore, Borio and Disyatat raise concerns regarding “excess savings,” noting that surplus countries could contribute to instability by financing credit booms in deficit countries. Eichengreen and Arteta (2000) find that a 1% increase in domestic credit correlates with a 0.056% rise in the likelihood of a banking crisis in the subsequent year.

A persistent debate exists over whether financial expansion ultimately has a positive or negative impact on the economy. While this debate remains ongoing, it seems that the answer depends largely on the perspective from which the issue is approached. Nevertheless, substantial financial growth is often seen as a potential source of vulnerability, as it may foster financial instability, as suggested by Minsky.

Many economists have argued that financialization has positive effects on economic development. Klein and Olivei (2008) propose that the opening of the capital account through financial integration could promote economic growth by developing the financial system. Levine (2005) investigates the relationship between financial depth and growth, concluding that financial development is positively linked to capital accumulation over time. Levine *et al.* (2000) also suggest that finance is positively correlated with capital accumulation, productivity, and economic growth.

Klein and Olivei (1999), in their study of 82 countries between 1986 and 1995, find that financial depth is positively related to economic growth in developed countries but negatively in developing ones. They attribute this divergence to the differing financial systems between the two groups of countries. Edwards (2001) arrives at a similar conclusion, stating that financial deepening benefits economic growth in developed countries but has an adverse effect in developing ones. Loayza and Rancière (2002) support the view that while financial development can promote economic growth, it can also be detrimental in certain circumstances. They argue that financial development, which often accompanies market opening, facilitates risk diversification, but also carries both positive and negative long-term implications for growth.

Contradictory views on the impact of financial deepening also exist. Aizenman *et al.* (2012) contend that financial integration could lead to financial instability and banking crises, ultimately hindering the financial system’s ability to supply credit to the real economy. Kaminsky and Reinhart (1999) suggest that financial liberalization may provoke banking crises, drawing from the experience of Southeast Asian countries where liberalization led to rapid growth in bank deposits, increased capital inflows, and rising real interest rates, culminating in a banking crisis. In such an unstable macroeconomic environment, where banks take on excessive risks, financial distortions are likely to emerge, reducing overall economic growth.

McKinnon and Pill (1997) examine financial crises in Latin America, Philippines, and Turkey, suggesting that in developing countries with weak institutions, investors often engage in moral hazard behavior, assuming risky assets in high profits’ anticipation, with the expectation that official authorities or international organizations will cover any losses incurred by the banking system. Stiglitz and Weiss (1981) address the issue of asymmetric information, linking it to free-rider behavior and moral hazard. Mehrez and Kaufmann (2000) also highlight that economies with low transparency levels are more vulnerable to financial instability, suggesting that the likelihood of financial crises diminishes when corruption is low.

Demirguc and Detragiache (1998), in their study of 50 countries between 1980 and 1995, demonstrate that financial integration tends to increase the likelihood of financial crises. Their findings suggest that a well-established institutional environment with low corruption could mitigate the negative effects of financial integration on financial crises.

Creel *et al.* (2015) examine the long-term effects of financial instability on economic performance in selected EU countries, concluding that large-scale financial depth does not contribute to economic growth. Instead, it increases the risks of financial instability, with the enlargement of the financial system contributing to the likelihood of large-scale financial crises. Similarly, Kohler (2019) studies the financial cycle in emerging countries, suggesting that currency fluctuations during the upward phase of the financial cycle enhance investment, but at the cost of deteriorating current account balances. Kohler argues that financial account regulation could mitigate this fragility.

The stock-flow consistency model (SFC), introduced by Godley (1999) and gaining prominence after the 2008 financial crisis, offers a framework for understanding the relationship between the real and financial sectors of the economy. This model aligns with Minsky's analysis of the interdependence between economic sectors and how credit expansion could lead to indebtedness. The SFC framework suggests that this process can contribute to a volatile financial system.

Dafermos (2018) develops a dynamic model incorporating Minsky and Godley's insights, arguing that instability and financial cycles arise from the interaction between spending propensity and targeted indebtedness. These debt levels, which tend to grow during periods of economic expansion and decrease during contraction, are endogenous to the system and contribute to financial instability. Similarly, Jump *et al.* (2017) develop a credit cycle model where firms' actions are determined by their desired debt-to-income ratio, with increased leverage during economic booms leading to higher debt ratios and greater volatility.

Delli Gatti *et al.* (2010) introduce a credit network model based on inside and outside credit. The model underlines the importance of the borrower's net worth in determining creditworthiness and stability, while also introducing the concept of the financial accelerator, where shocks to the network are amplified by increased credit rates in response to decreased net worth. The model also includes an endogenous mechanism for selecting business partners, which changes the structure of the credit network over time.

Nikolaïdi and Stockhammer (2017) propose a categorization of Minskyan models based on their focus on debt or asset prices, highlighting credit rationing models where banks provide credit based on their financial position. They suggest that financial instability arises from the interaction between the financial positions of banks and firms, with the desired debt ratio linked to risk perception, which changes throughout the cycle. Nikolaïdi (2014) further explores the interaction between firms and banks, emphasizing the role of leverage in producing financial instability during periods of euphoria.

Ryoo (2013) develops a model to examine the impact of banking profitability on financial instability, arguing that credit supply is closely related to the profitability of banks and firms. The model suggests that instability arises from the expansionary effects of credit supply, which increases firm indebtedness. The prolonged leverage during the euphoria phase ultimately leads to a contraction due to decreased profitability and rising interest payments.

Prochniak and Wasiak (2016) analyze the financial deepening in the EU28 and OECD countries between 1993 and 2013, finding that the large size of the financial sector negatively impacts the economy. Dhrifi (2010) supports this view, demonstrating that the liberalization of the financial system and the ensuing instability reduce the benefits of financial integration, with financial fragility negatively affecting economic growth.

In summary, the literature suggests that financial systems often exhibit vulnerabilities that could result in instability, particularly when economies become highly indebted, and financial institutions take on excessive leverage. The complex relationship between credit, risk, and economic growth underscores the potential for financial instability, which may exacerbate economic crises.

4. Data sources and sample

Building upon the aforementioned literature review, the subsequent section is devoted to the formulation of the relevant model. The data for all variables have been sourced from the World Bank, which applies a consistent methodology across the countries included in the sample. This approach is considered robust, as it ensures the use of uniform indicators derived from a single, reliable data source. All data are presented as year-end values.

The dataset utilized for the analysis comprises the sample of countries selected for model construction. Specifically, the sample includes sixteen countries: *Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Moldova, Montenegro, Romania, Serbia, the Slovak Republic, Slovenia, and Ukraine*. These countries were chosen based on their common status of undergoing economic transition, positioning them as developing economies. The time panel spans from 1990, marking the beginning of their transition, through the global financial crisis of 2008, and extends to 2020, a period in which economic stability was largely restored. This temporal range facilitates a comprehensive understanding of the economic behavior of these countries across various phases of the financial cycle.

5. Selected variables

The variables selected for the model have been identified as the most appropriate for the analysis. The dependent variable is the “**Domestic Credit to Private Sector as a Percentage of GDP**” (dCred), which serves as both a measure of financial expansion and a potential indicator of financial volatility when it experiences excessive growth. This variable quantifies the level of indebtedness through credit extended to the private sector, expressed as a percentage of total GDP for each country.

The independent variables chosen for the model include:

- (1) **Broad Money as a % of GDP (BroM)**, representing the money supply within the economy;
- (2) **Nonperforming Loans to Total Gross Loans (bnpl)**, which measures the proportion of nonperforming loans relative to the total loan portfolio;
- (3) **Bank Capital to Assets Ratio (BCAR)**, defined as the ratio of bank capital and reserves to total bank assets;
- (4) **Turnover Ratio of Domestic Shares (TR)**, which is the value of domestic shares traded divided by their market capitalization, providing insight into market liquidity;
- (5) **Foreign Direct Investment Net Inflows as a Percentage of GDP (FDI)**, reflecting the level of foreign investment entering the economy;
- (6) **Real Interest Rate (IntR)**, adjusted for inflation using the GDP deflator, providing a measure of the real cost of borrowing;
- (7) **Current Account Balance (CurAB)**, which includes the net exports of goods and services, net primary income, and net secondary income;
- (8) **Market Capitalization of Listed Domestic Companies as a Percentage of GDP (Capdc)**, which represents the total value of outstanding shares multiplied by their market price;
- (9) **Total Debt Service as a Percentage of GDP (TDS)**, indicating the total amount of interest and repayments on debt relative to GDP.

The selection of these variables is supported by existing literature, which suggests that they are key contributors to financial expansion. Additionally, their combination is expected to generate a robust and informative model for analyzing the dynamics of financial deepening and instability.

6. Methodology

The model under consideration is a panel data model, which has been subjected to robustness testing. The selected regressor is based on the pooled ordinary least squares (OLS) estimator. This model operates under the assumption of stationarity, implying that both the mean and variance remain constant over time. The stationarity assumption was verified through the unit root test, with the null hypothesis suggesting the presence of a unit root and the alternative hypothesis proposing stationarity. The results from the tests (P, Z, L*, and Pm) rejected the null hypothesis at an alpha level of 0.05, indicating no unit roots in the panels under the given test conditions (which included panel mean and time trend), thereby confirming that the values are stationary.

Furthermore, the normality of the model was examined. The normality test of the model states that the residual errors are normally distributed. The residuals from the regression model were predicted and the residual errors were found to follow a normal distribution. The normality test confirmed the null hypothesis that the data adhere to a normal distribution.

The variance of the error term is assumed to be constant, indicating homoscedasticity. The Breusch-Pagan test for homoscedasticity yielded a nearly zero chi-square value, with the *p*-value supporting the rejection of the null hypothesis, thereby confirming constant error variance. This result was further corroborated by White's diagnostic test for homoscedasticity.

Autocorrelation in the residuals was tested using the Durbin-Watson method, which returned a value of 1.83, indicating no autocorrelation within the residuals. Additionally, a multicollinearity test was conducted among the explanatory variables using the variance inflation factor (VIF). The mean VIF value of 4.51 indicated the absence of multicollinearity among the variables [1].

7. Final model

The development of the final model has been a complex and iterative process. On one hand, it was essential to avoid under-representation in the model, ensuring that the explanatory power of the independent variables, as measured by the R-squared value, was not compromised. On the other hand, care was taken to prevent overfitting, which could occur if too many variables were included, potentially leading to issues with variance. While overfitting might reduce the model's bias, it would likely increase variance, introducing greater variability. Additionally, overfitting could heighten the risk of multicollinearity, potentially resulting in errors within some of the explanatory variables. The final model was carefully constructed by selecting the most significant explanatory variables, ensuring an optimal balance in the number of variables included. The resulting panel data model was characterized as "strongly balanced," and can be expressed as follows:

$$\begin{aligned} dcred = & \beta_0 + \beta_1 BroM + \beta_2 bnpl + \beta_3 BCAR + \beta_4 TR + \beta_5 FDI + \beta_6 IntR + \beta_7 CurAB \\ & + \beta_8 Capdc + \beta_9 TDS + u \end{aligned}$$

Based on the preceding table, the F-statistic (34.29) assesses the joint effect of all independent variables in the model. Its interpretation is closely tied to the *p*-value, which is approximately zero (0.00). This low *p*-value indicates that the independent variables in the model significantly predict the dependent variable, suggesting a statistically significant relationship among them. The *p*-value is compared to an alpha level of 0.05, which is the commonly accepted threshold for statistical significance. This same alpha level is applied to all *p*-values in the subsequent analysis of each coefficient, in accordance with established statistical norms. It is important to note that this *F*-test evaluates the overall significance of the set of independent variables in their ability to predict the dependent variable.

The R-squared value represents the proportion of the variance in the dependent variable that can be explained by the independent variables. The model shows that the independent

variables account for over 95% of the variance in the dependent variable, which pertains to financial depth. Similarly, the adjusted R-squared value is close to 93%, confirming the robustness of the model.

The coefficients associated with each independent variable provide valuable insights into their effects. Specifically, each coefficient reflects the predicted change in the dependent variable resulting from a one-unit increase in the corresponding independent variable. For instance, a one-point increase in Broad Money growth is associated with a predicted increase of 0.5074399 points in Credit. The variable with the strongest positive relationship to the dependent variable is the “Bank capital to assets ratio” (BCAR), with a coefficient of 6.06861, while the most negative relationship is observed with the “Current account balance” (CurAB), which has a coefficient of -0.6062476 , indicating that an increase in CurAB is associated with a decrease in Domestic Credit (-1.6355). This suggests that an increase in market capitalization correlates with reduced demand for credit. Other variables, such as the “Turnover ratio” (TR) and the “Market capitalization of listed domestic companies” (Capdc), also show negative impacts on financial depth. It is logical that higher turnover ratios or increased capitalization may reduce borrowing demand or even reverse the trend. In contrast, the “Bank nonperforming loans to total gross loans” (bnpl), “Foreign Direct Investment” (FDI) inflows, and “Real Interest Rate” (IntR) all exhibit positive impacts of more than 1%, while the “Total debt Service” (TDS) shows a positive effect slightly greater (0.6628327) than Broad Money. All parameters, with the exception of the turnover ratio of domestic shares (with p -values <0.05), are statistically significant.

It is particularly intriguing to explore how these variables affect credit from various perspectives. Some variables contribute to financial expansion by fostering an atmosphere of euphoria (e.g. bank capital to assets ratio, money supply, interest rates), while others increase the demand for money (e.g. non-performing loans, debt service obligations). A third group of variables (e.g. market capitalization of listed domestic companies, current account balance, turnover ratio of domestic shares) exerts a negative impact, which serves to stabilize the economy by reducing dependence on the financial system and mitigating the risk of financial distortions. These variables can be considered stabilizing factors, as defined by Minsky.

The bank capital to assets ratio plays a significant role in shaping positive expectations. As this ratio increases, financial flows tend to expand. Banks with higher capital adequacy ratios are perceived as more secure, enhancing confidence and creating an environment conducive to increased credit demand. This dynamic contributes to prolonged periods of euphoria, during which leverage increases and bank capital grows. Given that banks are central to the financial system, their actions significantly influence the broader financial economy. They operate in parallel with the financial cycle, where credit availability expands during growth periods as banks feel more secure in their financial positions and those of their borrowers, thereby amplifying the financial cycle and economic activity.

The environment of euphoria is also reflected in positive market expectations. Increases in money supply and foreign direct investment signify greater availability of capital. Money supply stimulates the circulation of money, generating its own demand, which can be interpreted as financial deepening. Similarly, foreign direct investment inflows act as an injection into the economy, further contributing to financial expansion.

An increase in interest rates, however, can be viewed as a potential source of financial instability, as it raises the cost of debt servicing for firms. Consequently, interest rates are positively associated with the leverage ratios of debt-engaged entities, particularly during periods of financial expansion. This gradual shift in financing positions can lead to speculative behavior or even Ponzi financing.

In contrast, variables such as total debt service and bank nonperforming loans to total gross loans contribute to financial depth, not by fostering euphoric conditions but by responding to increased demand for financial resources. As nonperforming loans rise, economic agents seek additional financial resources, which in turn drives up money demand. Similarly, the total debt service ratio requires credit to maintain economic activity, as loans must be rolled over.

On the other hand, an increase in the turnover ratio of domestic shares can be seen as a positive indicator, contributing to the resilience and efficiency of the domestic economy. The same applies to the market capitalization of listed domestic companies and the current account balance, both of which function as stabilization factors. An increase in their values can help reduce the economy's reliance on external capital and mitigate the need for constant borrowing. The stock market capitalization of domestic companies reflects the financial health of firms, reducing the need for further borrowing and signaling a shift toward economic growth independent of financial expansion. In this context, these variables act as channels for economic growth beyond the scope of financial deepening. Among them, the most significant factor in reducing financial depth is the current account balance.

8. Conclusion

This paper endeavors to develop a pragmatic approach for understanding the processes that govern the economy and finance. It represents a complex interplay between observed empirical facts and a theory derived through deductive reasoning. However, the core principle underlying this approach is that theory must be aligned with empirical evidence. As [Myrdal \(1957, p. 160\)](#) asserts, when the observations of facts do not agree with a theory, i.e. when they do not make sense in the frame of the theory utilized in carrying out the research, then the theory has to be discarded and replaced by another (1957, p. 160).

The global financial crisis has highlighted the regulatory dynamics of international financial systems. Several fundamental stylized facts have emerged from the contemporary period, including the dominance of the financial system over traditional economic activities, the correlation between increased financial inflows and economic growth, the stability of the financial system in conjunction with the stability of the real economy, and the extensive interdependence among financial systems across countries. These observations suggest that financial depth may serve as an indicator of a country's heightened reliance on financial markets.

The globalized financial system has exposed several vulnerabilities, prompting a renewed examination of past theories. One such theory is Minsky's financial instability hypothesis, which remains highly relevant. Minsky posits that financial crises are an inevitable consequence of endogenous flaws within the system, rather than the result of any specific policy failure. The continuous availability of credit fosters an atmosphere of euphoria, but when credit flows suddenly cease, economic slowdowns ensue. According to Minsky, an economy's high dependency on financial depth contributes to procyclical behavior, with financial instability becoming intrinsically linked to debt accumulation. Despite potential growth, such an economy faces an increasing risk of vulnerability to unforeseen economic disruptions.

The model employed in this research investigates the factors that exert the most significant influence on the financial economy. Credit, while not inherently undesirable, carries risks when present in large quantities. The panel consists of countries with shared characteristics, including transitional economies with immature financial systems, yet strong aspirations for financial deepening and integration. The analysis spans from 1990, marking the beginning of the transition, through the financial crisis of 2008, and into 2020, allowing for a comprehensive understanding of these countries' economic behavior throughout various stages of the financial cycle. The results indicate that certain variables positively correlate with financial growth, contributing to an environment of euphoria and increased money demand. Conversely, variables such as market capitalization of listed domestic companies and the current account balance exert negative effects, helping to stabilize the economy by reducing reliance on the financial system and mitigating exposure to financial distortions.

An additional consideration pertains to the consequences of financial distortions in transitional economies, which typically lead to capital outflows and complicate recovery efforts. Many of these countries lack the capacity for fiscal expansion during periods of

distortion, either due to existing deficits or the unwillingness of markets to lend to them. For these countries, financial crises often bring about exchange rate devaluations as part of a balance of payments adjustment, alongside fiscal contractions. This combination hinders the application of fiscal expansion as a counter-cyclical policy, resulting in a reduction of domestic aggregate demand.

Minsky rejected the notion that financial matters are independent from real economy, emphasizing that financial events inevitably have real-world economic implications. Credit booms are often associated with diminished risk aversion, reduced safety margins, and a tendency to prioritize refinancing over debt reduction. Many economies, it appears, have adopted strategies that prioritize capital inflows, interpreted as increased credit availability and, ultimately, financial deepening.

An unstable macroeconomic environment contributes to both financial enlargement and instability. Such instability can arise from the loosening of current account balances. The findings suggest that maintaining a positive current account balance can enhance the stability and resilience of the financial economy by generating surpluses and reducing the need for continuous borrowing. The degree of intervention and regulation required in the financial system is crucial in determining its stability. As [Minsky \(1986a, b\)](#) suggests, financial reform can only be effective when integrated into a broader system of reforms. A stable economy necessitates a suitable level of regulation and oversight, including a reevaluation of the roles played by governments and central banks. Government intervention is essential during downturns to sustain profits and investment, and to produce surpluses during periods of economic expansion, in order to curb excessive profits. When both the government and firms are in deficit during credit expansions, surpluses accumulate in the hands of financial capital.

Furthermore, financial stability demands a clear definition of responsibilities for central banks as lenders of last resort. Transitional economies require policies aimed at preventing crises, including flexible exchange rate systems, capital account management techniques, and measures to ensure the robustness of external accounts, such as the accumulation of foreign exchange reserves. Multilateral agreements on exchange rate levels could be equally beneficial. Effective regulation and supervision of the banking system are also necessary to curtail excessive lending during expansionary periods. A potential solution could be the compartmentalization of financial institutions, distinguishing between investment and commercial banking, severing the link between financing via banks and investment production processes, and breaking the connection between debt accumulation and future profits. The shift from traditional long-term financing to short-term credit has made the financial system more vulnerable, as its viability increasingly depends on future profits to meet past obligations. Consequently, there is a pressing need to enhance government capacity for countercyclical fiscal policies, in order to sustain aggregate demand and increase state involvement in infrastructure, industry, and investment.

Therefore, current account balance serves as an important indicator of an economy's structural stability. Drawing from the historical patterns of financial crises, it is clear that an unstable macroeconomic environment, particularly one characterized by weakening current account balances, contributes to financial instability. Thus, prudent monitoring of current account balances and the overall balance of payments is essential in safeguarding economic stability.

Lastly, the paper addresses the impact of specific variables on financial development, based on official data. However, it acknowledges that such data may not fully capture capital from off-balance sheet transactions or the shadow banking system, which cannot be easily quantified, thus limiting a comprehensive assessment of the volume of financial transactions. Additionally, technological advancements have the potential to streamline operations, reduce costs, secure transactions, standardize practices, and facilitate faster, data-driven decision-making. Artificial intelligence could also enhance auditing processes and fraud detection. The integration of these technological advancements warrants further research, particularly in assessing the real state of financial systems and developing new methodologies for effective monitoring.

1. The VIF test states that for values less than 10, there is no multicollinearity between the variables.

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Further reading

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