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THE IMPACT OF INFLATION ON FINANCIAL SECTOR PERFORMANCE: EVIDENCE FROM OECD COUNTRIES

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ABSTRACT

This research article investigates the relationship between inflation and the performance of the financial sector within OECD countries, a group critical to global economic stability. The financial sector is a basis of sustainable economic growth, and its performance is heavily influenced by the macroeconomic environment, particularly inflation. This study analyses how inflation, alongside other significant factors such as real GDP growth, government size, trade openness, and interest rates, impacts the financial sector development. By examining data from 38 OECD countries over a 20-year period (2002-2021), this research employs a comprehensive approach using both static and dynamic panel regression models. The results consistently indicate a negative correlation between inflation and the key financial sector variables, suggesting that higher inflation levels undermine financial sector performance. These findings underscore the importance of maintaining low and stable inflation to foster an efficient and stable financial sector. This study makes a valuable contribution to the literature by focusing specifically on OECD countries, which are often seen as benchmarks for economic policies and financial systems.

Keywords: Inflation, Financial sector, Panel data regression, OECD Countries

1. INTRODUCTION

The impact of inflation on financial sector performance is profound, affecting interest rates, investment returns, the real value of currencies and the overall market stability. This relationship is crucial for understanding economic dynamics, as the financial sector plays a vital role in long run economic growth (Levine et al. 2000; Chee-Keong and Chan, 2011; Puatwoe and Piabuo, 2017). Examining the relationship between financial sector development and inflation in today's context is not just prudent but necessary. Recent times have seen significant inflationary pressures worldwide, driven by the Covid-19 that severely disrupted global supply chains, leading to increased costs. Also, geopolitical tensions, such as Russia-Ukraine conflict have driven up energy prices, contributing to cost-push inflation.

An in-depth understanding of inflation's impact is essential for crafting effective monetary policies that advocate financial stability and promote sustainable economic growth. Studies in the field indicate that the increase of inflation has a considerable negative influence on the financial sector performance (Boyd, Levine and Smith, 2001; Huang et al. 2010; Khan, Senhadji, and

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Smith, 2006; Tinoco-Zermeño, Martinez and Preciado, 2018; Bilalli & Sadiku, 2023) which in turn affects the economic output of countries. Moreover, its effects penetrate through various channels, influencing lending and borrowing, asset values, investment decisions, and the overall health of financial institutions. Managing these impacts requires a combination of prudent monetary policy, robust financial regulation, and strategic decision-making by financial institutions. The short-term inflation projections are particularly important, demonstrating its accuracy and usefulness for forecasting consumer prices and other financial indicators (Bessonovs and Krasnopjorovs, 2021). Top of Form Both domestic and external factors play a significant role in inflation dynamics, impacting the monetary policy transmission mechanism (Saygili, 2020). This suggests the complexity of managing inflation in interconnected economies and a globalized world.

The financial sector, often seen as a barometer for the wider economy, is substantially influenced by steadiness of many factors such as economic, social, and political. However, this study mainly focuses on examining the effects of inflation and other economic variables on the financial development in OECD countries, which most of them are renowned for their advanced economies and sophisticated financial systems. These nations present complex economic structures and have significant influence in the global market. By targeting these industrialized economies, the study also seeks to uncover what are the implications in a broader economic context and financial stability because these countries are at the forefront of world economic development and exhibit diverse responses to inflationary pressures due to their varying economic policies and financial system structures.

The paper is laid out in six sections to facilitate a comprehensive understanding. In Section 2, we present a review of the existing literature. This review encompasses a diverse array of sources, covering various authors, countries, and historical periods, providing a broad perspective on the subject. Moving forward, Section 3 is dedicated to outlining the research methodology employed in the study, along with the data used for the panel evidence. This section is crucial as it lays the foundation for the analysis, detailing the techniques and tools utilized to gather and analyze the data, ensuring the reader understands the framework within which the findings are generated. Section 4 delves into the results of the study. The discussion of findings considering literature in the field is presented in Section 5, and the paper's conclusions are presented in Section 6 that synthesize all the insights gathered from the research.

2. LITERATURE REVIEW

The existing literature and academic discourse that explore the dynamics and correlation between inflation and financial sector performance, especially for OECD countries is very limited, thus, this study tries to fill this gap. As a matter of fact, the literature on financial sector performance and its effects on economic growth is extensive, however the linkage of inflation and financial performance is scarce. Considering the precise model assumptions, economic theory can predict whether the trajectory of inflation will have a positive, negative, or no impact on the financial sector's performance. The impact of inflation on financial sector performance is crucial for several reasons. Inflation can interfere with the financial sector's ability to allocate resources efficiently, negatively affecting banking sector development and equity market activity. High inflation rates, especially those exceeding certain thresholds (e.g., 15%), can lead to a significant drop in financial sector performance, affecting both lending activity and stock market development (Boyd, Levine, & Smith, 2001). Inflation has a statistically significant negative effect on financial sector development in both the short and long-term (Bilalli & Sadiku, 2024). This impact is evident in different regions and economic contexts, highlighting the importance of controlling inflation to improve financial sector performance and achieve

sustainable economic development (Batayneh, Salamat, & Momani, 2021). Inflation's impact on the banking sector and stock market is profound. High inflation rates are detrimental to the financial sector's performance, affecting banking efficiency and the real returns on financial assets. This relationship underscores the necessity for monetary policies that maintain low and stable inflation rates to foster a healthier financial sector (Boyd & Champ, 2003).

The negative impact of inflation on the financial sector is well-documented by (Andrés & Hernando, 1999) emphasizing the need for policies aimed at maintaining inflation within manageable levels. Even low or moderate rates of inflation (like those we have seen inside the OECD) have a negative impact on long-term growth rates, this effect is significant and results in a permanent decline in the level of per capita income by employing panel-data techniques analyzing data collected from over seventy-five nations. Although inflation affects growth through its interaction with financial market conditions, this is not the only channel Andrés et al., 2004). Further, Gylfason & Herbertsson (2001) explored how inflation influences economic growth within an optimal growth framework. Their findings, based on data from 170 countries, revealed statistically significant and robust links between inflation and growth, highlighting the importance of managing inflation to support economic expansion. Giedeman & Compton (2009) found that the positive effect of financial development on economic growth diminishes as inflation increases, this suggests that high inflation rates can hinder the beneficial impacts of financial sector development on economic growth, underscoring the importance of maintaining stable inflation rates to foster economic expansion.

Bittencourt (2007) examines the impact of inflation on financial development in Brazil, finding that high inflation rates had adverse effects on financial development between 1985 and 2002. This study underscores the detrimental effects of poor macroeconomic performance, exemplified by high inflation rates, on financial development and, by extension, economic growth and income inequality.

According to the theoretical and empirical literature, even if inflation is anticipated, it significantly impacts financial performance. It seems especially clear regarding the effective distribution of the available resources. Zoli (2007) has demonstrated that a high inflation rate reduces the financial sector's efficiency by increasing financial market frictions, lowering investment levels, and slowing economic growth. Further, policymakers are preoccupied with the issue of inflation due to its effects on the economy, which include deterring long-term planning, lowering savings and capital accumulation, decreasing investment., causing a shift in the distribution of real. income and a resulting misallocation of resources, and introducing uncertainty and distortions into the informational content. of prices. Depending on the precise model assumptions, economic theory can forecast whether the trend of inflation will have a positive, negative, or zero impact on financial performance. The anticipated association between inflation and financial performance is still largely a matter of empirical investigation given the lack of a theoretical agreement. The consensus among economists on the impact of policy decisions on inflation rates highlights the importance of stable monetary policy for economic stability. Inflation volatility can significantly affect bank performance, particularly through long-term inflation effects, which monetary authorities aim to minimize and maintain at low levels. Central banks should focus on underlying inflationary pressures rather than directly targeting asset prices, except insofar as they signal potential inflationary or deflationary forces. This approach minimizes undesirable side effects and contributes to stabilizing the financial sector (Bernanke & Gertler, 2000). Combining monetary policy that strongly reacts to inflation deviations with countercyclical capital regulatory rules can be optimal for promoting overall economic stability. This strategy is particularly effective in mitigating procyclicality and enhancing both macroeconomic and financial stability (Agenor, Alper, & da Silva, 2018).

Barnes (2001) analyzed the threshold relationships among inflation, financial market development, growth and the results confirmed that this relationship changes across a statistically robust inflation threshold of about 14%, emphasizing that the relationship between growth and FMD is positive below 14% while above 14%, this relationship between growth. and inflation is negative. Further, to assess the effect of inflation on financial sector performance (Boyd, Levine, & Smith, 2001) illustrated that substantially lower financial development exists in countries with inflation rates that exceed the threshold rate, also demonstrated that the level of financial development is significantly lower in countries whose inflation rates are higher than the threshold rate of inflation. López-Villavicencio & Mignon (2011) emphasized that inflation non-linearly impacts economic growth while the threshold beyond inflation exerts a negative effect on growth.

Using an econometric and graphical approach (Rousseau & Yilmazkuday, 2009) found that higher levels of financial development, combined with low inflation, are related to higher rates of economic growth, especially in lower-income countries, the explanatory value of such financial progress, however, is significantly diminished in an environment of excessive inflation. In particular, when the annual rate of inflation is between 4 and 19%, small increases in the price level appear to be able to offset the relatively high growth. consequences of financial deepening, whereas the operation of the finance-growth link is less affected by inflation rates above this range. Emphasizing that, in such high-inflation environments where financial development is frequently suppressed, growth is much lower. Berentsen, Breu, & Shi (2012) found that reducing inflation can generate significant growth gains, indicating a negative impact of high inflation on financial sector development and economic growth. While the price level is a monetary phenomenon, the behavior of inflation is determined by how the central bank controls the monetary base and money creation. Money and inflation rise in line with the inflation target by keeping projected inflation at its target level. Maintaining the real rate of interest at the natural rate allows the central bank to avoid monetary emissions that otherwise might force undesirable changes in prices (Hetzel, 2004). In general, for macroeconomic stability is important to adopt a broader. inflation benchmark. than the CPI. (Consumer Price Index), in an inflation-targeting monetary policy environment, (Shah & Ahmad, 2017).

Ijaz et al. (2020) explored the impact of bank competition and financial stability on economic growth by analyzing panel data from 38 European countries spanning the period from 2001 to 2017 and the findings of the research indicate that bank stability plays a significant role in fostering economic growth in Europe. It is observed that economic growth experiences decline during crisis periods, such as the global financial crisis and local banking crises, underscoring the importance of having a resilient banking system during such challenging times.

Sinah (2018) underscored the relationship between broad money supply and inflation, high-lighting that these two economic indicators tend to move in tandem. Specifically, the research illustrates that an expansion in the broad money supply typically results in a corresponding rise in the consumer price index (CPI). This conclusion was derived using a model that incorporates a newly standardized reporting framework, which offers a more uniform and precise way to analyze these financial dynamics.

Forbes, Lewis, & Ames (2022) in their book discussed the negative impacts of inflation by illustrating how inflation erodes purchasing power, distorts economic decision-making, and can lead to economic instability, they also explore how inflation disproportionately affects various segments of society. Vorontsovskiy & Vyunenko (2021) analyzed forecasting macroeconomic indicators, including inflation, in Finland. Their approach to modeling and forecasting provides a methodological insight into understanding and predicting inflationary trends. Brukwicka & Dudzik (2021) discussed the causes and effects of inflation in Poland, particularly in light of

changes caused by the COVID-19 pandemic. It noted that CPI inflation in 2021 in Poland was significantly influenced by energy prices, food prices, and core economic inflation.

Moreover, inflation targeting as a monetary strategy has proven effective in stabilizing inflation and the economy in various contexts, though its suitability and benefits vary depending on the specific economic conditions and implementation in different countries. Sethi & Acharya (2020) examined the importance of inflation targeting, as a monetary policy strategy, that influences financial stability however, they discuss scenarios where strict adherence to an inflation target might conflict with other economic objectives, such as full employment or economic growth, emphasizing the role of central banks in balancing these competing goals and the implications for financial regulation and policy. Hammond (2012) focused on the role of inflation targeting in the aftermath of the global financial crisis, considering how this strategy has been adjusted in response to new economic challenges and uncertainties.

3. METHODOLOGY

This study utilizes panel data from 38 OECD countries over 20 years, from 2002 to 2021, to analyze the impact of inflation on financial sector performance. Methodologically, five econometric models are employed: Pooled OLS, Pooled OLS Robust (OLSR), Fixed Effects (FE), Random Effects (RE), and General Method of Moments (GMM). These models help to evaluate the influence of various pertinent variables also, the application of these models helps in understanding how inflation impacts financial sector performance in different ways. The FE model, validated by the Hausman test, seems most appropriate for this dataset, likely because it effectively accounts for unobserved heterogeneity within each country over time. The usage of different models allows for a comprehensive analysis, ensuring that the results are robust and account for various country-specific and temporal factors. The effectiveness of this method namely Fixed Effect (FE) will be used for the interpretation of results generated for both model specifications, respectively in the first model in which the dependent variable is domestic credit to the private sector as percent of GDP and in the second model where the dependent variable is broad money. Besides for comparison purposes of the results dynamic models using Generalized Method of Moments (GMM) are performed for estimating parameters in dynamic panel data context. These models are particularly useful when dealing with endogeneity issues by leveraging instruments like lagged variables. GMM is widely applied in econometrics, with the Arellano-Bond estimator being a notable implementation.

3. 1. THE SPECIFICATION OF THE MODELS

In this research, following the approach of Bilalli and Sadiku (2023), econometric models have been strategically used to analyze how financial variables react to changes in inflation rates. This analytical approach enables a nuanced examination of the interplay between inflation and key financial indicators within the economy. The model employs a comprehensive dataset of macroeconomic variables, incorporating yearly data spanning from 2002 to 2021. This time frame allows for a detailed observation of financial behaviors in response to inflationary trends over two decades, covering various economic cycles, including periods of rapid inflation, deflation, and stability. The choice of a log-linear model is particularly pertinent for this analysis due to its ability to transform nonlinear relationships into linear ones, facilitating easier interpretation and more accurate estimations of regression coefficients. By logging the data, we can more effectively capture the proportional changes and multiplicative effects of inflation on financial variables.

This methodology is advantageous for its simplicity and the interpretive clarity it offers, allowing for the direct estimation of the percentage change in financial variables for a one percentage

point change in inflation. Furthermore, the extensive dataset covering nearly two decades provides a robust foundation for the model, ensuring that the analysis incorporates a wide range of economic conditions. This breadth of data is crucial for understanding the complex dynamics at play and for drawing more generalized conclusions about the inflation-financial sector relationship. The application of the log-linear model to this extensive macroeconomic data series not only sheds light on historical patterns but also offers insights into potential future trends. By examining the data through the lens of this model, the study aims to contribute valuable empirical evidence to the ongoing discourse on inflation's impact on financial markets and economic policy-making. The specification for the regression (Model 1) is as follows:

Model 1:

$$logDC_{it} = \beta_0 + \beta_1 INFL_{it} + \beta_2 GDP_{it} + \beta_3 logGOVS_{it} + \beta_4 logTRADE_{it} + \beta_5 logINTR_{it} + u_i$$
 (1)

Model A, as detailed in this study, is designed to understand the relationship. between domestic credit to the private sector as percent of GDP and various economic indicators, taking into account the specific circumstances of each country and year.

Overall, (Model 1) is structured to analyze the complex interplay between macroeconomic factors and the financial sector's performance, particularly focusing on the credit to the private sector in the context of different OECD countries over a specific period.

Model 2:

$$logMONEY_{it} = \beta_0 + \beta_1 INFL_{it} + \beta_2 GDP_{it} + \beta_3 logGOVS_{it} + \beta_4 logTRADE_{it} + \beta_5 logINTR_{it} + u_i$$
 (2)

In the study, (Model 2) is adapted to analyze a different aspect of the financial sector. This version of the model focuses on Broad Money (MONEY) as the dependent variable. Broad Money represents the total money supply in the economy, including currency in circulation and deposits in financial institutions such as current, savings, and foreign currency accounts, expressed as a percentage of GDP.

Thus, in Models 1 and 2, domestic credit to the private sector as percent of GDP (DC) and broad money (MONEY) are considered as dependent. variables, respectively, while the inflation rate (INFL), GDP growth (GDP), general government final consumption expenditure (GOVS), trade openness (TRADE), and lending interest rate (INTR), are considered as independent variables in the specified model, is the error term.

Variable	Definition	Unit	Source	
INFL	Inflation as measured by the consumer price index that reflects the annual percentage change	(Annual (%)	WBD	
DC	Domestic credit to private sector refers to financial resources provided to the private sector	(% of GDP)	WBD	
MONEY	Broad money is the sum of currency outside banks; demand deposits other than those of the central government	(% of GDP)	WBD	
GDP	Annual real GDP growth	(annual %)	WBD	
GOVS	General government final consumption expenditure	(% of GDP)	WBD	
Trade	Trade openness – exports plus imports to GDP ratio	(% of GDP)	WBD	
INTR	The lending interest rate is the bank's rate typically used to fulfill the short- and medium-term financing requirements of private sector businesses	(%)	WBD	

Table 1. Definition of variables used

3. 2. DATA

The data are organized as a panel of country observations for 38 OECD Countries, namely Australia, Austria, Belgium, Canada, Chile, Costa Rica, Colombia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Israel, Japan, Korea, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Mexico, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye, United Kingdom and the United States. Data included in the sample are extracted from the World Bank Database (WDI), over the period 2002-2021. Further, the panel data set is strongly balanced, and we have proceeded by data analysis. Worth noting that during the analysis we faced a lack of data for the financial sector time series before the year 2002, even for some countries there were missing observations in particular years. However, to avoid the loss of degrees of freedom that is caused by missing data for some years in the period 2002-2021, the moving average method was used to fill out the missing observations.

4. EMPIRICAL FINDINGS

This section presents the empirical results focusing first on the descriptive statistics and the correlation matrix. Descriptive statistics of the selected variables is crucial for a comprehensive understanding of the empirical investigation. This description typically involves presenting key statistical metrics for each variable used in the analysis. These metrics often include measures of central tendency (like mean or median), dispersion (such as standard deviation or range), and other relevant statistics that provide insights into the nature of the data. Here's an expanded explanation of what might be included in the statistical description table for the selected variables:

Variable	Obs.	Mean	Std. Dev.	Min	Max
INFL	760	2.54	2.976	-4.478	44.964
GDP	760	2.335	3.541	-14.839	24.37
GOVS	760	2.183	2.529	-10.055	13.784
TRADE	760	94.549	55.682	20.447	388.12
DC	718	98.615	48.55	.186	304.575
MONEY	312	126.885	68.196	38.414	390.108
INTR	245	9.865	6.364	.75	36.015

Table 2. Descriptive statistics of the variables

Source: Author's Calculations; Data from the World Bank Database (WBD)

The sample countries have an average inflation rate of 2.54% for the respective period (2002-2021). The average real GDP growth was found to be 2.33%. The government size (GOVS) is averaged at 2.18% of GDP, and (TRADE) is averaged at 94.55% of GDP. Domestic credit to the private sector (DC) is at 98.61% of GDP. Broad Money (Money) is at an average of 126.88% of GDP and the lending interest rate (INTR) is at 9.86%.

The correlation matrix, which shows the connections between variables included in the sample, is shown in Table 3. The correlation matrix is often used in the preliminary stages of data analysis to assess the relationships between variables. This can guide more detailed analyses, such as regression modeling, by indicating which variable relationships are most significant and also to detect any pattern of multicollinearity among explanatory variables.

Table 3. Correlation analysis

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) INFL	1.000						
(2) GDP	0.063	1.000					
(3) GOVS	0.005	0.314	1.000				
(4) TRADE	0.061	0.023	-0.184	1.000			
(5) DC	-0.259	-0.191	-0.109	-0.383	1.000		
(6) MONEY	-0.447	-0.248	-0.088	-0.191	0.665	1.000	
(7) INTR	0.696	0.293	0.237	-0.050	-0.331	-0.559	1.000

Source: Author's Calculations; Data from the World Bank Database (WBD)

Based on the results presented in the table above, generated from the application of a correlation matrix that expresses the correlation that exists between the variables included in the sample for this set of counties, we can recognize a weak positive correlation between the inflation rate (INFL) and real GDP growth (GDPG) namely, (r=0.063). A similar relationship with the inflation rate and Trade namely, (r=0.061), highlighted that these two indicators are positively related to each other and with an increase in inflation there is no decrease in trade. Inflation raises the costs of hedging financial risks among potential trade partners as financial instruments become more consistently discouraging trade and leading to net outflows of capital as the economy becomes less ell-integrated with the rest of the world (Rousseau & Yilmazkuday, 2009). A weak positive correlation exists between GOVS and inflation with a correlation coefficient that is closer to zero (r=0.005). While a strong positive correlation (r=0.696) is generated between the lending interest rate (INTR) and inflation. Therefore, these two variables move in the same direction, where the increase in the inflation rate positively impacts the increase in the interest rate and vice versa.

A negative correlation with the inflation rate has domestic credit to the private sector (DC) namely, (r=-0.259), an increase in the inflation rate causes a decrease in DC. Also, the inflation rate has a negative relationship with the broad money (r=-0.447), these two indicators are negatively related to each other and the increase in the inflation rate has an impact on the reduction of the broad money.

Table 4. Panel Regression Models for (Model 1) specification

Variables	Pooled OLS		OLSR		FE		RE		GMM	
	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat	Coef.	t-stat	Coef.	z-stat
INFL	-0.122**	-2.06	-0.122**	-2.05	-0.728*	-1.69	-0.36	-1.34	-3.788**	-2.27
GDP	-0.431	-1.28	-0.431	-1.25	-1.326	-1.63	-1.335	-1.65	1.548	-1.51
GOVS	-1.343	-0.85	-1.343	-0.97	0.907	1.05	0.724	0.83	7.315*	1.73
TRADE	-0.511***	-5.76	-0.511***	-7.64	-0.147	-0.76	-0.259	-1.56	-0.56	0.49
INTR	-3.254***	-3.89	-3.254***	-3.15	2.72***	3.87	2.05**	2.99	0.478	0.19
DCt-1									1.075***	5.61
Hausman Test=0.0000										
Sargan Test									8.89	
Prob > F	0.0000		0.0000		0.0001		0.0004		0.0001	
\mathbb{R}^2	0.23		0.23		0.11		0.11			

t statistics in parentheses

Source: Author's Calculations; Data from the World Bank Database (WBD)

^{*} p<0.1, ** p<0.05, *** p<0.01

The regression results using five econometric techniques are displayed in (Table 4), first for the (Model 1) specification and then for (Model 2). One can note that for the choice between fixed and random effects is used the Hausman test, which suggests we should focus on the fixed effects and not rely on random effects because fixed effects better capture the overall impact in both models as the test suggest.

The domestic credit to the private sector was considered as dependent variable that is used as a proxy variable for financial development performance. Private credit is frequently highlighted as a critical gauge for assessing the evolution and maturity of the banking sector. By quantifying the amount of credit extended by banks to the private sector, this metric provides invaluable insights into the capacity of the banking system to support economic activity. It is considered an appropriate indicator to measure the financial sector development by different authors (Beck, Levine, & Loayza, 2000; Boyd, Levine, & Smith, 2001; Levine, Loayza, & Beck, 2000; Tinoco-Zermeño et al., 2022). Further, the ratio of credit to the private sector to GDP as a proxy for financial development is used also by Ozturk & Karagoz (2012) for Turkey applying the ARDL bound test, confirming that a significant long-run relationship exists between inflation and financial sector.

The obtained results show that inflation has a negative impact on domestic credit to the private sector in all econometric models, being in line with findings of (Boyd, Levine, & Smith 2001). In general, credit market frictions depend on the level of inflation rates. Low inflation has no impact or the impact may be slightly positive while if the rate of inflation exceeds some threshold level, credit market frictions become binding, and there exists a noticeable decrease in financial sector performance (Azariadis & Smith, 1996; Boyd; Levine, & Smith, 2001).

		(
Variables	Pooled OLS		OLSR		FE		RE		GMM	
	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat	Coef.	t-stat	Coef.	z-stat
INFL	-2.445	-1.00	-2.445*	-1.94	-0.714**	2.11	0.858	1.29	0.0474	1.05
GDP	-2.93	-1.61	-2.93	-1.57	-1.376**	-3.29	-1.386**	-3.20	0.142	0.37
GOVS	0.211	0.11	0.211	0.13	0.383	0.7	0.338	0.6	3.079*	1.99
TRADE	-0.361***	-3.39	-0.361***	-3.70	0.444***	3.84	0.372	3.26	0.484	1.45
INTR	-4.941***	-5.13	-4941***	-5.44	-0.926*	-2.24	-1.118**	-2.64	2.867*	1.95
BMt-1									1.250***	12.8
Hausman Test=0.0003										
Sargan Test		,						3.72		
Prob > F	0.0000		0.0000		0.0001		0.0004		0.0000	
R ²	0.34		0.34		0.27		0.28			

Table 5. Panel regression models for (Model 2) specification

t statistics in parentheses

Source: Author's Calculations; Data from the World Bank Database (WBD)

The GDP growth has a negative impact on domestic credit; however, the coefficient of this variable is statistically insignificant, this finding is consistent with the author Bui (2020). One possible explanation is that as the economy expands, other sources of financing might become more prominent, reducing the reliance on bank credit. Additionally, rapid GDP growth could lead to tighter monetary policies which might constrain credit availability. Trade expresses a negative impact on domestic credits, but it is statistically significant only in pooled OLS model, while the variable related to the size of the government is positively correlated with the domestic credits in fixed and random effects models as well as GMM but statistically significant only

^{*} p<0.1, ** p<0.05, *** p<0.01

in GMM model at 10% level. Further, the lending interest rate has a negative and significant effect on domestic credit at 1% level in the regression models, except in GMM model, so based on fixed effects model, an increase of one percentage point in lending interest rate, domestic credit to the private sector decreases by 2.72 percent, holding other factors unchanged. Higher interest rates make borrowing more expensive, reducing the propensity of businesses and individuals to seek credit, thus constraining the growth of domestic credit. This finding is in line with conventional economic theory, which posits that higher interest rates reduce credit demand and, consequently, the expansion of credit within the economy.

Table 5 displays the results of (Model 2) where as dependent variable is considered the broad money.

The Fixed Effect model results reveal several crucial relationships between economic variables and broad money. Notably, inflation exhibits a negative impact on broad money, suggesting that as inflation rises, the overall supply of broad money contracts. This outcome could be attributed to the erosion of purchasing power and a shift in monetary demand patterns during periods of high inflation. The real GDP growth rate also shows a significant negative impact on broad money, with a coefficient of -1.37. This relationship is consistently significant across both fixed and random effects models. The negative coefficient implies that as the economy grows, there is a relative decrease in the proportion of broad money. This could be interpreted as economic expansion leading to a more diversified financial system where broad money becomes a smaller share of the total monetary base or due to shifts in the velocity of money. Government consumption expenditures, on the other hand, have a positive relationship with broad money, but this effect is statistically significant only in the Generalized Method of Moments (GMM) model. This positive linkage indicates that increased government spending may boost the supply of broad money, possibly through mechanisms like fiscal stimulus or increased public sector liquidity injections, although this effect might be more complex and conditional on the model used. Trade is also a significant factor, showing a robust positive impact on broad money. This finding, which is highly statistically significant, highlights the role of trade in enhancing liquidity within the economy. Increased trade activities can lead to higher foreign exchange inflows and greater circulation of money, reflecting how interconnected global trade dynamics influence domestic monetary conditions. The lending interest rate exhibits a negative and statistically significant effect on broad money. Specifically, a one-percentage-point increase in the lending interest rate is associated with a 0.92 percent decrease in broad money, holding other factors constant (ceteris paribus). This inverse relationship suggests that higher borrowing costs deter lending and borrowing activities, leading to a contraction in broad money as both the demand for and supply of credit diminish.

5. DISCUSSION

This analysis focuses on how inflation affects the broader economy, particularly the financial sector, which is crucial for long-term economic growth. Inflation, as a key macroeconomic variable, significantly influences economic policies. The results of this study highlight that inflation can adversely impact financial development, which is a critical channel through which inflation affects overall economic growth (Ozturk & Karagoz, 2012). This reveals the need for policies that strengthen financial sector efficiency while maintaining optimal inflation rates to avoid distorting economic components. Different countries adopt varying institutional policies to manage inflation, reflecting their unique developmental stages and historical experiences with inflation. Other research studies have shown varying impacts of inflation on financial sector performance, depending on the country's economic conditions, monetary policy framework, and the level and volatility of inflation. For example, in countries with well-established infla-

tion-targeting regimes, the negative impacts of inflation on the financial sector can be mitigated to some extent. However, the impact of inflation on the financial sector in OECD countries underscores the importance of sound monetary and fiscal policies, effective financial regulation, and robust financial markets that can adapt to and mitigate the effects of inflation.

Future research should explore policies that enhance financial sector performance and stabilize inflation, especially in OECD countries. While inflation is largely managed through monetary policy (Pain, Koske, & Sollie, 2008), it is also influenced by other factors, including structural elements like globalization and production dynamics. Globalization can be considered in future studies as it impacts inflation by affecting prices and economic integration. Additionally, higher production markups can prompt monetary authorities to adjust output, potentially leading to higher inflation rates (Neiss, 2001).

6. CONCLUSION

The main purpose of this research paper was to investigate the impact of inflation on financial sector performance in OECD countries, considering the critical role of the financial sector in long-term economic growth. Additionally, as described in the literature part, referring to the other author's work, the impact of inflation depends on the level of its rate. Moreover, for this set of counties and periods, findings indicate that domestic credit to private sector and broad money negatively correlate with inflation, highlighting that the relationship between inflation and financial sector performance has important policy implications. Thus, maintaining low and stable inflation rates is crucial for the development of a deeper and more active financial sector within OECD countries. This requires strong economic institutions, including independent central banks and sound fiscal authorities.

Thus, based on the findings of this study, to boost real output while maintaining price stability, and making credits to private sector more accessible, a monetary authority that establishes clear inflation targets is essential. However, evidence disproves the claim that better performance of the inflation rates in the inflation-targeting countries is only due to a more "aggressive" monetary policy (Wu, 2004). Therefore, policymakers can reduce inflation by using suitable fiscal and monetary policies.

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