


THE ROLE OF MONETARY POLICY IN SHAPING JORDAN'S ECONOMIC GROWTH: A REGRESSION ANALYSIS FROM 2008 TO 2022

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 07 April 2023</p> <p>Accepted 06 July 2023</p>	<p>Purpose: The aim of this research is to investigate the correlation between monetary policy and economic growth in Jordan during the period from 2008 to 2022. The study evaluates significant macroeconomic indicators, including inflation rate, interest rate, money supply, and economic growth, within and beyond the specified time frame. The objective of this study is to assess the influence of monetary policy on economic growth through the utilization of the statistical technique of least squares regression. Accurate results are obtained using EViews, a widely recognized statistical program. The data for this study is sourced from reputable institutions such as the World Bank and Trading Economics.</p>
<p>Keywords:</p> <p>Inflation Rate; Interest Rate; Monetary Policy; Economic Growth; Per Capita Average Gross Domestic Product; Money Supply.</p>	<p>Theoretical framework: The importance of this study holds great significance as it aims to examine the link between monetary policy and the growth of the economy, a topic that has been the subject of extensive theoretical and policy discussions among economists over a significant period. Given the current economic conditions characterized by slow growth and concerns about potential deflation, as well as perceived constraints on economic policies, there is heightened interest in understanding this relationship. Consequently, the debate surrounding this issue has occasionally become intense and contentious.</p>
	<p>Design/Methodology/Approach: The Methodology plays a crucial role in scientific research as it provides researchers with a framework to follow in order to achieve objective and reliable results. The choice of methodology may vary depending on the academic discipline, with each approach having its own unique characteristics and functions that are utilized by researchers in their respective fields of specialization. In the context of this particular study, a descriptive approach was adopted for the theoretical aspect, while an analytical approach was employed for the practical aspect. By collecting macroeconomic indicators as time series data from 2008 to 2022, the study aimed to investigate the interconnection implementation of monetary policy and the growth of the economy. To examine the stability of the variables, unit root tests were employed, and the data utilized in the study was obtained from reliable sources such as the World Bank and Trading Economics.</p> <p>Findings: The result of this analysis reveals significant findings regarding the influence of various factors on economic growth from 2008 to 2022. The findings reveal a statistically significant negative association between the inflation rate and economic growth, with a significance level of 0.05. Based on this finding, the null hypothesis (H0) is rejected in favor of the alternative hypothesis (H1). However, the study determines that the impact of the interest rate on economic growth is not statistically significant at the 0.05 significance level. Consequently, the null</p>

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hypothesis (H0) is accepted, and the alternative hypothesis (H1) is rejected. Finally, the analysis reveals a statistically significant positive relationship between money supply and economic growth, with a significance level of 0.05. As a result, the study rejects the null hypothesis (H0) and supports the alternative hypothesis (H1). These findings offer valuable insights into the connection between monetary policy and economic growth within the specified timeframe. The study highlights the need for further comprehensive research on the factors influencing the growth of the Jordanian economy. Specifically, it emphasizes the importance of investigating various indicators of monetary policy and their effects on economic growth in Jordan. It is recommended to consider inflation rate policies and implement economic reform measures to mitigate the adverse impacts of inflation on economic growth in the country. Furthermore, careful attention should be given to money supply and the policies implemented by relevant institutions, particularly regarding the circulation of money, due to its positive influence on economic growth.

Research, practical & social implications: The aims of this study is to examine the interplay between various monetary policy instruments and the dynamics of economic growth, with a specific focus on the context of Jordan. The objective of this study is to assess the influence of monetary policy on economic growth through the utilization of the statistical technique of least squares regression. Accurate results are obtained using EViews, a widely recognized statistical program. The data for this study is sourced from reputable institutions such as the World Bank and Trading Economics.

Doi: <https://doi.org/10.26668/businessreview/2023.v8i7.2522>

O PAPEL DA POLÍTICA MONETÁRIA NA FORMAÇÃO DO CRESCIMENTO ECONÔMICO DA JORDÂNIA: UMA ANÁLISE DA REGRESSÃO DE 2008 A 2022

RESUMO

Objetivo: O objetivo deste estudo é investigar a correlação entre política monetária e crescimento econômico na Jordânia durante o período de 2008 a 2022. O estudo avalia indicadores macroeconômicos significativos, incluindo taxa de inflação, taxa de juros, oferta monetária e crescimento econômico, dentro e além do prazo especificado. O objetivo deste estudo é avaliar a influência da política monetária no crescimento econômico através da utilização da técnica estatística de regressão dos mínimos quadrados. Resultados precisos são obtidos usando EViews, um programa estatístico amplamente reconhecido. Os dados para este estudo são provenientes de instituições respeitáveis, como o Banco Mundial e Trading Economics.

Estrutura teórica: A importância deste estudo tem grande significado, uma vez que visa examinar a ligação entre a política monetária e o crescimento da economia, um tópico que tem sido objeto de extensas discussões teóricas e de política entre economistas durante um período significativo. Dadas as atuais condições econômicas caracterizadas por um crescimento lento e por preocupações acerca da deflação potencial, bem como pela percepção das restrições das políticas econômicas, há um interesse acrescido em compreender esta relação. Consequentemente, o debate em torno desta questão tornou-se ocasionalmente intenso e contencioso.

Design/Methodologia/Abordagem: A Metodologia desempenha um papel crucial na pesquisa científica, uma vez que fornece aos pesquisadores um quadro para seguir a fim de alcançar resultados objetivos e confiáveis. A escolha da metodologia pode variar dependendo da disciplina acadêmica, com cada abordagem tendo suas próprias características e funções únicas que são utilizadas pelos pesquisadores em seus respectivos campos de especialização. No contexto deste estudo específico, foi adotada uma abordagem descritiva para o aspecto teórico, enquanto uma abordagem analítica foi empregada para o aspecto prático. Ao recolher indicadores macroeconômicos como dados de séries cronológicas de 2008 a 2022, o estudo teve como objetivo investigar a interligação entre a execução da política monetária e o crescimento da economia. Para examinar a estabilidade das variáveis, foram utilizados testes unitários de raiz e os dados utilizados no estudo foram obtidos de fontes confiáveis, como o Banco Mundial e a Trading Economics.

Conclusões: O resultado desta análise revela conclusões significativas sobre a influência de vários fatores no crescimento econômico entre 2008 e 2022. Os resultados revelam uma associação negativa estatisticamente significativa entre a taxa de inflação e o crescimento econômico, com um nível de significância de 0,05. Com base neste achado, a hipótese nula (H0) é rejeitada em favor da hipótese alternativa (H1). No entanto, o estudo determina que o impacto da taxa de juros no crescimento econômico não é estatisticamente significativo no nível de significância de 0,05. Consequentemente, a hipótese nula (H0) é aceita, e a hipótese alternativa (H1) é rejeitada. Por último, a análise revela uma relação positiva estatisticamente significativa entre a oferta de moeda e o crescimento econômico, com um nível de significância de 0.05. Como resultado, o estudo rejeita a hipótese nula

(H0) e apoia a hipótese alternativa (H1). Estas conclusões proporcionam informações valiosas sobre a ligação entre a política monetária e o crescimento econômico dentro de um horizonte temporal especificado. O estudo destaca a necessidade de uma investigação mais abrangente sobre os fatores que influenciam o crescimento da economia jordana. Mais especificamente, sublinha a importância de investigar vários indicadores da política monetária e os seus efeitos no crescimento econômico na Jordânia. Recomenda-se que sejam consideradas as políticas de taxa de inflação e que sejam implementadas medidas de reforma econômica para mitigar os impactos adversos da inflação sobre o crescimento econômico no país. Além disso, deve ser prestada especial atenção à oferta de moeda e às políticas implementadas pelas instituições relevantes, em particular no que se refere à circulação de moeda, devido à sua influência positiva no crescimento econômico.

Investigação, implicações práticas e sociais: O objetivo deste estudo é examinar a interação entre os vários instrumentos de política monetária e a dinâmica do crescimento econômico, com um foco específico no contexto da Jordânia. O objetivo deste estudo é avaliar a influência da política monetária no crescimento econômico através da utilização da técnica estatística de regressão dos mínimos quadrados. Resultados precisos são obtidos usando EViews, um programa estatístico amplamente reconhecido. Os dados para este estudo são provenientes de instituições respeitáveis, como o Banco Mundial e Trading Economics.

Palavras-chave: Taxa de Inflação, Taxa de Juro, Política Monetária, Crescimento Econômico, Média Per Capita do Produto Interno Bruto, Oferta de Moeda.

EL PAPEL DE LA POLÍTICA MONETARIA EN LA FORMACIÓN DEL CRECIMIENTO ECONÓMICO DE JORDANIA: UN ANÁLISIS DEL REGRESO DE 2008 A 2022

RESUMEN

Objetivo: El objetivo de este estudio es investigar la correlación entre la política monetaria y el crecimiento económico en Jordania durante el período 2008-2022. El estudio evalúa indicadores macroeconómicos significativos, como la tasa de inflación, la tasa de interés, la oferta monetaria y el crecimiento económico, dentro y fuera del plazo especificado. El objetivo de este estudio es evaluar la influencia de la política monetaria sobre el crecimiento económico utilizando la técnica estadística de regresión de los mínimos cuadrados. Se obtienen resultados precisos utilizando EViews, un programa estadístico ampliamente reconocido. Los datos para este estudio provienen de instituciones respetables como el Banco Mundial y la Economía Comercial.

Estructura teórica: La importancia de este estudio es de gran importancia, ya que tiene por objeto examinar el vínculo entre la política monetaria y el crecimiento de la economía, un tema que ha sido objeto de extensas discusiones teóricas y políticas entre economistas durante un período significativo. Dadas las condiciones económicas actuales caracterizadas por un crecimiento lento y las preocupaciones por una posible deflación, así como las limitaciones percibidas de las políticas económicas, hay un mayor interés en entender esta relación. En consecuencia, el debate sobre esta cuestión se ha vuelto en ocasiones intenso y polémico.

Diseño/ Metodología/ Enfoque: La Metodología desempeña un papel crucial en la investigación científica, ya que proporciona a los investigadores un marco a seguir para lograr resultados objetivos y fiables. La elección de la metodología puede variar en función de la disciplina académica, y cada enfoque tiene sus propias características y funciones únicas que utilizan los investigadores en sus respectivos campos de especialización. En el contexto de este estudio específico, se adoptó un enfoque descriptivo del aspecto teórico, mientras que se utilizó un enfoque analítico para el aspecto práctico. Al recopilar los indicadores macroeconómicos como datos de series cronológicas de 2008 a 2022, el objetivo del estudio era investigar la vinculación entre la aplicación de la política monetaria y el crecimiento económico. Para examinar la estabilidad de las variables, se utilizaron pruebas unitarias de raíz y los datos utilizados en el estudio se obtuvieron de fuentes confiables como el Banco Mundial y la Economía Comercial.

Conclusiones: El resultado de este análisis revela conclusiones significativas sobre la influencia de diversos factores en el crecimiento económico entre 2008 y 2022. Los resultados muestran un vínculo negativo estadísticamente significativo entre la tasa de inflación y el crecimiento económico, con un nivel significativo de 0,05. Sobre la base de este hallazgo, la hipótesis cero (H0) se rechaza a favor de la hipótesis alternativa (H1). Sin embargo, el estudio determina que el impacto de la tasa de interés sobre el crecimiento económico no es estadísticamente significativo a un nivel significativo de 0,05. En consecuencia, se acepta la hipótesis cero (H0) y se rechaza la hipótesis alternativa (H1). Por último, el análisis revela una relación positiva estadísticamente significativa entre la oferta monetaria y el crecimiento económico, con un nivel significativo de 0,05. Como resultado, el estudio rechaza la hipótesis cero (H0) y apoya la hipótesis alternativa (H1). Estas conclusiones proporcionan información valiosa sobre el vínculo entre la política monetaria y el crecimiento económico en un horizonte temporal determinado. El estudio destaca la necesidad de una investigación más exhaustiva de los factores que influyen en el crecimiento de la economía jordana. Más concretamente, subraya la importancia de investigar diversos indicadores de política monetaria y sus efectos en el crecimiento económico de Jordania. Se

recomienda que se estudien las políticas relativas a la tasa de inflación y que se apliquen medidas de reforma económica para mitigar los efectos adversos de la inflación en el crecimiento económico del país. Además, debe prestarse especial atención a la oferta monetaria y a las políticas aplicadas por las instituciones pertinentes, en particular por lo que se refiere a la circulación del dinero, debido a su influencia positiva en el crecimiento económico.

Investigación, implicaciones prácticas y sociales: El objetivo de este estudio es examinar la interacción entre los diversos instrumentos de la política monetaria y la dinámica del crecimiento económico, con un enfoque específico en el contexto de Jordania. El objetivo de este estudio es evaluar la influencia de la política monetaria sobre el crecimiento económico utilizando la técnica estadística de regresión de los mínimos cuadrados. Se obtienen resultados precisos utilizando EViews, un programa estadístico ampliamente reconocido. Los datos para este estudio provienen de instituciones respetables como el Banco Mundial y la Economía Comercial.

Palabras clave: Tasa de Inflación, Tasa de Interés, Política Monetaria, Crecimiento Económico, Promedio de Producto Interno Bruto Por Capital, Oferta Monetaria.

INTRODUCTION

Monetary policy plays a crucial role in economic management as it aims to achieve both economic growth and monetary stability. It is designed to address key objectives such as reducing inflation, lowering unemployment rates, and maintaining overall economic equilibrium. The effectiveness of monetary policy largely depends on the government's ability to handle it, as it exerts significant influence on macroeconomic dynamics. Monetary policy is an integral part of macroeconomic policies that focus on managing the monetary aspect to stimulate economic growth. Central banks employ various tools to regulate economic transactions, address imbalances, and provide support during times of crisis and economic downturn. These measures are implemented within the broader framework of economic policy. (Moustafa, 2021).

Monetary policy involves the deliberate management and regulation of the supply of money by the authorities responsible for monetary matters, usually, the monetary authorities, in collaboration with the central government, undertake monetary policy with the aim of achieving specific economic goals. Governments often seek to control the growth rate of the money supply due to its significant impact on inflation rates. In essence, monetary policies encompass various strategies aimed at influencing the functioning of the monetary sector. Monetary policy is precisely defined as the intentional utilization of a wide range of monetary instruments, encompassing both direct and indirect measures, employed by central banks and other monetary authorities to foster macroeconomic stability. Its primary objective is to ensure stability in the monetary system and control price levels. Common objectives of monetary policy in many countries include maintaining price stability, achieving a balanced balance of payments, fostering employment and output growth, and promoting sustainable development (Ayodeji and Oluwole, 2018).

In recent years, Jordan has gained recognition as a promising economic player in the Middle East region, demonstrating noteworthy performance. The country has implemented a comprehensive program focused on strengthening financial regulations and pursuing greater integration into the global economy. Additionally, Jordan has adopted a well-balanced approach to its monetary policies, taking into account both security considerations and the promotion of economic growth. These initiatives have positively influenced local economic development and have also had implications for international financial markets and price movements.

In recent years, the Jordanian government has demonstrated a growing dedication to improving monetary policy tools and implementing reforms to enhance the development and liberalization of its financial and banking sectors. This commitment reflects an understanding of the significant role these sectors play in fostering balanced and sustainable economic growth. The government's efforts in this regard deserve recognition. Monetary policy, being a crucial factor in promoting economic expansion, plays a vital role in ensuring efficiency and stability within the economy. Furthermore, it strengthens the economy's resilience to unexpected external shocks (Mugableh, 2019).

This study holds great significance as it aims to examine the link between monetary policy and the growth of the economy, a topic that has been the subject of extensive theoretical and policy discussions among economists over a significant period. Given the current economic conditions characterized by slow growth and concerns about potential deflation, as well as perceived constraints on economic policies, there is heightened interest in understanding this relationship. Consequently, the debate surrounding this issue has occasionally become intense and contentious.

This study holds great importance due to the enduring relevance of monetary policies as essential macroeconomic tools utilized by governments in both developing and developed nations to address and rectify their economic conditions. It also emphasizes the significance of these policies in promoting the development of the monetary sector, enabling it to effectively mobilize and direct savings towards productive investments. This, in turn, has a direct impact on overall GDP and per capita income, reflecting the efficiency of financing within the economy. Considering the paramount importance of economic growth and its influence on the economy, the ability of monetary policy to shape and sustain it at appropriate levels holds significant importance and plays a crucial role in determining overall economic performance.

This study aims to examine the interplay between various monetary policy instruments and the dynamics of economic growth, with a specific focus on the context of Jordan.

The evaluation of the effectiveness of monetary policy requires additional empirical research that takes into account the unique economic, financial, and policy circumstances of a specific country. In the case of Jordan, there is a lack of empirical studies addressing this issue, and existing studies often rely on limited time series data, raising concerns about the reliability of their findings. Hence, the main goal of this study is to undertake a comprehensive analysis of the immediate and enduring impacts of monetary policy on the Jordanian economy from 2008 to 2022. By utilizing an extensive time series dataset, this research aims to provide more robust and conclusive insights into the connection between monetary policy measures and the overall economic performance in Jordan.

This study's primary focus is to provide a comprehensive analysis of how monetary policy influences the economic growth of Jordan. This investigation can be encapsulated in the following question:

Does monetary policy have an impact on the economic growth of Jordan from 2008 to 2022?

LITERATURE REVIEW

Considering the significance of evaluating the influence of monetary policy on economic growth, the literature review concentrates on analyzing studies that specifically investigate these effects. Ayodeji and Oluwole (2018) undertook a study aiming to examine the influence of monetary framework on the economic growth of Nigeria. The researchers formulated an extensive model to examine the correlation between the monetary policy of the government and economic growth, incorporating various variables in their analysis. Based on the study's findings, it was revealed that there is a sustained connection between the policies implemented by the government pertaining to the monetary system and the advancement of the Nigerian economy in the long run. Amiri and Gang (2018) conducted an investigation to analyze how monetary framework on the overall economic growth of the United States. The researchers utilized data from 1970 to 2016 and applied the TVP-FAVR technique in their analysis. The study's findings revealed a constructive association between the strategies implemented in monetary management and the advancement of the economy, specifically highlighting the influence of interest rates and inflation on this connection. Rahman et al. (2019) conducted a study with the objective of exploring the impact of the monetary framework on the

overall progress of the Bangladeshi economy from 1997 to 2017. The findings of the study indicated that several factors, such as consumption, investment, government net expenditure, and net exports, had a significant impact on the economic growth of Bangladesh as measured by its Gross Domestic Product (GDP). Moreover, the findings of the investigation indicated that the implemented monetary policy measures in Bangladesh play a crucial role in shaping these intermediary factors. Azizov (2019) undertook a study aiming to investigate the influence of the monetary policy implemented by the central bank on promoting economic growth and evaluating its effectiveness. According to the outcomes derived from the study, it was revealed that the tools and techniques utilized in monetary policy primarily exert an indirect influence on economic growth. This is achieved by creating a favorable business environment that attracts foreign investment and stimulates domestic producers, thereby contributing to economic growth. Mugableh (2019) conducted a study with the objective of analyzing the long-term and short-term interactions between the tools of monetary policy and the growth of the Jordanian economy during from 1990 to 2017. According to the study's findings, the majority of monetary policy variables demonstrated a favorable effect on the growth of the economy, spanning both the immediate and extended periods. However, it is important to note that the inflation rate was an exception to this pattern. Mukhtarov et al. (2020) undertook a study aiming to examine how monetary policy and tax revenue affect foreign direct investment (FDI) in Jordan. The researchers utilized time series data covering the period from 1991 to 2017 for their analysis. According to the study's results, it was found that the increase in money supply had a significant and positive impact on foreign direct investment (FDI) in Jordan. Conversely, tax revenue was found to have a negative impact on FDI in the country. Additionally, the study indicated that the influence of the interest rate on foreign direct investment (FDI) in Jordan was found to be statistically insignificant. Another aim of the study was to assess the influence of monetary policy on the economic growth of Bangladesh from 1990 to 2018. The study's findings indicated that the adjustments in borrowing costs, along with changes in inflation and the expansion of the monetary base, had a positive effect on growth of economy. It highlighted the significance of implementing effective monetary policy to ensure sustainable GDP growth and mitigate the risks of sudden financial shocks. Abille and Mpuure (2020) undertook a research endeavor with the objective of examining the role of monetary policy as a catalyst for economic growth in the Ghanaian economy. The study employed annual data spanning from 1983 to 2017 to conduct its analysis. The findings of the study confirm the existence of co-integration among the variables under investigation, with the money supply demonstrating a substantial positive

influence on long-term economic growth in Ghana. However, in the short term, the study reveals a noteworthy negative impact of the money supply on growth. In a research endeavor led by Buzian et al. (2021), the main focus was to analyze how monetary policy influences economic growth in the MENA region. The researchers utilized a conventional economic approach to evaluate the impacts of specific variables related to the management of monetary policy on growth of economy over a span from 1990 to 2019. The study's findings revealed the significant role played by monetary policy in addressing imbalances through a diverse array of tools and channels. As a result, it contributes significantly to stabilizing economic growth. In their study, Ani and Onu (2021) aimed to analyze impact of monetary policy measures on the growth of the Nigerian economy during the post-structural adjustment program period. The study's findings revealed that the expansion of the money stock had a noteworthy and statistically favorable impact on the growth of the Nigerian economy throughout the period from 1986 to 2015. Conversely, the study revealed a significant and negative relationship between the interest rate and growth of economy during the same time frame. Furthermore, during the identical period, the study identified a positive association between the inflation rate and Nigerian economic growth. In a study led by Muhammed et al. (2021), the researchers aimed to explore the impact of monetary policy on the economy of Nigeria. The researchers employed a combination of statistical methodologies, including the Augmented Dickey-Fuller unit root test, Vector Error Correction Mechanism (VECM), and Ordinary Least Squares (OLS) method, to conduct a comprehensive analysis of the data from 1981 to 2016. The study's findings revealed that the implementation of monetary policy, particularly with regard to the expansion of the money supply, had a beneficial influence on growth of GDP while simultaneously exerting a negative effect on the inflation rate. In an empirical study conducted by Md. Islam et al. (2021), the researchers aimed to examine the correlation between the policies pertaining to the management of money supply and the growth of the economy. The researchers conducted an analysis of both the long-term and short-term effects of monetary policy on the growth of the economy in two countries: Bangladesh, representing a developing country, and the United Kingdom, representing a developed country. The research outcomes unveiled a persistent connection between monetary policy and economic growth in both developing nation of Bangladesh and the developed nation of the United Kingdom. Astuti and Udjianto (2022) conducted an in-depth study to explore the intricate connections between economic growth, international trade, inflation across four ASEAN countries: Indonesia, Malaysia, the Philippines, and Thailand and monetary policy. The researchers employed vector

autoregression techniques and panel data analysis to analyze the relationships between these variables. During the immediate period, the research findings demonstrated an adverse impact of interest rate adjustments, as part of monetary policy, on the growth of the economy. However, over an extended duration, the study uncovered a favorable impact of these adjustments on economic growth. In their study, Srithilat et al. (2022) undertook an investigation to analyze the correlation between monetary policy and the growth of the economy in Lao PDR. The researchers employed a Vector Autoregressive Model (VAR) and analyzed quarterly data covering spanning from the initial quarter of 1995 to the final quarter of 2018. The study's findings demonstrated that the implementation of an expansionary monetary policy by the central bank was associated with a decline in real output in the Lao economy. In a study conducted by Alzyadat (2022), the objective was to assess the relative efficacy of fiscal and monetary policies in fostering economic growth in Jordan, covering the timeframe from 1970 to 2020. The researcher utilized the Autoregressive Distributed Lag (ARDL) model as the analytical framework for examining the relationships in the study. The study's findings indicated that government expenditures, representing fiscal policy, had a more pronounced and immediate impact on bolstering the stability of the Jordanian economy compared to the money supply, which represented monetary policy. In a study led by Al_kasasbeh, Omar, et al. (2022), the main aim was to assess the impacts of fiscal measures and the liberalization of trade on the growth of Jordan's economy. For analysis, the researchers used Kapetanios and Augmented Dicky Fuller unit root tests. According to the study's findings, government spending and taxes were found to have a positive impact on economic growth, whereas public debt was found to have a negative effect. Based on these findings, the study suggests that it is advisable to prioritize increased investments in human resources and infrastructure, with the funding primarily sourced from taxes rather than relying heavily on foreign loans. In an investigative study led by Arwani, Agus, et al. (2023), the primary aim is to examine and analyze the relationship among the Index of Human Development, open unemployment rate, and poverty, with the inclusion of intervening variables related to economic development in Central Java Province from 2015 to 2020. The study's findings revealed that neither the open unemployment rate nor economic growth exhibited a significant influence on poverty. The authors recommend that future research in this area should be carried out by other scholars.

Study Methodology

Methodology plays a crucial role in scientific research as it provides researchers with a framework to follow in order to achieve objective and reliable results. The choice of methodology may vary depending on the academic discipline, with each approach having its own unique characteristics and functions that are utilized by researchers in their respective fields of specialization. In the context of this particular study, a descriptive approach was adopted for the theoretical aspect, while an analytical approach was employed for the practical aspect. By collecting macroeconomic indicators as time series data from 2008 to 2022, the study aimed to investigate the interconnection implementation of monetary policy and the growth of the economy. To examine the stability of the variables, unit root tests were employed, and the data utilized in the study was obtained from reliable sources such as the World Bank and Trading Economics.

Study Hypothesis

In order to tackle the research problem, the researchers established the following hypotheses:

Hypothesis I

There is a statistically significant effect at a significant level of 0.05 for monetary policy and economic growth in Jordan.

The null hypothesis (H₀) posits that monetary policy does not exert a substantial influence on economic growth.

The alternative hypothesis (H₁) states that monetary policy has a significant impact on economic growth.

Hypothesis II

There is a statistically significant effect at a significant level of 0.05 for Interest rates and economic growth in Jordan.

The null hypothesis (H₀) suggests that changes in interest rates do not have an impact on economic growth.

The alternative hypothesis (H₁) proposes that interest rates have an effect on economic growth.

Hypothesis III

There is a statistically significant effect at a significant level of 0.05 for Inflation rates and economic growth in Jordan.

The null hypothesis (H0) suggests that the inflation rate does not have any influence on economic growth.

The alternative hypothesis (H1) states that the inflation rate has an impact on economic growth.

Hypothesis IV

There is a statistically significant effect at a significant level of 0.05 for Money supply and economic growth in Jordan.

The null hypothesis (H0) posits that changes in money supply do not have an impact on economic growth.

The alternative hypothesis (H1) suggests that changes in money supply have an effect on economic growth.

Table 1 Economic Indicators: GDP, Per Capita GDP, Unemployment Rate, Inflation Rate, Interest Rate, and Money Supply (2008-2022)

Years	GDP Jordan (Billion)	Per Capita Average gross domestic product	Unemployment rate	Inflation rate	Interest rate	Money supply
2008	23.2	2,081.4	12.7%	14.0%	4.0%	44,734
2009	24.3	2,152.3	12.9%	0.7%	2.5%	45,860
2010	25.1	2,204.2	12.5%	5.0%	2.0%	47,466
2011	28.3	2,511.7	12.9%	4.2%	2.3%	57,395
2012	31.0	2,708.7	12.2%	4.5%	4.0%	51,775
2013	33.6	3,049.8	12.6%	4.8%	3.5%	62,028
2014	35.9	3,229.2	11.9%	3.9%	2.8%	60,559
2015	38.2	3,408.6	13.0%	0.9%	1.5%	61,136
2016	40.5	3,677.7	15.3%	0.8%	1.8%	66,245
2017	43.4	3,857.1	16.3%	3.3%	3.0%	71,130
2018	43.4	3,767.1	18.6%	4.5%	4.0%	76,196
2019	45.0	3,946.8	19.1%	0.8%	3.3%	78,972
2020	44.2	3,946.1	24.7%	0.3%	2.0%	7,558
2021	45.7	4,036.5	25.2%	0.1%	1.8%	56,234
2022	46.2	4,126.9	26.3%	3.0%	2.7%	49,322

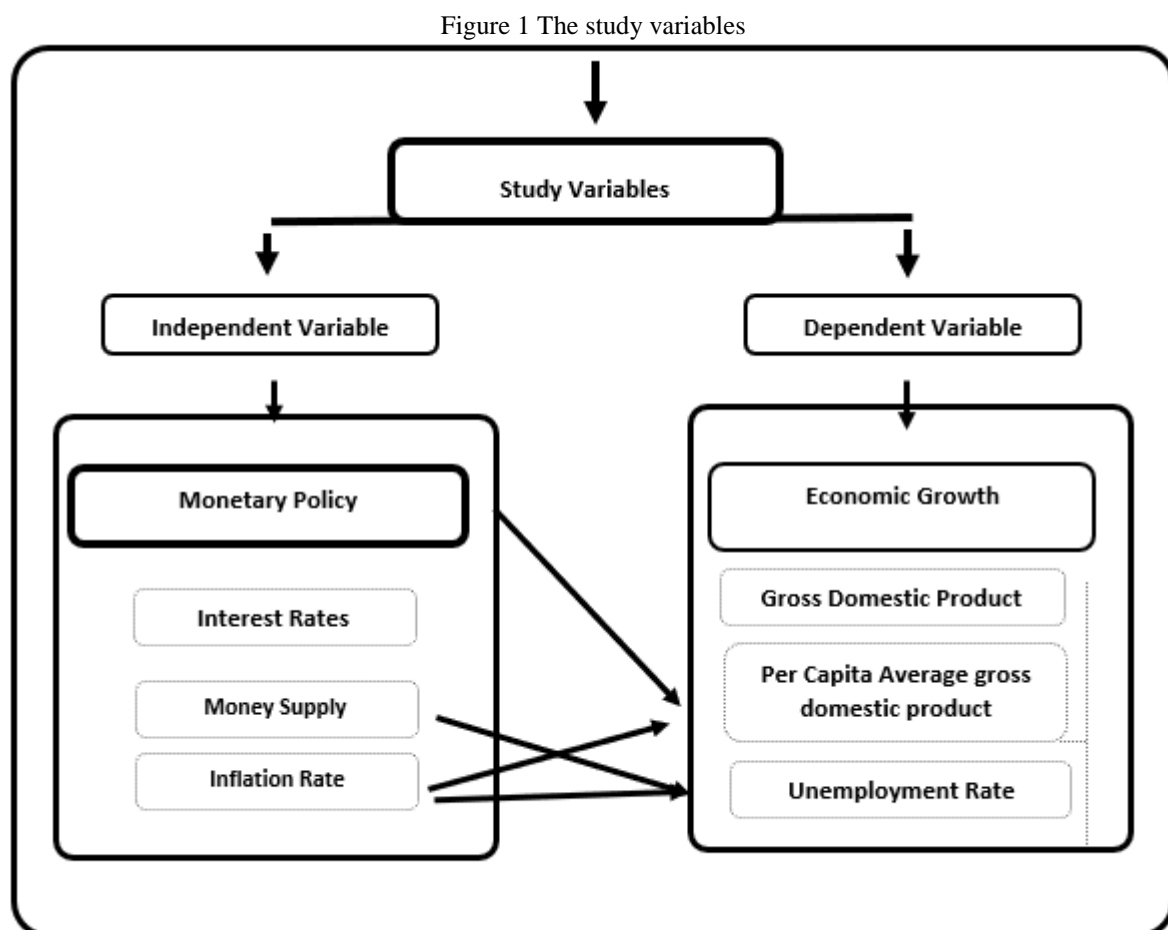
Source: Prepared by the authors (2023) depending on the collected data of the World Bank and Trading Economics data for the period (2008-2022)

Statistical Techniques

The researchers employed the statistical software program EViews for conducting the statistical analyses. The statistical analysis techniques utilized in the study encompassed the following:

- Descriptive statistics (Mean, Median, St. Deviation, Range, Minimum and Maximum)
- Pearson correlation coefficients
- Unit root tests of the variables to test stationarity
- Normality and homoskedasticity test
- The least squares regression.

Study Model



Source: Prepared by the authors (2023)

Limits of Study

The limitations of this study focused on the following:

Objectivity limits

Examining the Link Between Monetary Policy and Economic Growth

Time limits

The field study was limited to 15 years, from 2008 until the end of 2022.

Spatial boundaries

Jordan was the place where the current study was conducted.

Study Variables

$$\frac{GDP_{standardized} + GDPPC_{standardized} + ER_{standardized}}{3}$$

Where,

YEAR = Year

GDP = GDP Jordan (Billion)

GDPPC = Per Capita Average gross domestic product

UR = Unemployment rate

ER = Employment rate = 1 - UR

INFR = Inflation rate

INTR = Interest rate

MS = Money supply

EG = Economic growth

RESULTS AND DISCUSSION

Table 2 Descriptive statistics for the main variables

	GDP Jordan (Billion)	Per Capita Average gross domestic product	Unemployment rate	Inflation rate	Interest rate	Money supply
Mean	36.54	3,246.9	0.164	0.034	0.027	55,774
Median	38.20	3,408.6	0.13	0.033	0.027	57,395
St. Deviation	8.39	743.8	0.052	0.035	0.009	17,042
Range	23	2,045.5	0.144	0.139	0.025	71,414
Minimum	23.21	2,081.4	0.119	0.001	0.015	7,558
Maximum	46.21	4,126.9	0.263	0.14	0.04	78,972

Source: results of statistical analysis Using E-views

Table 2 shows that:

- For GDP Jordan (Billion), The mean = 36.54, Median = 38.20, St. Deviation = 8.39, Range = 23, Minimum = 23.21, and Maximum = 46.21.
- For Per Capita Average gross domestic product, The mean = 3,246.9, Median = 3,408.6, St. Deviation = 743.8, Range = 2,045.5, Minimum = 2,081.4, and Maximum = 4,126.9.
- For Unemployment rate, The mean = 0.164, Median = 0.13, St. Deviation = 0.052, Range = 0.144, Minimum = 0.119, and Maximum = 0.263.
- For Inflation rate, The mean = 0.034, Median = 0.033, St. Deviation = 0.035, Range = 0.139, Minimum = 0.001, and Maximum = 0.14.
- For Interest rate, The mean = 0.027, Median = 0.027, St. Deviation = 0.009, Range = 0.025, Minimum = 0.015, and Maximum = 0.04.
- For Money supply, The mean = 55,774, Median = 57,395, St. Deviation = 17,042, Range = 71,414, Minimum = 7,558, and Maximum = 78,972.

Table 3 Correlation matrix

	GDP Jordan (Billion)	Per Capita Average gross domestic product	Unemployment rate	Inflation rate	Interest rate	Money supply
GDP Jordan (Billion)	1					
Per Capita Average gross domestic product	0.998	1				
Unemployment rate	0.773	0.766	1			
Inflation rate	-0.569	-0.568	-0.410	1		
Interest rate	-0.167	-0.187	-0.211	0.621	1	
Money supply	0.208	0.195	-0.251	-0.030	0.259	1

Source: results of statistical analysis Using E-views

Table 3 shows that:

- Per Capita Average Gross Domestic Product exhibits a strong and positive correlation (correlation coefficient = 0.998) with Jordan's GDP (Billion).
- GDP Jordan (Billion) has a positive and significant relationship with Unemployment rate, as correlation coefficients = 0.773.
- GDP Jordan (Billion) has a negative and significant relationship with Inflation rate, as correlation coefficients = - 0.569.
- GDP Jordan (Billion) has a negative and significant relationship with Interest rate, as correlation coefficients = - 0.167.

- GDP Jordan (Billion) has a positive and significant relationship with Money supply, as correlation coefficients = 0.208.

Table 4 Unit root tests of the variables. Null hypothesis is that the variable has unit root.

Variable	ADF Test (Level)		
	Test Statistic	P-value	Order of Integration
EG	-4.779205	0.0042	I(0)
INFR	-4.732044	0.0145	I(0)
INTR	-6.776235	0.001	I(0)
MS	-3.451622	0.0269	I(0)

Source: results of statistical analysis Using E-views

Table 4 displays that all the variables exhibit stationarity at the level. Therefore, the suitability of the least squares regression is confirmed as the null hypothesis (Ho) is rejected, indicating that the variables do not exhibit unit root characteristics.

Table 5 Diagnostic tests of the least squares regression. Null hypotheses are normality, homoskedasticity and no serial correlation, respectively.

	Test	Statistic	P-Value
Normality	Jarque-Bera	3.837847	0.146765
Homoskedasticity	Breusch-Pagan-Godfrey	0.853788	0.4933
Serial correlation	Lagrange Multiplier	1.513477	0.2713

Source: results of statistical analysis Using E-views

The diagnostic tests indicate that the residuals do not exhibit significant deviations from normality. Additionally, there is no evidence of significant heteroskedasticity or serial correlation in the residuals at the 0.05 level of significance.

Table 6 Least squares regression of economic growth on the independent variables.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFR	-.310086	3.746288	-2.218219	0.0485
INTR	9.50567	15.45908	0.614892	0.5511
MS	1.10E-02	6.18E-06	1.784578	0.0319
Constant	-0.592704	0.413652	-1.432856	0.1797

Source: results of statistical analysis Using E-views

Table 6 shows that at a significance level of 0.05, the observed increase in consumer prices shows a statistically significant negative impact on economic growth. Since the

calculated probability of 0.0485 is below the predetermined significance level of 0.05, we can infer that there is sufficient evidence to support the alternative hypothesis (H1) and invalidate the initial assumption (H0). The coefficient value of -0.31 indicates that for every one-unit increase in the inflation rate, there is an associated decrease of 0.31 units in economic growth. Based on the chosen significance level of 0.05, there is no significant evidence to suggest that the interest rate has a substantial impact on economic growth. This conclusion is drawn based on the computed p-value of 0.551, which surpasses the predetermined significance level of 0.05. Therefore, the alternative hypothesis (H1) is dismissed while the null hypothesis (H0) is embraced.

CONCLUSION AND RECOMMENDATIONS

Based on the analysis results covering the period from 2008 to 2022, it can be concluded that the interest rate does not exhibit a substantial influence on economic growth. Based on the analysis, it is evident that the money supply plays a meaningful role in promoting economic growth, as evidenced by a statistically significant and positive relationship. This conclusion is derived from the obtained probability value, which is below the predetermined significance level of 0.05. Consequently, the obtained results lead us to dismiss the null hypothesis (H0) and support the alternative hypothesis (H1). Moreover, a one-unit increment in the supply of money is associated with a corresponding rise of 0.011 units in economic growth.

This study recommends that it is necessary to Study the various monetary policy indicators and their impact on economic growth in Jordan holds great importance. It is crucial to consider inflation rate policies and implement comprehensive economic reform packages to mitigate the adverse effects of inflation on economic growth in Jordan. Special attention should be given to the money supply and the policies implemented by responsible institutions regarding the amount of money in circulation, given its positive influence on economic growth. Furthermore, a thorough examination of the diverse factors influencing the growth of the Jordanian economy is necessary. It is essential to closely monitor the influence of the inflation rate on the expansion of the Jordanian economy. Furthermore, considering its influence on various economic indicators. Furthermore, conducting further studies with comprehensive data to examine the effects of the interest rate on the Jordanian economy is of utmost importance. Additionally, Examining the implications of the money supply on the growth rates of the Jordanian economy is crucial and warrants careful consideration. Exploring and studying the factors influencing the Jordanian economy should also be prioritized.

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