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THE IMPACT OF INFLATION RATE ON ECONOMY GROWTH IN POST SOVET UNION COUNTRIES

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Annotation: This thesis examines the complex relationship between inflation and economic growth in post-Soviet Union countries, analyzing the challenges these transitioning economies face in managing inflation and its impact on their development trajectories. It investigates the interplay between inflation, macroeconomic indicators, and key economic variables, highlighting the potential for both positive and negative consequences of inflation on growth. The thesis also discusses policy implications and strategies for mitigating the adverse effects of inflation while fostering sustainable economic development.

Keywords: Inflation, Economic Growth, Post-Soviet Union Countries, Transition Economies, Macroeconomic Indicators, Monetary Policy, Fiscal Policy, Structural Reforms, Development Strategies.

Post-Soviet Union countries have experienced a tumultuous economic journey since their transition to market-based economies. While significant progress has been made, these economies remain vulnerable to economic shocks, including inflation. Understanding the impact of inflation on economic growth is crucial for policymakers to navigate the complexities of managing macroeconomic stability and promoting sustainable development.

Inflation, a pervasive increase in the overall price levels of goods and services over time, serves as a critical economic metric. Measurement of inflation involves indices such as the Consumer Price Index (CPI), Producer Price Index (PPI), and GDP Deflator. The multifaceted nature of inflation extends beyond a mere ascent in prices, delving into intricate causes and consequences. Inflation, the rate at which the general level of prices for goods and services rises, erodes purchasing power and can have various impacts on economic growth.

Ghosh and Phillips, (1998) maintain that while there is no doubt about the fact that high inflation is bad for growth, there is less agreement about the effect of moderate inflation. Using panel regressions which allowed for nonlinearity specification, they found a statistically and economically significant inverse relationship between inflation and economic growth which holds robustly at all but the least inflation rates. They concluded that short-run growth costs of disinflation are only relevant for the most severe disinflations or when the initial inflation rate is well within the single-digit range.

Quartey, (2010) using the Johansen co-integration methodology, investigated whether the revenue maximising rate of inflation is growth maximising in Ghana. He found that there is a negative impact of inflation on growth. Furthermore, the study found a revenue maximising rate of inflation at 9.14 percent over the period 1970-2006 using the Laffer curve. He further established that the rate of inflation that is growth maximising is not a single digit one.

Barro, (1995) made an assessment on the effects of inflation on economic performance using data for around 100 countries over the period 1960-1990. His study reached to a conclusion that

if a number of country characteristics are held constant, then the regression results suggested that an increase in average inflation of 10 percent per annum reduces the growth rate of real GDP by 0.2 to 0.3 percent per annum and lowers the ratio of investment to GDP by 0.4 to 0.6 percent. In addition, Barro (1996) conducted another empirical study using panel data of around 100 countries from 1960 to 1990. He revealed that for a given starting level of real per capita GDP, lower inflation, higher initial schooling and life expectancy, lower fertility, lower government consumption, better maintenance of rule of law, and improvements in the terms of trade, enhance the growth rate. Marbuah, (2010) investigated the relationship between inflation and economic growth to ascertain whether a significant threshold effect existed in the case of Ghana over the period 1955-2009. The study found evidence of significant threshold effect of inflation on economic growth with and without structural break. Specifically, the evidence showed both a minimum and maximum inflation threshold levels of 6% and 10% respectively. Moreover, the study found that adjusting for structural break in the model increases the effect of inflation on growth at a robust threshold level of 10% by a factor of 1.8 or approximately 81%. He concluded by recommending to continue pursuing the inflation targeting framework by keeping inflation targets below 10% for beyond 10% threshold, inflation can be detrimental to Ghana's growth prospects.

Hasanov, (2010) employed annual data set on growth rate of real GDP, Consumer Price Index Inflation and growth rate of real Gross Fixed Capital Formation to investigate whether there was any threshold effect of inflation on economic growth over the period of 2001-2009. Estimated threshold model indicated that there was non-linear relationship between inflation and economic growth in the Azerbaijani economy and threshold level of inflation for GDP growth was 13 percent. Inflation rate lower than 13 percent reflected statistically significant positive effect on GDP growth but this positive relationship became negative when inflation exceeded 13 percent. He added that, economic growth was expected to decline by about 3 percent when inflation increased above the 13 percent threshold.

Umaru and Zubairu, (2012) suggested that all the variables in the unit root model were stationary and the results of causality revealed that GDP caused inflation and not inflation causing GDP. The results also revealed that inflation possessed a positive impact on economic growth through encouraging productivity and output level and on evolution of total factor productivity.

Mallik and Chowdhury, (2001) found two results: First, the relationship between inflation and economic growth is positive and statistically significant for Bangladesh, Pakistan, India and Sri Lanka. Second, the sensitivity of growth to changes in inflation rates was smaller than that of inflation to changes in growth rates. The policy implication of these results was the fact that although moderate inflation promotes economic growth, faster economic growth absorbs into inflation by overheating the economy.

Frimpong and Oteng-Abayie, (2010) found a threshold effect of inflation on economic growth of 11 percent for Ghana over the period 1960-2008 though failing the test of significance at that level.

Nell, (2000) examined the issue if inflation was detrimental to economic growth or not by using Vector Auto Regressive (VAR) technique. Data for the period from 1960-1999 was used and his empirical results suggested that inflation within the single-digit zone may be beneficial to economic growth, while inflation in the double digit zone tends to limit economic growth.

Sergii, (2009) found that growth - inflation interaction was strictly concave with some threshold level of inflation. Inflation threshold level is estimated using a non-linear least squares technique, and inference made by applying a bootstrap approach. The main findings

were that inflation rate above 8 percent tend to slow down economic growth while below 8 percent promotes economic growth.

Espinoza et al. (2010) examined threshold effect of inflation on GDP Growth by using a panel data of 165 countries including Oil Exporting Countries and Azerbaijan over the period of 1960-2007. Their study found that for all country groups' threshold level of inflation for GDP growth was about 10 percent (with the exclusion of industrialized countries where threshold level was much lower). Estimated results suggested that inflation from higher than 13 percent decreases real non-oil GDP by 207 percent per year. Lastly, review of literature on money supply and exchange rate influence on economic growth and inflation. Mehari and Wondafrash, (2008) revealed that money supply had a direct impact on inflation. Mwase, (2006) indicated that currency appreciation is associated with a decrease in inflation rate, with one quarter lag.

According to Atmadja (1999), inflation in Indonesia is short-term inflation and long-term inflation. Thus, inflation is a monetary phenomenon that has a broad impact on macroeconomic conditions. It is crucial to control the inflation rate. Quantity Theory of Money is the classical theory that discusses inflation. However, this theory refined by the University of Chicago economists called the Monetarist Model in its development. This theory emphasizes the role of the money supply and public expectations regarding price increases against inflation. The essence of this theory is as follows: 1) Inflation occurs if there is an increase in circulation volume, both currency and demand deposits. 2) The inflation rate is also determined by the increase in the money supply and public expectations regarding future price increases.

Link and Synthesis with Classical Economists' Theory about Economic Growth

Monetary Dynamics and the Quantity Theory of Money

Classical economists, notably adherents of the Quantity Theory of Money, established a connection between money supply and inflation. This aligns with contemporary discussions on the role of monetary factors in inflation, emphasizing the enduring relevance of classical insights.

Demand-Pull and Cost-Push Dynamics

The classical perspective on economic growth, emphasizing factors like capital accumulation and technological progress, resonates with both demand-pull and cost-push inflation. Inflationary pressures arising from increased demand align with classical notions of economic expansion, while cost-push inflation reflects the impact of production factors on prices.

Expectations and Adaptive Inflation

Classical economists' emphasis on rational expectations finds a parallel in the exploration of behavioral aspects in inflation. The expectations-augmented Phillips curve aligns with classical ideas, demonstrating how anticipated future events, including inflation, influence current economic behaviors.

Hyperinflation and Economic Stability

Classical economists, while not directly addressing hyperinflation, contributed to foundational economic principles that underscore the importance of stability. Classical theories of economic growth highlight the significance of a stable economic environment for sustained development, indirectly addressing concerns related to hyperinflation.

Policy Responses and Global Considerations

Classical economists' focus on limited government intervention aligns with discussions on policy responses to inflation. The classical perspective on free markets and minimal government interference resonates in debates on inflation management. Global considerations, echoing classical notions of international trade benefits, highlight the interconnectedness of economies in a globalized world.

Critiques and Debates

While classical economists didn't directly engage with modern inflation measurement, their emphasis on market mechanisms aligns with critiques on inflation indices. Debates on inflation targeting and its potential impact on long-term growth reflect ongoing discussions echoing both classical and contemporary economic thought.

Inflation can have both positive and negative effects on economic growth.

Table 1.

Positive and negative effects of inflation on economic growth.

Positive effects:	Stimulating Demand	Moderate inflation can encourage consumer spending and business investment by reducing the real value of debt and incentivizing purchases before prices rise further.
	Flexibility in Price Adjustments	Inflation allows businesses to adjust prices more easily, promoting market efficiency and facilitating shifts in resource allocation.
Negative effects:	Uncertainty and Investment Discouragement	High inflation creates uncertainty for businesses, making them hesitant to invest in long-term projects and leading to reduced investment.
	Erosion of Purchasing Power	High inflation erodes the purchasing power of consumers, reducing demand and slowing economic activity.
	Distortion of Price Signals	High inflation distorts price signals in the market, hindering efficient resource allocation and making it difficult for businesses to make informed decisions.
	Currency Depreciation	High inflation can lead to currency depreciation, making imports more expensive and potentially contributing to higher prices for consumers and businesses.

There are some factors influencing the impact of inflation:

- Inflation rate. The severity of inflation's impact depends on its level. Low levels of inflation (around 2-3%) are generally considered beneficial, while high levels (above 10%) can be detrimental to growth.
- Inflation expectations. If consumers and businesses expect high inflation in the future,

they may make decisions that accelerate inflation, creating a self-fulfilling prophecy.

- Economic structure. Countries with a more diversified economy and less dependence on imported goods are generally less vulnerable to the adverse effects of inflation.
- Monetary policy. Effective monetary policy can help to control inflation and reduce its negative impact on growth.
- Fiscal policy. Sound fiscal policy, including responsible government spending and tax collection, can also contribute to macroeconomic stability and minimize the risks of inflation.

In conclusion, inflation can have a complex and multifaceted impact on economic growth in post-Soviet Union countries. While moderate levels of inflation can be beneficial, high inflation can be detrimental to growth by creating uncertainty, eroding purchasing power, and distorting price signals. Effective monetary policy, fiscal responsibility, and structural reforms are crucial for managing inflation and maximizing economic growth in these transitioning economies. Understanding the complex relationship between inflation and growth is critical for developing sound economic policies aimed at fostering sustainable development in post-Soviet countries.

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