

Economic Uncertainty, Institutional Quality, and Economic Growth: A Conceptual Perspective

Lyu Mengran, Pei-Tha Gan*, Shahrun Nizam, Azila Abdul Razak, & Fatimah Salwa Abd. Hadi

Department of Economics, Faculty of Management and Economics, Universiti Pendidikan Sultan Idris (Sultan Idris Education University), 35900 Tanjong Malim, Perak. Malaysia.

*Email: gan.pt@fpe.upsi.edu.my

Abstract

Economic uncertainty has become a persistent and structurally significant feature of the global macroeconomic environment, influencing economic behavior beyond short-term cyclical fluctuations. This paper develops a conceptual framework that examines the relationship between economic uncertainty and economic growth, with particular emphasis on the moderating role of institutional quality. Drawing on a Keynesian demand perspective, economic uncertainty is conceptualized as a factor that weakens expectations, delays investment, and dampens aggregate demand, thereby constraining output growth. However, the magnitude and persistence of these effects are not uniform across economies. Differences in institutional quality, reflected in governance effectiveness, regulatory stability, policy credibility, and rule enforcement, shape how uncertainty is transmitted to real economic activity. Strong institutions mitigate uncertainty-induced contractions by stabilizing expectations, improving the transmission of macroeconomic policies, and sustaining investor confidence, whereas weak institutions amplify uncertainty shocks and weaken growth resilience. The framework further incorporates interest rates and exchange rates as key monetary and external channels through which uncertainty influences growth dynamics in open economies. By integrating economic uncertainty and institutional quality into a unified growth framework, this paper contributes to the structural macroeconomic literature and provides a coherent foundation for future empirical research.

Keywords: Natural aggregate demand; Economic growth; Economic uncertainty; Institutional quality

1. Introduction

Economic uncertainty has emerged as a defining characteristic of the contemporary global economy, reflecting recurrent financial crises, geopolitical tensions, pandemics, climate-related shocks, and rapid technological transformation. Unlike transitory business-cycle disturbances, uncertainty increasingly represents a persistent structural condition that shapes economic behaviour over extended horizons (Bloom, 2009; Aastveit et al., 2017; Ahir et al., 2022; Baker et al., 2016). Heightened uncertainty alters the decision-making environment faced by households, firms, and policymakers by increasing precautionary motives, delaying irreversible commitments, and weakening confidence in future economic conditions. These behavioural responses affect not only short-term fluctuations but also medium- and long-term growth trajectories, particularly in economies with limited institutional capacity. The growing prominence of uncertainty has therefore intensified academic and policy interest in understanding its macroeconomic consequences and transmission mechanisms. Empirical studies consistently document that elevated uncertainty is associated with weaker investment, lower employment growth, and reduced output expansion across both advanced and developing economies (Bernanke, 1983; Bloom et al., 2007; Luk et al., 2020; Naboka-Krell, 2024). However, the magnitude of these effects varies substantially across countries and over

time, suggesting that uncertainty does not operate independently of broader structural conditions. This heterogeneity raises important questions regarding the role of institutional and governance-related factors in shaping how economies absorb and respond to uncertainty shocks.

The theoretical foundation for analysing uncertainty can be traced back to Keynes's (1936) seminal insight that the future is fundamentally uncertain and cannot be reduced to calculable probabilities. In such a non-ergodic environment, economic agents rely on conventions, confidence, and what Keynes described as "animal spirits" rather than rational forecasts when forming expectations. When uncertainty rises, pessimistic expectations dominate, leading firms to postpone investment and households to restrain consumption, thereby weakening aggregate demand and output (Keynes, 1936; Larson, 2002; Bloom et al., 2018; Basu and Bundick, 2017). This Keynesian mechanism emphasises that uncertainty affects economic activity primarily through expectations and confidence rather than through observable fundamentals alone. Subsequent theoretical and empirical research has reinforced this view, showing that uncertainty shocks generate sharp declines in investment and employment, followed by slow and uneven recoveries (Bernanke, 1983; Bloom, 2009; Bloom et al., 2018; Gieseck and Rujin, 2020). Importantly, these effects tend to be more pronounced during periods of macroeconomic stress, when policy credibility is weak and expectations are fragile. While Keynesian theory provides a powerful account of the behavioural channels linking uncertainty and output, it offers limited insight into why similar uncertainty shocks produce divergent growth outcomes across countries. This limitation points to the importance of incorporating institutional factors into the uncertainty-growth framework.

Institutional quality has increasingly been recognised as a central determinant of macroeconomic performance and growth resilience. Institutions shape the rules governing economic interactions by influencing policy credibility, contract enforcement, regulatory stability, and governance effectiveness (North, 1990; La Porta et al., 1999; Kaufmann et al., 2010; North, 2016). Strong institutions reduce transaction costs, stabilise expectations, and facilitate coordination among economic agents, thereby mitigating the adverse effects of uncertainty on investment and consumption. Conversely, weak institutions amplify uncertainty by fostering policy inconsistency, political instability, and credibility deficits, which undermine confidence and distort policy transmission mechanisms (Alesina et al., 1996; Rodrik et al., 2004; Acemoglu and Robinson, 2012; Uddin et al., 2023). Despite the growing recognition of institutional quality as a driver of long-run growth, most studies treat institutions as a direct determinant of output rather than as a factor that conditions how uncertainty affects economic activity. As a result, the moderating role of institutions in the uncertainty-growth nexus remains underexplored. This omission is particularly important in an era characterised by frequent and overlapping sources of uncertainty, where institutional capacity may determine whether uncertainty shocks translate into temporary slowdowns or persistent growth losses. Addressing this gap requires a conceptual framework that explicitly integrates economic uncertainty, institutional quality, and macroeconomic dynamics within a unified analytical structure.

2. Theoretical Foundations and Conceptual Framework

2.1 Economic Uncertainty and Aggregate Demand

Within the Keynesian theoretical tradition, economic uncertainty primarily affects economic growth through its influence on aggregate demand, expectations, and confidence. Keynes (1936) emphasised that when future outcomes are uncertain in a fundamental sense, firms and households revise their spending behaviour not on the basis of expected returns alone, but on their confidence in those expectations. Elevated uncertainty weakens confidence, leading firms to postpone investment decisions and households to increase precautionary savings, thereby reducing aggregate demand and output (Larson, 2002; Bloom, 2009; Basu and Bundick, 2017). This contractionary mechanism is particularly pronounced when investment involves irreversible commitments and adjustment costs, as firms adopt a “wait-and-see” strategy in response to uncertain demand and policy environments (Bernanke, 1983; Bloom et al., 2007; Arestis et al., 2012). As investment spending declines, multiplier effects amplify the initial shock, resulting in larger and more persistent output losses. Empirical evidence supports this Keynesian channel, showing that uncertainty shocks are associated with sharp declines in investment, employment, and industrial production across a wide range of economies (Bloom, 2009; Bloom et al., 2018; Gieseck and Rujin, 2020). Importantly, this mechanism does not require changes in observable fundamentals; rather, it operates through shifts in expectations and confidence. As such, uncertainty represents a distinct macroeconomic force that can suppress growth even in the absence of adverse supply shocks or policy tightening.

Household consumption decisions are similarly affected by economic uncertainty through precautionary behaviour and expectations of future income risk. When uncertainty regarding employment prospects, inflation, or fiscal sustainability increases, households tend to reduce consumption and raise savings as a form of self-insurance (Keynes, 1936; Larson, 2002; Carroll and Kimball, 2008; Bloom et al., 2018). This behaviour is particularly evident for durable goods consumption, which involves long-term financial commitments and is therefore more sensitive to uncertainty. Reduced consumption weakens aggregate demand and reinforces downturns initiated by declining investment. Moreover, uncertainty-induced consumption retrenchment can persist over time if confidence fails to recover, thereby prolonging periods of subdued growth. In open economies, uncertainty may also influence consumption through exchange rate volatility and imported inflation, further complicating demand dynamics (Mundell, 1963; Aghion et al., 2001; Demir, 2013). Empirical studies consistently find that heightened uncertainty is associated with declines in consumer confidence and household spending across both developed and developing economies (Baker et al., 2016; Aastveit et al., 2017; Ahir et al., 2022). These findings underscore the central role of expectations in shaping aggregate demand responses to uncertainty. Taken together, the investment and consumption channels highlight that economic uncertainty constrains growth primarily by weakening demand-side forces, consistent with the Keynesian emphasis on effective demand as the driver of output and employment.

2.2 Monetary Conditions, Interest Rates, and Uncertainty

Monetary policy plays a central role in shaping the macroeconomic effects of uncertainty, particularly through interest rate channels. In the Keynesian framework, lower interest rates are intended to stimulate investment and consumption by reducing borrowing costs and encouraging credit expansion (Keynes, 1936; Bernanke and Gertler, 1995). However, heightened uncertainty weakens the effectiveness of this transmission mechanism by reducing the responsiveness of private-sector spending to changes in interest rates. Firms may remain reluctant to invest despite accommodative monetary conditions if future demand and policy environments are perceived as unstable (Bernanke, 1983; Bloom, 2009; Bloom et al., 2018). Similarly, households may prioritise precautionary savings over consumption even when borrowing costs decline. As a result, uncertainty can generate a form of monetary policy ineffectiveness, particularly during periods of economic stress. Empirical evidence suggests that uncertainty shocks dampen the impact of monetary easing on output and employment, consistent with the Keynesian liquidity trap argument (Romer and Romer, 2004; Mertens and Ravn, 2014; Basu and Bundick, 2017). Moreover, elevated uncertainty may increase risk premia in financial markets, raising effective borrowing costs and further constraining investment. These dynamics imply that interest rate policy alone may be insufficient to stabilise growth under conditions of persistent uncertainty, highlighting the importance of broader institutional and policy frameworks in shaping macroeconomic resilience.

The interaction between uncertainty and interest rates also has important implications for long-term growth dynamics. Persistent uncertainty can reduce capital accumulation by delaying investment and discouraging innovation, thereby weakening productivity growth over time (Arestis et al., 2012; Bellais, 2004; Paniccià et al., 2013). Even when monetary policy remains accommodative, firms may underinvest in research and development if future market conditions and regulatory environments are perceived as uncertain. This behaviour constrains technological progress and limits potential output growth. Furthermore, uncertainty-induced investment delays can lead to hysteresis effects, whereby temporary shocks have permanent effects on productive capacity (Blanchard and Summers, 1986; Bloom et al., 2018). From this perspective, uncertainty is not merely a short-run disturbance but a factor that can shape long-run growth trajectories. Interest rate policy may mitigate some of these effects by supporting demand, but its effectiveness depends on the credibility of policy institutions and the stability of the broader macroeconomic environment (Bernanke and Gertler, 1995; Carlin and Soskice, 2015). In economies where policy credibility is weak, accommodative monetary policy may fail to restore confidence, allowing uncertainty to exert persistent negative effects on growth. This observation reinforces the argument that institutional quality plays a crucial role in conditioning the uncertainty-growth relationship.

2.3 Exchange Rates, Openness, and Economic Uncertainty

In open economies, exchange rates constitute an important channel through which economic uncertainty affects growth dynamics. Exchange rate movements influence trade competitiveness, production costs, and external balance, thereby shaping aggregate demand and output (Mundell, 1963; Rodrik, 2008; Aghion et al., 2001). Heightened economic uncertainty is often accompanied by increased exchange rate volatility, as financial markets reassess risk and capital flows become more volatile. Such volatility increases transaction costs for exporters and importers, discourages trade, and reduces firms' willingness to engage in

cross-border investment (Handley and Limao, 2015; Demir, 2013; Zhu et al., 2022). From a Keynesian perspective, uncertainty-induced exchange rate instability weakens net exports, thereby amplifying demand-side contractions initiated through investment and consumption channels. Moreover, exchange rate appreciation—often driven by capital inflows seeking safe assets during periods of global uncertainty—can erode export competitiveness and suppress output growth, particularly in export-oriented economies (Rodrik, 2008; Aghion et al., 2001). Conversely, excessive depreciation may increase imported inflation and raise production costs, further complicating macroeconomic stabilisation efforts. Empirical studies consistently show that exchange rate volatility and uncertainty are associated with lower trade volumes, weaker investment, and reduced growth, especially in developing and financially open economies (Demir, 2013; Zhu et al., 2022; Deniz et al., 2021). These dynamics highlight that exchange rates act as a key external transmission channel through which uncertainty influences economic growth.

The growth effects of exchange rate uncertainty are further conditioned by financial openness and integration into global markets. In economies with high capital mobility, uncertainty shocks can trigger sudden capital outflows, leading to sharp exchange rate movements and financial instability (Mundell, 1963; Aghion et al., 2001; Rodrik et al., 2004). Such dynamics can constrain domestic credit availability, raise borrowing costs, and reduce investment, thereby reinforcing the negative impact of uncertainty on growth. Moreover, exchange rate volatility complicates firms' pricing and production decisions, particularly in economies heavily dependent on imported intermediate goods (Demir, 2013; Zhu et al., 2022). From a structural macroeconomic perspective, these effects are not symmetric across countries. Economies with diversified export bases, deep financial markets, and credible policy frameworks are better able to absorb exchange rate fluctuations, whereas economies with narrow export structures and weak financial systems are more vulnerable to uncertainty-induced external shocks (Rodrik, 2008; Aghion et al., 2001). Importantly, exchange rate management alone cannot fully offset the adverse growth effects of uncertainty if underlying institutional weaknesses persist. This observation reinforces the need to consider institutional quality as a central moderating factor in the uncertainty-growth nexus, particularly in open economies where external shocks play a prominent role.

3. Institutional Quality as a Moderating Mechanism

3.1 Institutions, Expectations, and Credibility

Institutional quality plays a central role in shaping how economic uncertainty affects growth by influencing expectations, credibility, and confidence. Institutions determine the stability and predictability of the policy environment, which are critical for long-term investment and consumption decisions (North, 1990; La Porta et al., 1999; Kaufmann et al., 2010). Strong institutions enhance policy credibility by ensuring consistency, transparency, and accountability, thereby reducing the perceived risk associated with future economic conditions. When policies are credible, firms and households are more likely to maintain investment and consumption plans despite elevated uncertainty, mitigating demand-side contractions (Acemoglu and Johnson, 2005; Rodrik et al., 2004; Aziz, 2022). Conversely, weak institutions amplify uncertainty by generating policy reversals, regulatory instability, and

governance failures, which undermine confidence and distort expectations (Alesina et al., 1996; Acemoglu and Robinson, 2012; Uddin et al., 2023). Under such conditions, uncertainty shocks are more likely to translate into sharp and persistent declines in economic activity. Empirical evidence suggests that economies with stronger institutional frameworks experience less volatile growth and recover more quickly from uncertainty shocks (Nguyen et al., 2018; Radulović, 2020; Mehmood et al., 2023). These findings underscore the importance of institutions in conditioning the behavioural responses that drive uncertainty-growth dynamics.

The moderating role of institutional quality extends beyond expectations to the effectiveness of macroeconomic policy transmission. In economies with strong governance and well-functioning legal frameworks, monetary and fiscal policies are more likely to influence real economic activity through predictable and transparent channels (Bernanke and Gertler, 1995; Kaufmann et al., 2010; Carlin and Soskice, 2015). Effective contract enforcement, regulatory quality, and control of corruption facilitate credit allocation and reduce risk premia, enhancing the responsiveness of investment and consumption to policy interventions. In contrast, weak institutions impair policy transmission by introducing distortions, rent-seeking behaviour, and credibility deficits, which reduce the effectiveness of stabilisation efforts (La Porta et al., 1999; Alesina et al., 1996; Acemoglu and Robinson, 2012). During periods of heightened uncertainty, these institutional weaknesses become particularly salient, as policy signals may fail to restore confidence or stimulate demand. As a result, uncertainty shocks have more pronounced and persistent effects on growth in economies with low institutional quality. This mechanism highlights that institutions do not merely influence long-run growth outcomes but actively shape short- and medium-term macroeconomic dynamics under uncertainty.

3.2 Institutional Quality, Investment, and Long-Term Growth

Institutional quality also plays a crucial role in shaping the long-term growth effects of economic uncertainty through its influence on investment, innovation, and capital accumulation. Persistent uncertainty discourages firms from undertaking long-horizon investments, particularly in environments where property rights are weak and regulatory frameworks are unstable (North, 1990; Arestis et al., 2012; Paniccià et al., 2013). In such contexts, uncertainty not only delays capital formation but also constrains technological upgrading and research and development activities, thereby weakening productivity growth over time (Bellais, 2004; Aghion et al., 2001). Strong institutions mitigate these effects by providing legal protection, regulatory predictability, and credible enforcement mechanisms that reduce the perceived risks associated with long-term investment (Acemoglu and Johnson, 2005; Rodrik et al., 2004; Ngo and Nguyen, 2020). By stabilising the investment climate, high institutional quality allows firms to maintain innovation and capital accumulation even under uncertain macroeconomic conditions. Conversely, weak institutions exacerbate uncertainty by increasing the likelihood of policy reversals, expropriation risks, and contract violations, leading firms to adopt short-term strategies that prioritise liquidity over productivity-enhancing investment (La Porta et al., 1999; Acemoglu and Robinson, 2012; Mehmood et al., 2023). These dynamics imply that uncertainty has more severe and persistent growth consequences in economies with poor institutional quality, reinforcing structural divergence in long-run growth trajectories across countries.

The interaction between uncertainty, institutions, and long-term growth also has important implications for structural change. Structural transformation requires sustained investment in physical capital, human capital, and innovation, all of which are highly sensitive to uncertainty and institutional conditions (Rodrik, 2008; Arestis et al., 2012; Zhao et al., 2021). In economies with strong institutions, uncertainty shocks may temporarily slow investment but are less likely to derail long-term development paths, as credible governance frameworks support recovery and adaptation. In contrast, economies with weak institutions face greater risks of structural stagnation, as uncertainty discourages diversification and reinforces dependence on low-productivity sectors (Acemoglu and Robinson, 2012; Ngo and Nguyen, 2020). Empirical studies suggest that institutional quality is closely linked to total factor productivity growth and the ability of economies to adapt to external shocks (Nguyen et al., 2018; Radulović, 2020; Aziz, 2022). From this perspective, institutional quality not only moderates the short-run effects of uncertainty on growth but also shapes the long-run evolution of economic structures. This insight is particularly relevant for developing and emerging economies, where institutional weaknesses may magnify the growth costs of uncertainty and hinder structural upgrading. Incorporating these considerations into the uncertainty–growth framework enhances its relevance for analysing long-term development and structural change.

4. Integrated Conceptual Framework and Dynamic Interactions

4.1 Conceptual Structure of the Uncertainty–Growth Relationship

Building on the preceding theoretical discussion, this study proposes an integrated conceptual framework that links economic uncertainty, institutional quality, and economic growth within a dynamic macroeconomic system. At the core of the framework is the Keynesian proposition that economic growth is primarily demand-driven and shaped by expectations, confidence, and behavioural responses to uncertainty (Keynes, 1936; Bloom, 2009; Basu and Bundick, 2017). Economic uncertainty enters the framework as a central disturbance that weakens expectations, delays investment, and suppresses consumption, thereby reducing aggregate demand and output. Interest rates and exchange rates function as key monetary and external transmission channels through which uncertainty affects real economic activity, particularly in open economies (Mundell, 1963; Bernanke and Gertler, 1995; Aghion et al., 2001; Demir, 2013). Importantly, the framework does not assume a uniform response to uncertainty across economies. Instead, it recognises that the magnitude and persistence of uncertainty-induced growth effects depend on broader institutional and governance contexts. Institutional quality shapes policy credibility, regulatory stability, and the effectiveness of macroeconomic interventions, thereby conditioning how uncertainty is transmitted to investment, consumption, and trade (North, 1990; Rodrik et al., 2004; Kaufmann et al., 2010; Acemoglu and Robinson, 2012). By integrating these elements, the framework provides a coherent structure for analysing heterogeneous growth responses to uncertainty across countries and over time.

To formalise the theoretical relationships discussed above, the conceptual framework can be expressed in a reduced-form representation that captures the key demand-side channels linking economic uncertainty and growth. Specifically, economic growth is conceptualised as

a function of its own persistence, monetary conditions, external competitiveness, and economic uncertainty, as represented by the following expression:

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + \alpha_2 r_t + \alpha_3 er_t + \alpha_4 eu_t + \mu_t \quad (1)$$

where y_t denotes economic growth, y_{t-1} captures growth persistence reflecting dynamic adjustment and path dependence, r_t represents real interest rates as a monetary transmission channel, er_t denotes the real exchange rate capturing external competitiveness, and eu_t represents economic uncertainty. The disturbance term μ_t captures unobserved influences on growth. This expression is not intended as an estimable empirical model but as a formalisation of the conceptual mechanisms outlined in the Keynesian demand framework (Keynes, 1936; Bernanke, 1983; Bloom, 2009; Carlin and Soskice, 2015). Importantly, institutional quality is not introduced as an additive explanatory variable in Equation (1). Instead, it is conceptualised as a moderating factor that conditions the magnitude, persistence, and effectiveness of the relationships captured in the expression, consistent with institutional economics arguments that governance structures shape economic behaviour under uncertainty (North, 1990; Acemoglu and Johnson, 2005; Rodrik et al., 2004).

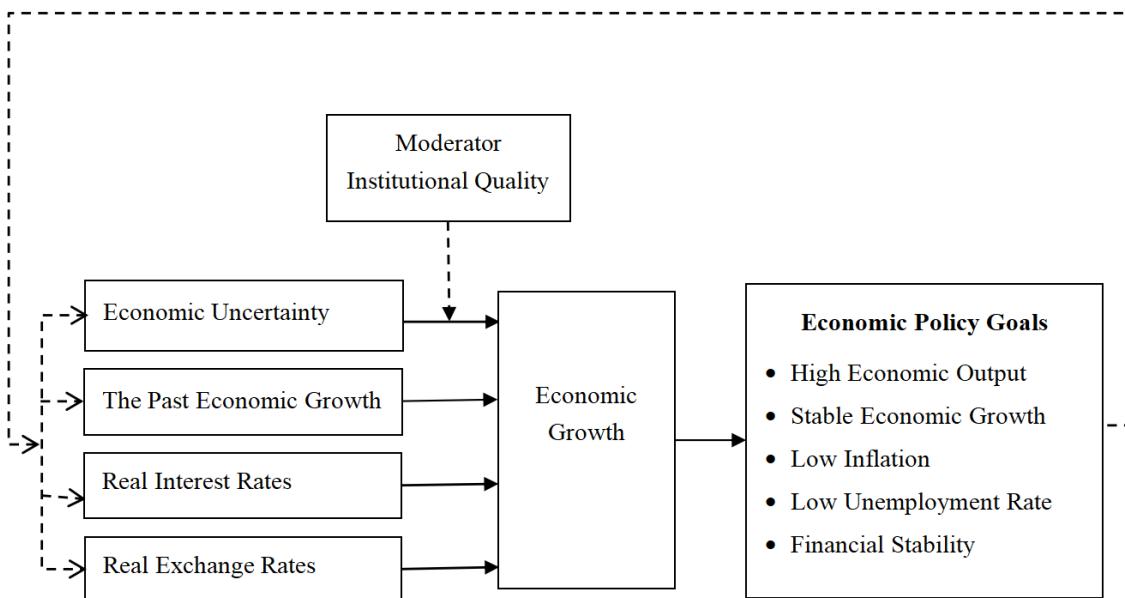


Figure 1: Conceptual framework

To complement the formal representation presented in Equation (1), Figure 1 provides a visual synthesis of the integrated conceptual framework developed in this study. The figure illustrates how economic uncertainty influences economic growth through key demand-side transmission channels, namely investment, consumption, and external trade, which are proxied by monetary conditions (interest rates) and external competitiveness (exchange rates). Economic uncertainty is depicted as a central disturbance that alters expectations and confidence, thereby affecting aggregate demand and output. Consistent with the Keynesian demand framework, these effects operate dynamically and may persist over time through growth inertia and feedback mechanisms (Keynes, 1936; Bloom, 2009; Basu and Bundick, 2017). Importantly, Figure 1 highlights the moderating role of institutional quality, which

conditions the strength and persistence of the uncertainty–growth relationship rather than acting as a direct additive determinant of growth. Strong institutional quality—reflected in governance effectiveness, policy credibility, and regulatory stability—mitigates the adverse impact of uncertainty by stabilising expectations and enhancing the effectiveness of macroeconomic transmission mechanisms, while weak institutions amplify uncertainty shocks and weaken growth resilience (North, 1990; Acemoglu and Johnson, 2005; Rodrik et al., 2004; Kaufmann et al., 2010). By integrating these elements into a single schematic representation, Figure 1 serves as a bridge between the formal conceptual expression and the subsequent discussion of dynamic feedback effects and institutional moderation.

A key feature of the proposed framework is the recognition of dynamic feedback effects between economic growth and economic uncertainty. Economic growth influences future uncertainty by shaping macroeconomic stability, fiscal capacity, and policy credibility, while uncertainty simultaneously affects growth through demand-side channels (Aastveit et al., 2017; Baker et al., 2016; Ahir et al., 2022). Periods of sustained growth tend to reduce uncertainty by improving employment prospects, stabilising public finances, and reinforcing confidence in economic institutions. Conversely, prolonged downturns increase uncertainty by eroding fiscal space, weakening policy credibility, and intensifying political and social pressures. Institutional quality plays a critical role in conditioning this feedback process. In economies with strong institutions, negative shocks are more likely to be absorbed without triggering persistent uncertainty, as credible governance frameworks support stabilisation and recovery (Rodrik et al., 2004; Kaufmann et al., 2010; Mehmood et al., 2023). In contrast, weak institutions may allow uncertainty to become self-reinforcing, amplifying growth slowdowns and prolonging macroeconomic instability (Alesina et al., 1996; Acemoglu and Robinson, 2012). By explicitly incorporating these dynamic interactions, the framework highlights that the uncertainty–growth relationship is inherently bidirectional, path-dependent, and institutionally mediated, providing a robust conceptual foundation for subsequent empirical analysis.

5. Testable Propositions

5.1 Economic Uncertainty and Economic Growth

The first proposition concerns the direct relationship between economic uncertainty and economic growth through aggregate demand channels. Consistent with Keynesian demand theory, heightened economic uncertainty is expected to exert a negative influence on economic growth by weakening expectations, reducing investment, and suppressing consumption (Keynes, 1936; Bernanke, 1983; Bloom, 2009; Basu and Bundick, 2017). When firms face uncertainty regarding future demand, policy direction, or financing conditions, they tend to postpone irreversible investment decisions, leading to a contraction in capital formation and output. Similarly, households respond to increased uncertainty by raising precautionary savings and reducing consumption, particularly of durable goods, thereby weakening aggregate demand (Larson, 2002; Bloom et al., 2018). These behavioural responses generate multiplier effects that amplify the initial uncertainty shock, resulting in larger and more persistent output losses. Empirical studies consistently document negative associations between various measures of uncertainty and economic growth across countries and time

periods (Baker et al., 2016; Gieseck and Rujin, 2020; Ahir et al., 2022). Based on these theoretical and empirical insights, the first proposition is stated as follows:

H1: Economic uncertainty is negatively associated with economic growth through aggregate demand channels.

5.2 Monetary and External Transmission Channels

The second proposition relates to the role of monetary and external conditions as transmission channels through which uncertainty influences economic growth. Interest rates and exchange rates are central components of the macroeconomic adjustment process, shaping investment, consumption, and trade dynamics (Keynes, 1936; Mundell, 1963). Higher real interest rates raise borrowing costs and discourage investment, while exchange rate appreciation reduces export competitiveness and weakens net exports, thereby constraining output growth (Bernanke and Gertler, 1995; Aghion et al., 2001; Rodrik, 2008). Economic uncertainty interacts with these channels by reducing the responsiveness of private-sector behaviour to monetary and exchange rate adjustments. Firms may remain reluctant to invest despite accommodative monetary policy, while exchange rate volatility increases transaction risks and discourages trade (Bloom, 2009; Demir, 2013; Zhu et al., 2022). These dynamics suggest that interest rates and exchange rates not only influence growth directly but also mediate the effects of uncertainty on economic activity. Accordingly, the second proposition is formulated as follows:

H2: Higher real interest rates and real exchange rate appreciation are associated with lower economic growth, acting as key transmission channels through which economic uncertainty affects output.

5.3 Institutional Quality as a Moderating Variable

The third proposition concerns the moderating role of institutional quality in the uncertainty–growth relationship. Institutional economics emphasises that governance structures, policy credibility, and regulatory stability shape how economic agents respond to uncertainty (North, 1990; La Porta et al., 1999; Kaufmann et al., 2010). Strong institutions stabilise expectations, reduce transaction costs, and enhance the effectiveness of macroeconomic policy, thereby mitigating the adverse effects of uncertainty on investment and consumption (Acemoglu and Johnson, 2005; Rodrik et al., 2004; Aziz, 2022). In contrast, weak institutions amplify uncertainty by fostering policy inconsistency, governance failures, and credibility deficits, which undermine confidence and distort policy transmission (Alesina et al., 1996; Acemoglu and Robinson, 2012; Uddin et al., 2023). These institutional differences help explain why similar uncertainty shocks produce heterogeneous growth outcomes across countries. Based on this reasoning, the third proposition is stated as follows:

H3: Institutional quality moderates the relationship between economic uncertainty and economic growth, such that stronger institutions weaken the negative impact of uncertainty on growth.

5.4 Dynamic Feedback between Growth and Uncertainty

The final proposition addresses the dynamic and bidirectional nature of the relationship between economic uncertainty and economic growth. Economic growth influences future

uncertainty by shaping macroeconomic stability, fiscal capacity, and policy credibility (Carlin and Soskice, 2015; Aastveit et al., 2017). Periods of sustained growth tend to reduce uncertainty by improving employment prospects, stabilising public finances, and reinforcing confidence in economic institutions. Conversely, prolonged downturns increase uncertainty by eroding fiscal space, weakening policy credibility, and straining institutional capacity (Baker et al., 2016; Ahir et al., 2022). Institutional quality conditions this feedback process by determining how effectively growth translates into stability and resilience (Rodrik et al., 2004; Acemoglu and Robinson, 2012). These considerations imply that uncertainty and growth interact dynamically over time, rather than through a unidirectional causal relationship. Accordingly, the fourth proposition is formulated as follows:

H4: The relationship between economic uncertainty and economic growth is dynamic and characterised by feedback effects, implying persistence and bidirectional interaction.

6. Conclusion

This paper develops a comprehensive conceptual framework that integrates economic uncertainty, institutional quality, and economic growth within a unified macroeconomic perspective. Drawing on Keynesian demand theory, the analysis highlights that uncertainty suppresses growth primarily by weakening expectations, delaying investment, and dampening aggregate demand (Keynes, 1936; Bernanke, 1983; Bloom, 2009; Basu and Bundick, 2017). However, the framework emphasises that these effects are not uniform across economies and depend critically on institutional contexts. By incorporating insights from institutional economics, the study demonstrates that governance structures, policy credibility, and regulatory stability shape how uncertainty is transmitted to real economic activity (North, 1990; Acemoglu and Johnson, 2005; Kaufmann et al., 2010). Strong institutions mitigate uncertainty-induced contractions by stabilising expectations and improving policy transmission, while weak institutions amplify uncertainty shocks and undermine growth resilience (Alesina et al., 1996; Acemoglu and Robinson, 2012). This conceptualisation advances the literature by moving beyond models that treat uncertainty as an exogenous shock with homogeneous effects.

Although the analysis is conceptual in nature, it provides a coherent foundation for future empirical research on growth dynamics under uncertainty. The proposed framework and testable propositions offer a structured basis for examining how uncertainty, monetary and external conditions, and institutional quality interact across different countries and time periods (Baker et al., 2016; Ahir et al., 2022; Nguyen et al., 2018; Mehmood et al., 2023). From a policy perspective, the framework underscores the importance of strengthening institutional quality as a strategy for enhancing macroeconomic resilience in an increasingly uncertain global environment. Reforms aimed at improving governance effectiveness, regulatory stability, and policy credibility can play a crucial role in mitigating the adverse growth effects of uncertainty and supporting sustainable development (Rodrik et al., 2004; Acemoglu and Robinson, 2012; World Bank, 2023). In this sense, institutions are not merely long-run determinants of growth but active stabilising mechanisms that shape short- and medium-term macroeconomic outcomes. By integrating uncertainty and institutions into a unified analytical structure, this study contributes to the structural macroeconomic literature and offers valuable insights for both scholars and policymakers.

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