

# Impact of Public Debt, Bank Credit and Financial Institutions on Economic Growth: Evidence from Selected Asean Countries

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## Abstract

This study examines the impact of public debt, bank credit and financial institutions on economic growth: evidence from selected ASEAN countries. The need to put the economy on the path of growth and development is more like a complex journey rather than a clear cut path to follow. All the nations of the world have one common aim i.e. to be the most successful economy of the world. Economic growth of every nation is highly dependent on the sustenance and development of its banking. This study tries to examine the relationship between the bank credit and economic growth for six ASEAN countries, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. It also studies the relationship between development of banking and economic growth for ASEAN countries. Further, the relationship between Public Debt and economic growth is also studied. Changes in GDP indicate the economic growth or backwardness of each country. The finding indicates that the economic growth of the countries are strongly related with the bank credit and public debt status and the economic growth of the chosen countries is weakly related with the banks of the countries. It is thus concluded that bank credit and public debt is more significant variable for economic growth of the countries as compared with that of banks of the countries.

**Keywords:** Public Debt, Economic Growth, Gross Domestic Product, Bank Credit, Financial Institutions, ASEAN

## Introduction

Examining the financing methods of governments in different countries indicates that debt is an inevitable part of government finances, and according to the conditions and economic structure of countries, and the combination of debt instruments, it can bring different economic consequences, and in other words, debt It is like a double-edged sword, which acts as an economic stimulus if there is stability; the growing economy of Southeast Asian and ASEAN countries has made the investigation of the factors effective in their economic

development an attractive topic. Therefore, examining the factors affecting the economic growth of these countries, which in this research are bank credit, development of banks and government loans, is important from the point of view of economic science.

Banks offer various types of insurance, ranging from life insurance to insurance on mortgage contracts. Insurance firms and banks also insure other banks. If one bank becomes insolvent, its losses are partially absorbed by the other institutions that insured it. In some instances, this can lead to systemic risk, which describes the danger of a major bank's collapse having a filter down effect on other banks and the economy as a whole. In ASEAN countries and banks are responsible for important tasks in the economy, which include arranging deposits, mediating and facilitating payment flows, credit allocation, etc. These institutions in ASEAN countries are capable of financial intermediation and can help reduce investment risk by providing various credit methods (Chung, 2019).

Finance on the broader level can be defined as the monetary resource that is required by individuals, businesses and the government sector to fulfill their economic needs. Therefore, all the activities dealing with the finances are organized in the financial sector of an economy. The Financial sector comprises of various financial institutions and markets. The financial sector of an economy includes financial instruments, banks, and financial markets all of which work together the efficient mobilization and allocation of savings as per the economic priorities of the nation. Hence, the primary role of these markets is to act as a conduit for transfer of financial resources from actual savers to the borrowers. Financial markets thus greatly affect the volume and availability of savings in an economy for investment purposes. Thus, financial market acts as an important institutional factor for the economic transformation. A bank is the touch point for the households and the business and forms the largest institutional network for financial system of an economy (Oura, 2012).

### **Economic Growth**

Economic growth can be defined as the increase or improvement in the inflation-adjusted market value of the goods and services produced by an economy in a financial year. Statisticians conventionally measure such growth as the percent rate of increase in the real gross domestic product, or real GDP (Bakar et al., 2018: 97).

Growth is usually calculated in real terms – i.e., inflation-adjusted terms – to eliminate the distorting effect of inflation on the prices of goods produced. Measurement of economic growth uses national income accounting (Burro, 2019: 953). Since economic growth is measured as the annual percent change of gross domestic product (GDP), it has all the advantages and drawbacks of that measure. The economic growth-rates of countries are commonly compared using the ratio of the GDP to population (per-capita income (Bhala and Lau, 2020).

The "rate of economic growth" refers to the geometric annual rate of growth in GDP between the first and the last year over a period of time. This growth rate represents the trend in the average level of GDP over the period, and ignores any fluctuations in the GDP around this trend (Bilgili et al., 2022: 1161).

Economists can be defined as the increase in the value of goods and services adjusted for inflation over time. Statisticians conventionally define such growth as a percentage increase in real gross domestic product or GDP (Bernstein, 2019: 320).

Development of new goods and services also generates economic growth (Chen,2020). As it so happens, in the U.S. about 60% of consumer spending in 2013 went on goods and services that did not exist in 1869 (Chenery and Bruno, 2022: 82).

The economic growth rate is an increase in the production of economic goods and services compared to another period of time. This concept can also be adjusted and measured in nominal or real terms according to the inflation rate. Traditionally, aggregate economic growth is measured by gross national product (GNP) or gross domestic product (GDP); However, sometimes, alternative criteria are also used. Anyway, economic growth is influenced by various factors that may even be associated with stressful conditions (Çiçek, Ceviche, 2021: 141).

Banking network can influence the growth through three main routes- firstly, it greatly increases the marginal productivity of capital by investing in the most efficient project, secondly, it increases the proportion of savings directed towards the investors and thirdly, it greatly encourages and increases the savings rate in the economy. Also, it helps in pooling of funds; savers get to choose between wide range of saving instruments, efficient allocation and appropriation of capital and thus all of it leading to higher creation of wealth in the economy (Maah, 2018).

Keeping the link between economic growth and financial institution in mind, hereby the research tries to establish this link further by studying the same in reference to the countries of Malaysia and Singapore, Vietnam, Thailand, Philippines and Indonesia.

The GDP per person data is the measurement of GDP per person in the population of a country; Because the amount of production or income per person in an economy can show average productivity or average living standards. GDP per capita can be expressed as nominal, real (adjusted for inflation) or PPP (purchasing power parity) (Alizadeh et al., 2021). Table 1-1 shows economic growth by country.

Table 1

*Economic growth by country(Bacha, 2022)*

Country	Period	Real GDP per person at beginning of period	Real GDP per person at end of period	Annualized growth rate
<b>Japan</b>	1890–2008	\$1,504	\$35,220	2.71%
<b>Brazil</b>	1900–2008	\$779	\$10,070	2.40%
<b>Mexico</b>	1900–2008	\$1,159	\$14,270	2.35%
<b>Germany</b>	1870–2008	\$2,184	\$35,940	2.05%
<b>Canada</b>	1870–2008	\$2,375	\$36,220	1.99%
<b>China</b>	1900–2008	\$716	\$6,020	1.99%
<b>United States</b>	1870–2008	\$4,007	\$46,970	1.80%
<b>Argentina</b>	1900–2008	\$2,293	\$14,020	1.69%
<b>United Kingdom</b>	1870–2008	\$4,808	\$36,130	1.47%
<b>India</b>	1900–2008	\$675	\$2,960	1.38%
<b>Indonesia</b>	1900–2008	\$891	\$3,830	1.36%
<b>Bangladesh</b>	1900–2008	\$623	\$1,440	0.78%

Seemingly the Asian economy is affected by the Corona epidemic, which was first seen in the Hubei province of the city of Wuhan, China. China's economy experienced its first contraction

in the post-Mao era as a result of the Covid-19 epidemic, or Corona. After China, Iran is the most affected country in Asia in terms of death rate (Diaz, 2018). The fear of economic collapse after the expansion of US sanctions against China during the Trump administration has increased the concerns of China's economy today (Bacha, 2022). Japan has been hit by the coronavirus pandemic since the 2011 Fukushima nuclear disaster, with the 2020 Summer Olympics being postponed amid a shrinking population and a stagnant economy. South Korea, Singapore, Qatar, the Philippines, Indonesia and India have also been affected by the pandemic, raising fears of an economic slowdown across the Asian continent after stock markets in the region fell. Lockdown across the country in India and the continued closure of schools and work in China, in fact more than 2 billion people (a quarter of the current human population of the world) are in quarantine inside these two countries. (Kutivadze, 2021). ASEAN countries such as Malaysia, Vietnam and Thailand have public debt to GDP ratio are in the range of 50%-53% (Table 2).

Table 2

*Comparison of rating of public debt to GDP of ASEAN countries (2021)(Hamilton, 2018: 390)*

Rank	Country	%of GDP
13	Singapore	105.60
71	Malaysia	53.50
73	Vietnam	52.70
82	Thailand	50.60
102	Philippine	44.80
147	Indonesia	22.70

**Economy of selected ASEAN countries**

**Malaysia**

The graph below shows the sharp increase in the GDP per capita of Malaysia with two small dips. It can be said that Malaysia experienced a smooth increase in the GDP per capita since 1990.

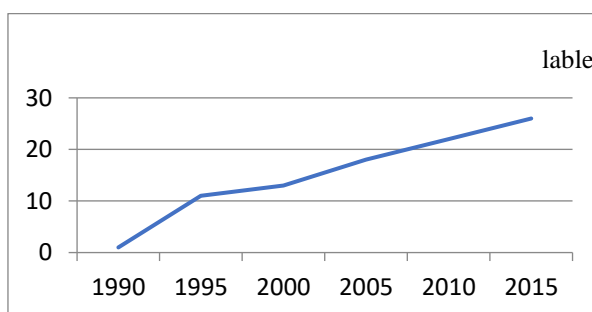


Figure 1: GDP per capita of Malaysia (world Bank,2022)

**Singapore**

The graph below shows the GDP per capita of Singapore from 1990 to 2019. There has been a significant increase in the per capita GDP with some small dips. This shows that economy of Singapore experienced almost linear growth with time (Panizza, U. and A.F. Presbitero, 2014).

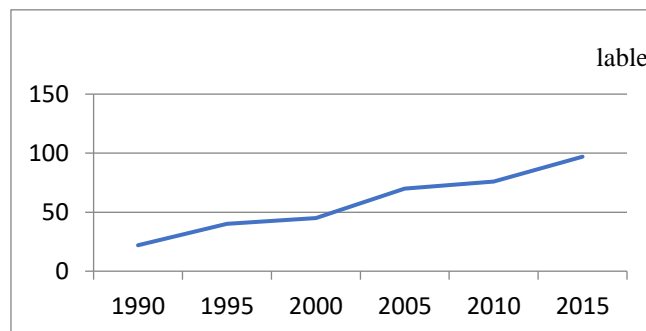


Figure 2: GDP per capita of Singapore from 1990 to 2019 ( World bank, 2022)

### Thailand

In Southeast Asia, Thailand ranks as second largest economy with US\$7,273.56 as in 2018 and ranks fourth GDP per capita for Southeast Asian countries. Further, it was second-largest in international reserve and in international trade in 2018 among South-Asian countries. The country also ranks low in unemployment rate.

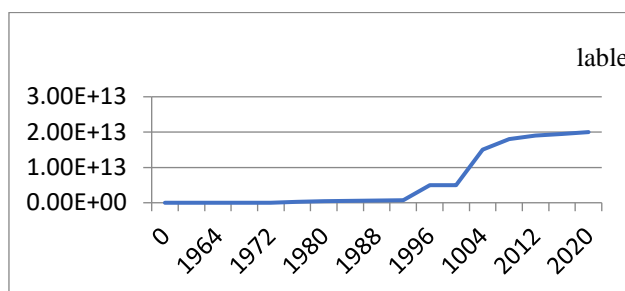


Figure 3: GDP of Thailand from 1960 to 2020 (World bank, 2022)

### Indonesia

The ratio of trade to GDP raises from 30 per cent in 1970 to 60 per cent in the 2000s and value of Indonesia’s exports rose rapidly in the early 1970s with oil exports as an important source of revenue. In late 1980s, international trade rose strongly with the implementation of trade liberalization and industrialization policies of Indonesian economy.

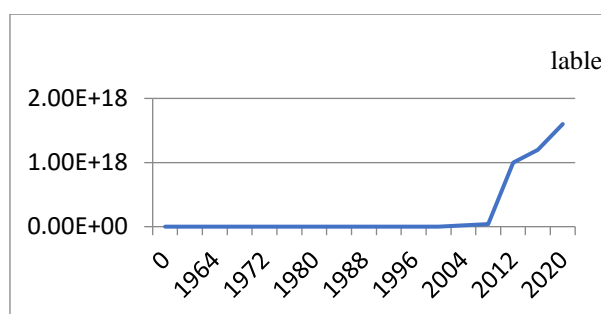


Figure 4: GDP of Indonesia from 1960 to 2020 (World bank, 2022)

The above graph shows the rising GDP of Indonesia since 1993. The GDP has been at a rise since three decades and the country is growing economically substantially.

**Philippines**

In 2019-20, Coronavirus has reduced the growth rates and affected the trading in the international market. The exports had reduced, tourism industry faced a set back and there was drastic decline in consumption and investment. However, in 2021-22, it is expected to rebound itself with rising consumption and investment and controlled coronavirus domestically as well as globally.

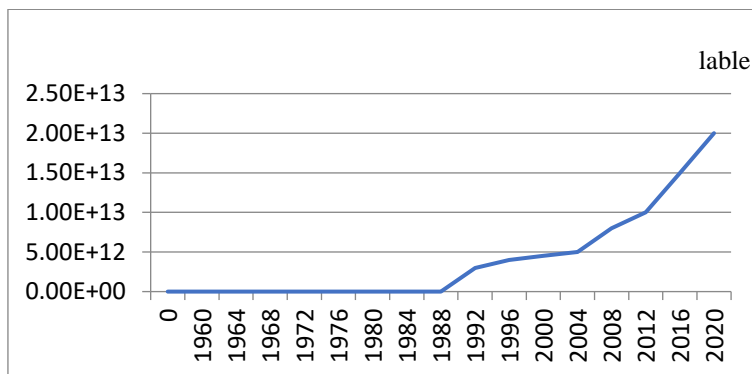


Figure 5: GDP of Philippines from 1960 to 2020 (World bank, 2022)

The above graph shows the rising GDP of Philippines since 1982. The GDP has been at a rise since four decades and the country is growing economically substantially. However, in recent years due to rising coronavirus, the economic growth has slowed down and declined. But this is a temporary effect and will be overcome shortly.

**Vietnam**

There is a geographic inequality in the trade pattern of Vietnam. It has a trade surplus with Western countries and trade deficits with the neighboring Asian countries. To maintain a balance the country should increase the value of exports and do product diversification.

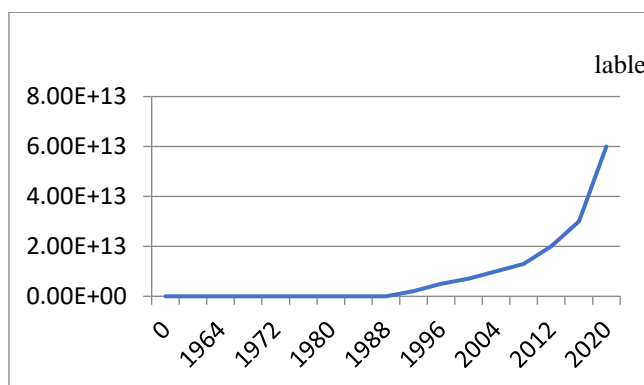


Figure 6: GDP of Vietnam from 1960 to 2020 (World bank, 2022)

**The foundation of public debt, bank credit, financial institutions, and economic growth**  
**Public debt**

Once the debt ratio reaches heightened levels (nonlinear threshold), further increases in the debt level as a percentage of GDP have a negative impact on economic growth (Bhala and Lau, 2020). Existence of a nonlinear threshold would imply that neoclassical theories on the relationship between debt and growth may be well grounded. Such theories suggest that the

distortionary impact of future tax increases to achieve debt sustainability will likely lower potential economic output (Bilgili et al., 2022: 1161). Additionally, a nonlinear threshold could suggest that increased government borrowing competes for funds in the nation's capital markets, which in turn raises interest rates and crowds out private investment, confirming the debt overhang theory (Bernstein, 2019: 320).

The various channels through which high and growing public debt levels adversely affect economic growth include (1) the crowding out of private investment (Elmendorf and Mankiw, 1999) as government borrowing competes for funds in the nation's capital markets; (2) higher long-term interest rates caused by an excess supply of government debt and greater credit risk premia (Agénor, 2021); (3) higher distortionary taxes to fund future liabilities and rising debt repayments (Dotsey 1994); and (4) an increase in the rate of inflation (Alizadeh et al., 2021).

### **Public debt in ASEAN**

Globally, Public debt levels have increased significantly over the past few decades and particularly for developing countries. In the recent International Monetary Fund (2022) Fiscal Monitor, the global historical build-up of debt was close to 100 percent of GDP in 2020. For 2021, it stood at 97.2% although it was projected to drop to 94.4% for 2022. The improvement mirrored the recovery from pandemic recession, especially in developed countries. In ASEAN countries, Public debt continues to rise and this elevates uncertainty where these countries have limited access to funding as compared to developed countries. Ayhan et al (2021) further highlights this development by presenting evidence of debt accumulation waves in the global economy over the past 50 years. Accordingly, for ASEAN and developing economies, four major debt episodes have been detected since 1970. The first three waves ended with financial crises — the Latin American debt crisis of the 1980s, the Asian Financial Crisis of the late 1990s, and the Global Financial Crisis (GFC) of 2007–09 (Ursua and Wilson, 2012).

The current wave began in 2010 and continues to gain momentum, reaching \$55 trillion in 2018 (Ayhan et al., 2021). With the ongoing pandemic and fiscal expansion, the debt is expected to continue its significant upwards trajectory (International Monetary Fund, 2022). In the aftermath of each crisis, countries in the Asian region carry out various fiscal stimuli to jump-start the economy bringing additional pressure to their debt positions. This shows the dependency on foreign resources (capital) and increases the degree of debt vulnerability for the country (UNCTAD, 2022).

According to the theory of finance led growth, there are at least four possible approaches that could explain the causal relationship between finance and growth, namely: (1) Finance is the determining factor of economic growth (finance-led growth hypothesis) or so-called supply-leading view; (2) financial follows economic growth (growth-led finance hypothesis) or so-called demand-following view; (3) Interplay between finance and growth, or commonly called the bidirectional causality view; and (4) Finance and growth are not interconnected or so-called "the independent hypothesis (Puente-Ajovín et al., 2021: 70). The first is "the finance-led growth hypothesis" or "supply-leading view". This theory generally assumes that the finance sector that drives economic growth (Ramzan, 2021: 204). This theory basically looks for the relationship between finance and economic development. Proponents of this theory believe that the existence of the financial sector that acts as intermediary institutions between the parties that excess capital (surplus units) with those who lack capital (deficit units) will provide resource allocation which is efficient funding that will drive the economic

sectors in the growth process (Reinhart, 2020: 574). The second is "the finance-led growth hypothesis" or "the demand-following view". The development of the financial sector follows the economic growth or entrepreneurial activity (enterprise) to encourage the growth of the financial sector (Rodrik, 2022: 1001). If the economy expanded, the demand for banking products and services will also increase, by itself, the banking sector will also increase (Romer, 2021: 1003). The third is "the bidirectional causality view" (Sachs, 2019). Schools of economic thought illustrate the relationship a two-way interplay between financial sector development and economic growth (Savvides, 2022, Smyth, 2018, Tehranchian, 2020 and Tornell, 2022). This hypothesis states that a country which has a good financial sector development will encourage a high rate of economic expansion through technological advances and innovative products and services. Then this condition will create a high demand for products and banking services (Umutlu et al., 2021: 79).

If the banking institutions respond effectively to the request, then the response will stimulate higher economic performance (Utkulu and Kahyaoglu, 2019). The financial sector and economic growth in each interconnected positively and this relationship occurs in both directions. Fourth is "the independent hypothesis" or no interplay between finance and economic growth (Uysal et al., 2022: 163). This hypothesis was introduced by Lucas who believes that the financial sector and economic growth do not have interplay (Adam, 2022: 501).

### **Bank Credit**

A bank credit guarantee is a commitment document that is used as collateral requested by creditors (banks and credit institutions) and at their request to guarantee the issuer's obligations from the fund as a guarantor in favor of the creditor in Riyals or foreign currency (according to the type of approved facility) issued by the creditor (Chenery and Bruno, 2022: 82). Validation is a scale for calculating credit risk, which is the result of examining a person's financial records based on the fulfillment of bank obligations, timely loan payments, and the ability to manage assets and liabilities using standard formulas that are extracted and calculated from the credit report (Çiçek & Ceviche, 2021: 141). A good credit rating is the result of timely payment of bills and received facilities and shows how committed a person is to fulfilling his financial obligations on time. On the other hand, an inappropriate credit rating is the result of late repayment of bank loan installments, negative history including bankruptcy, bounced check history, having a negative history in the field of tax debt, etc. A Bank Credit can also be a guarantee of payment for a transaction, meaning that the issuer's letter of credit is redeemable. LCs are primarily used in international trade transactions of significant value, for transactions between a seller in one country and a customer in another country. In such cases, the International Chamber of Commerce, for letters of credit, includes the UCP rules that are currently approved (UCP 600, the latest version). It is also used in the process of urban land development to ensure the construction and creation of facilities approved by the public (streets, sidewalks, etc.) (Eisner, 2022: 296).

### **Bank credits in ASEAN**

It has been argued that individuals in collectivistic societies must follow group norms, suggesting that values are defined at the group level rather than the individual level (Pitlik and Rode 2016).



In addition, Fuentelsaz et al (2019) indicated that the cultural dimension was different between countries and contributed to the behavior of their societies. This outcome meant that trust in authority was higher in such societies than in individualistic cultures. Hence, the findings of this study explain whether government policies should target enhancing trust or expanding the regulatory and oversight powers of institutions

In the context of bank lending, the lack of a regulatory framework due to poor institutional quality may have exacerbated banks' risk-taking behavior, making them unstable and vulnerable to banking crises (Anginer et al. 2018). For instance, because of weak governance systems, less stringent supervision encourages banks to offer risky loans to ventures based on mere political ties instead of project feasibility, which in the long term raises problems for banks (Beck et al., 2006).

Alternatively, a sound institutional framework improves supervision and credit market competition through alternative modes of finance, which impacts banks' risk-taking behavior and restricts them from granting risky loans (Ashraf, Arshad, and Yan 2017). In a nutshell, the governance structure defines the effectiveness of a country's banking system, affecting its lending activities, as banks operate within the existing governance framework.

### **Financial Institutions**

A financial institution (FI) is a company engaged in the business of dealing with financial and monetary transactions such as deposits, loans, investments, and currency exchange. Financial institutions encompass a broad range of business operations within the financial services sector including banks, trust companies, insurance companies, brokerage firms, and investment dealers (İspir, 2019).

Krugman (2020) have a similar view, considering financial development as a means to help economic entities improve their ability to manage risks, promote innovation, and reduce information costs, thereby leading to an increase in the efficiency of allocating financial resources and investment activities, which then lead to economic growth.

From another perspective, Mariano et al (2021) argue that countries with underdeveloped financial markets, characterized by the absence of a channel connecting savings and investment, tend to grow slowly and often fall into recession and macroeconomic instability. However, the development of the financial system does not always evolve on a stable path. There are periods of uncertainty, with financial crises breaking out, which may cause the financial system to fail to support growth (Moulai et al., 2021: 96).

There are few studies that have gone into the depth of studies regarding the role of banking in the growth of the economy. In order to complete the research gap, this study attempts to establish a more specific relationship between the efficient working of the banking and financial systems and institutions and economic growth of a nation (Erdel, 2017).

Many researchers have introduced various factors affecting economic growth.

Kumar (2019) introduced bank credit as effective on economic growth and stated that bank credit is very important for the economic development and growth of countries (Kumar, 2019).

Also, Pang (2019) believes that the development of financial markets in economic growth is always one of the key issues in development economics. In this regard, one of the important and influential factors on economic growth is bank credit, which provides the basis for growth and development by creating investment opportunities for producers (Yang, 2019).

According to Liu and Lyu (2021), the development path of East Asia, based on market-oriented perspectives and the use of what has been proposed in recent decades, under the title of Washington Consensus; which bank credits have a direct effect on (Liu and Lyu, 2021).

According to Hadi and Hisham (2020), the development path of East Asia is based on more serious government interventions; This approach is known as developmental government. This means that economic development is directly affected by government performance and public debt (Hadi and Hashim, 2020).

Some researchers such as Mah (2018) also believe that the continuous increase in government spending leads to a widening of the financial deficit gap, and thereby government borrowing from domestic and foreign sources. In some countries, due to the many problems that the economy has faced in recent years, it has been common to provide part of the government's revenues and expenses through the budget deficit. The economic consequences of a high budget deficit in public debt are heavy, which will mainly affect economic growth (Mah, 2018).

Researches have mainly focused on public debt or finally bank credit and have measured the economic growth affected by it. Examining the component of economic growth under the influence of the three factors of bank credit, development of banks, public debt, makes it possible to identify the hidden and unexamined effects and to be able to perform much better in generalizing the results. The public debt and bank credit does play an important role in GDP components (Aftab and Rehman, 2017).

These proposals would cut the top rate on pass-through income below the top rate on ordinary income (to 15 percent and 25 percent respectively), giving wealthy individuals a strong incentive to reclassify their wage and salary income as "business income" to get the lower pass-through rate. This would produce a substantial loss in revenue, while providing no benefit to the vast majority of small businesses, whose tax rate would be unaffected (Indrani, 2018).

### **Financial institution in ASEAN**

ASEAN banks are largely in good health Thanks to major overhauls of the financial system in the wake of the AFC, banks are generally in good shape. The average capital to asset ratios of ASEAN banks was more than 11% on average as of 2019, a ratio similar to US banks and much stronger than European banks (Çiçek & Ceviche, 2021: 141). Thanks to a positive economic growth trajectory coupled with a high yield environment, ASEAN bank profitability has been robust, particularly in Indonesia, where banks reported a net interest margin (NIM) of 6% and return on equity (ROE) of 16.6% in 2019, placing them among the most profitable banks in the region. Regarding asset quality, the non-performing loan to gross loan ratio in ASEAN has improved markedly in the last decade as a result of the restructuring of the banking system since the AFC. Surviving the COVID-19 stress test The financial stress on ASEAN banks due to the COVID-19 induced crisis was intense. The economy experienced its worst contraction since the AFC. Credit growth collapsed as businesses and households scaled back spending. Low interest rates put heavy pressure on net interest margins (NIMs). Foreign investors rushed to withdraw funds from emerging markets (EMs), seeking shelter in safe haven assets. According to Nikkei Asia, 16 of the largest ASEAN banks saw their non-performing loans (NPLs) rise by around 17% YoY in 2020 (Cohen, 2022). Authorities urgently required banks to reduce or suspend dividends. Most importantly, loan moratorium and credit guarantee from governments and central banks helped firms and households avoid financial distress and

protected bank assets. Overall, banks' strong balance sheets, notably in major economies like Singapore, Malaysia and Indonesia along with targeted policy support from governments and central banks helped banks cope well with the COVID-19 recession. The current concern is the withdrawal of these policy measures will reveal the true picture of non-performing loans, which has been masked by loan moratoriums. This will potentially put pressure on banks' balance sheets. However, ASEAN banks already stepped up their loan loss provisions last year to preserve capital buffers in case of stress. On top of that, the ongoing economic recovery should limit the downside risks (Doğan, 2021: 203).

Big banks still have significant competitive advantages, including established customer relationships and a large market coverage. Traditional banks have also evolved by engaging in fintech through acquisitions or partnerships, while investing millions of dollars to enhance their IT capabilities to adapt with the pace of change. Yet there is no room for complacency amongst traditional banks. With lower barriers to entry, the sector will undoubtedly see more competition. Overall, this shift is likely to create a better future for the banking system by enhancing its efficiency and competitiveness. Most importantly, consumers will benefit from competition in the end (Eisner, 2022: 296).

#### **The relationship between economic growth and public debt, banking and bank credit in ASEAN countries**

With the intensification of US-China competition and the efforts of both superpowers to deepen relations in the region, ASEAN countries can benefit from a privileged geopolitical position in the coming years. Both countries have highlighted their commitment to trade with ASEAN-China economies, particularly through access to the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). The United States only has free trade agreements with selected ASEAN countries. This competition is not the only factor that can contribute to the growth of ASEAN in 2023. Several countries in the region have large international tourism sectors, and a further improvement in the epidemiological environment should help the industry recover in 2023 (US-ASEAN Business Council, 2021).



FIGURE 7. Geographical importance of ASEAN (Kutivadze, 2021)

ASEAN economies have been attractive destinations for foreign direct investment in recent years. These countries generally offer attractive alternatives for companies looking to reduce exposure to China given rising trade barriers and the desire to find cheaper manufacturing sites. Countries in the region are generally experiencing faster than average GDP growth, reflecting booming population growth and increasingly liberal trade policies. In turn, multinationals are increasingly looking to Southeast Asia as an alternative manufacturing hub,

attracted by competitive wages, improved regulations and business infrastructure, and rising domestic demand. In 2021, Singapore will see approx. 100 billion dollars was foreign investment. Key industries for investment in Singapore include information technology, aerospace, electronics, pharmaceuticals and professional services. Total foreign direct investment in Indonesia reached 894 trillion rupiah (US\$57 billion) by the third quarter of 2022, or 75 percent of the 2022 target of US\$80 billion. Although the official statistics have not yet been released, the government is confident that it has achieved its goal. For 2023, the government plans to increase its FDI target to \$92 billion or 1,400 trillion rupees. Indonesia is the only member of the Group of 20 in ASEAN, and with an abundance of natural resources and a large domestic market of 260 million, the country offers long-term investment opportunities (Hashemi, 2022: 159).

Figure 7 exhibits the geographical importance of the ASEAN region. The ASEAN countries collectively have a population of 650 million people. It is a regional group that brings diverse neighbors together to solve economic, security, and political concerns. It has been a driving force behind Asian economic integration, pushing efforts to establish one of the world's biggest free trade blocs and negotiating six free trade agreements with other Asian economies (Maizland and Albert, 2020).

Vietnam gives investors access to a range of internationally competitive industries, providing greater market access and certainty for manufacturers than China. Amid the trade war between the US and China, Vietnam has emerged as an alternative supplier of wood products (Hellmann, 2021: 150). The United States is currently the main destination market for the export of wood products. Similarly, Vietnam's textile industry looks more attractive following US laws on forced labor and cotton sourced from Xinjiang, China. Meanwhile, Thailand has been a steady recipient of Chinese investment for some time. The country is at the heart of the ASEAN bloc and is integral to the Chinese government's plans for global connectivity as well as private investment (Joines, 2022: 6). The first point has been addressed by the Belt and Road Initiative, while private investors are increasingly looking to Thailand as an investment destination for initiatives in the fields of digital currencies, fintech, blockchain and artificial intelligence, as well as healthcare. They see health and medical tourism (Nourzad, 2022: 83).

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The above examples reflect long-term trends that will continue despite the weakening of the global economy. A steady increase in FDI to ASEAN, especially for Singapore, Malaysia, Thailand, Indonesia and Vietnam, is likely to continue in 2023. The remarkable achievements of ASEAN in the past 50 years have been compiled by the ASEAN and East Asia Economic

Research Institute (ERIA) and published in a 50-volume collection in 2017 on the occasion of the 50th anniversary of ASEAN. In 1993, the former Prime Minister of Malaysia, Mahathir Mohamad, declared himself a supporter of ASEAN and stated that the reason for this was ASEAN's key role in transforming a region full of conflict and turmoil into a region full of peace and prosperity. The ASEAN region is an economic success story in the developing world, with all its member countries contributing to global growth. ASEAN is the most successful regional integration in the world and a model of "free regionalism". This region is also an important destination for attracting foreign direct investment. For example, in the last decade, ASEAN has been China's second direct investment destination. Therefore, the determinants of the credit risk have vital significance (Nourzad, 2022: 83).

It can be observed from Figure 2 that NPLs of selected ASEAN countries (Indonesia, Malaysia, the Philippines, and Thailand) took a rapid rise from 2014 to 2016. Having a slight decline from 2016 to 2017, they again increased and reached 2.25 percent in 2019. The wishes and expectations of the ASEAN people for their country and region have been taken into consideration in the ASEAN 2040 vision. The results of the ERIA Institute survey conducted in 2016-2017, including the expectations and opinions of 2300 students, government officials, businessmen, civil society, academics, and researchers regarding ASEAN's 2025 vision, were used in the design of the 2040 vision. According to this survey, ASEAN people want an integrated, connected, comprehensive and resilient society. They want a society with less urban pollution, more sustainable management of natural resources. They want a good governance and away from corruption, and they want a society that has a clear voice in the world and plays an important role in creating peace in the region. At the same time, there is a big gap between their expectations and their predictions of what will happen, especially in the field of good governance, reducing corruption, equal access to opportunities and reducing urban pollution. Their biggest concern is the existence of corruption at the national and regional level, and income and social inequality, climate change and natural disasters are in the next ranks. Therefore, ASEAN should pay attention to these concerns. As stated by Beyani and Kasonde (2009), successful financial innovation results in reduced risk and cost.

The global developments facing ASEAN in the remaining two decades until 2040 will be very different from the geopolitical and economic centrality of the region in the past 50 years. Digital transformations and the fourth industrial revolution will accelerate in the next two decades in the world, East Asia and the ASEAN region. The Asian continent will have a significant global growth in the next two decades due to the rise of India alongside China. In fact, the India-ASEAN-China corridor will become the golden arc of growth opportunities in the world. It is predicted that in the 2020s and 2030s, China, India, and ASEAN will be the first, second, and fourth largest economies in the world, respectively, based on purchasing power parity. The shift in economic power in Asia has been complicated by the withdrawal of the United States from multilateralism and the impending Brexit. These developments, along with the increasing growth of China and the rise of India, have led to the creation of geopolitical uncertainty caused by the change in the arrangement of powers in the region. Increasing protectionism and opposition to globalization in developed countries, as exemplified by the victory of Donald Trump in America, makes the importance of comprehensive growth in the context of open economy and regional integration more obvious (Rodrik, 2022: 1001).

Demographic changes in Asia show an increase in the elderly population in Northeast Asia on the one hand and an increase in the number of young people in India and ASEAN on the other hand. However, in the countries of Singapore, Thailand and Vietnam, the concern about the

aging of the population is increasing. High vulnerability to climate change reveals the need for sustainable and resilient development of ASEAN (Savvides, 2022: 385).

Considering the impending change of economic power in Asia and the difficulty of adapting to it due to the emergence of protectionism in the United States and the split in the European Union, the multilateral economic system and as a result the economic and political security of Asia and the ASEAN region are under threat. has it. ASEAN and other countries that play a major role in this system should strive to maintain multilateral trade. Although the consumption in East Asia is increasing, but this region still relies on the free markets of other places and needs an open global system to supply its products in the world markets. The importance and weight of Asia in the multilateral system requires that the leadership of the world system be from this region. No country can take the leadership of Asia, which includes several great powers and divergent interests. Asia's collective leadership, with ASEAN interests central to global economic policy, is vital. Collective leadership emphasizes consensus, partnership and shared leadership in achieving common interests, and shared commitment to multilateral principles (Tornell, 2022: 1210).

In the midst of geopolitical and economic transitions and challenges that ASEAN is facing, this union is the center of orientation and increasing the effectiveness of collective leadership, which is necessary for the stability and progress of the East Asian region. ASEAN is accepted by all claimant parties. In addition, ASEAN has the mechanisms and history of facilitating dialogues and building trust in its portfolio. The networks around ASEAN have created a region full of peace that has brought development, poverty reduction and prosperity to millions of people.

At the same time, the strength, cohesion and stability of ASEAN depends not only on the relations of its members, but also on ASEAN's relations with the great powers, as well as how ASEAN manages the relations between these powers and mediates the growing differences between the great powers. it depends. The challenge facing ASEAN and its middle power partners is to find win-win solutions and reduce the instability caused by the strategic competition between the world's two major economic powers. Each country in East Asia and the Pacific, China and the United States play a role in strengthening collective leadership in the region. The challenge facing ASEAN is to bring together all Asian economies in order to strengthen the centrality of ASEAN in institution building, Asian cooperation and collective leadership in East Asia (Uysal et al., 2022: 163).

The Regional Comprehensive Economic Partnership (RCEP) is one of the ways to extend ASEAN's collective leadership to larger regions. Three features of the RCEP agreement make it possible to use it as a model for wider regional integration at the world level; A gradual and step-by-step approach; promoting economic cooperation in order to achieve equitable economic development for all members; and supporting rationalism. The completion of RCEP and the Comprehensive Trans-Pacific Partnership (CPTPP) will be a major achievement for the multilateral trading system and open economy. A system that is now under the threat of the emergence of protectionism in the world, especially in Western countries. The successful completion of RCEP is crucial to ASEAN's pivotal role in the region. The failure of this agreement will undermine the central role of ASEAN in the region and the ability of this union to defend its interests in the world system. One of the important aspects of RCEP is to provide a framework for promoting multilateral economic and political cooperation with China. A country that will become the economic power of the world in terms of purchasing power

comparison, and therefore the failure of RCEP will cause problems for the multilateral cooperation between ASEAN and China (Adam,2022: 501).

ASEAN's cooperation with dialogue partners to pursue projects with regional and global impact is an exercise in collective leadership for ASEAN. These cooperations are carried out with the aim of defending the framework of multilateralism in solving trade disputes and shaping the negotiations of emerging and major issues in world trade as well as reforming the World Trade Organization. ASEAN can encourage China and Japan, as the important founders of investment in the region's infrastructure, to have a more coordinated approach with ASEAN and other partners regarding the backwardness of the region's infrastructure. ASEAN can also develop a maritime economy (blue economy) with India. It is possible for ASEAN to encourage its dialogue partners to adopt the principles of the Southeast Asian Treaty of Amity and Cooperation (TAC) in order to use it to form bilateral dialogue relations with these partners as well as the relations between them (Bacha, 2022).

In an era of trade policy uncertainty, the Asian continent centered on ASEAN must take global leadership on how to move forward; Considering that the Asian continent is gradually becoming the economic center of the world and it needs a stable, predictable and open business environment in the world for its growth. ASEAN and East Asia have created two main paths to move forward, one is the RCEP agreement (as well as the previously signed CPTPP agreement) and the other is the Connectivity Initiatives, which, if successfully implemented, mean " "Multilateralism" will give new life. Since it is very difficult to hold a new round of trade negotiations by the World Trade Organization (WTO) due to the failure of the Doha negotiations, one of the ways to progress in this field is to use the RCEP model (implicitly the ASEAN model). In this model, the process of integration gradually expands, along with economic cooperation and attention to the principles of open regionalism. This model of regional integration is complementary to WTO's global plans at the sectoral level, such as the WTO Trade Facilitation Agreement. Therefore, the successful implementation of RCEP will strengthen ASEAN's centrality and credibility as a platform for realizing the multilateral, open and predictable trade environment on which the progress of this union depends (Bilgili et al., 2022: 1161).

It is also a source of providing improved service to customers. Similarly, Allen and Carletti (2006) also stated that financial innovation in the shape of introducing new instruments and opening up new markets is desirable because it promotes liquidity and creates diversification opportunities. It was argued by Bhattacharyya and Nanda (2000) that innovating banks could also achieve first-mover advantage against their rival banks.

The present study tries to measure the impact of public debt, banking and bank credit on economic growth: evidence from selected ASEAN countries by reviewing the library, relevant books and reliable documents and reviewing relevant websites. The study is quantitative research the data obtained are from secondary sources, ie from World Bank website on gross domestic product of selected ASEAN countries, Public debt of selected ASEAN countries and bank credit of selected ASEAN countries.

### **Methodology**

This research, using the information available on the government websites about the selected ASEAN countries, as well as using all available and applicable economic indicators, tries to investigate the impact of public debt, bank credit, and financial institutions on economic growth in selected ASEAN countries. In the current research, first the correlation between the

research variables is tested, and if there is a correlation between the research variables, multiple regression models are estimated. This research is applied in terms of purpose. Also, the present research is descriptive-causal in terms of nature and method. The domains of the research is as follows:

The thematic domain: the study of the effect of government debts, bank credits and financial institutions (banking) on economic growth in selected ASEAN countries.

The spatial domain: selected ASEAN countries (Malaysia, Singapore, Philippines, Indonesia, Thailand and Vietnam).

The time domain: financial information related to six ASEAN countries in the 60-year period, from 1960 to 2020.

### **Statistical Population**

The statistical population of the study are six ASEAN countries, namely (Malaysia, Singapore, Philippines, Indonesia, Thailand and Vietnam). The selection of these six countries as the statistical population is due to the availability and reliability of the economic and financial information of these countries. First, the economic data of these countries is more easily accessible on the government websites of these countries, as well as the information on the World Bank website. Also, ASEAN countries have attracted the attention of economic researchers due to economic growth in recent years, which was also effective in their selection.

The variables of this research are as follows:

Dependent variable: economic growth of six selected countries under study

Independent variable: public debt, bank credits, financial institutions (banking)

### **Research Design**

In the present study, explanatory research design is used by researcher due to the nature of research. The relation between the variables needs to be established by using statistical tools and this is done by using explanatory research design. The implementation of explanatory study helps in determining the degree of relation between the independent and dependent variables which are bank credit, public debt and Gross Domestic Product (Kumar, 2019).

### **Research Instrument**

The research instrument is the downloaded data files from the government website that gives the data for all known economic indicators. Further, SPSS and excel statistical tools are used to evaluate correlation and regression. Later hypothesis testing is done by using appropriate test (Green et al., 2012).

### **Data Analysis**

First, to determine the use of the panel data model, or the combined data model, F Leamer test (constrained F) is used.

In order to check the independence of the errors from each other, the Durbin-Watson test is used.

In this study, according to the number of variables, the multiple regression model and the multivariable regression model can be used to analyze the data. If the goal is to predict a criterion variable from several predictor variables, the multiple regression model is used. If



the goal is to simultaneously predict several criterion variables from the predictor variables or a subset of them, the multivariable regression model is used.

Also, the Pearson correlation coefficient is used to check the assumption of linear relationship between two variables. The assumptions of this test are defined as follows.

H0: There is no linear correlation between the variables.

H1: There is a linear correlation between the variables.

The value of Pearson's correlation coefficient is compared with the critical value of the standard normal distribution using the above calculated statistic. If the absolute value of the statistic is greater than the critical value, then we accept that there is a significant linear relationship between the variables, and as a result, we reject the null hypothesis of the test that there is no linear relationship between the variables.

The coefficient of determination, which is indicated by  $R^2$ , states how much of the changes in the dependent variable can be attributed to the changes in the independent variable and it is used in present study.

To test the mentioned hypothesis, we use the F statistic at the 95% confidence level ( $\alpha=5\%$ ). Eviews software is an econometric software designed and provided by the World Bank which is used here. One of the capabilities of Eviews is the combination of cross-sectional and temporal data, and it is possible to run a regression model with combined data. In this research, the statistical method used to analyze the data is the multivariate regression method using combined data. Therefore, the software used is Eviews software, which has the capability of such analysis.

**Results and Discussion**

In order to get a better understanding of the research community and get more familiar with the research variables, before analyzing the statistical data, it is necessary to describe these data. Therefore, before testing the research questions, the descriptive statistics of the variables used in the research were examined. The mean, as one of the central parameters, represents the center of gravity of the society, and in other words, it shows that if the mean is placed instead of all the observations of the society, there will be no change in the sum total of the society's data. The results of descriptive statistics are presented in table (3).

Table 3  
Descriptive statistics (Research findings)

Description	Mean	Median	Max	Min	standard deviation
BANK CREDIT	-0.145	-0.225	0.699	-0.797	0.432
BANKING	0.224	0.170	0.500	0.010	0.157
PUBLIC DEBT	0.394	0.353	0.700	0.101	0.186
ECONOMIC GROWTH	0.202	0.154	0.581	0.091	0.135

**Correlation between research variables**

Before testing the research questions, we check the correlation of the variables.

Table 4  
Correlation coefficient between research variables (Research findings)

		(1)	(2)	(3)	(4)
BANK CREDIT	(1)	1.000	0.670	0.653	0.543
BANKING	(2)	0.670	0.686	0.856	0.745
PUBLIC DEBT	(3)	0.653	0.856	1.000	0.931
ECONOMIC GROWTH	(4)	0.154	0.685	0.663	0.652

Table 3 shows the correlation between the variables. The value of correlation includes numbers between -1 and 1. When the value is equal to 1, it shows that two variables are completely and directly related and vice versa.

Findings confirm that, at the 5% probability level, there is no serial autocorrelation among the residuals in the first research model.

The next issue is to check the strong collinearity between the variables. In other words, when the independent variables of the research have a high correlation with each other, this issue leads to a decrease in the efficiency of the model. One of the methods is the variance inflation factor test. When the mentioned statistic is less than 10, it can be concluded that the linearity is negligible. The results of this test are shown in Table 5.

Table 5

*Variance inflation factor test of the model (Research findings)*

Variable	Variance coefficient	Variance inflation factor
BANK CREDIT	1.674436	3.151347
BANK CREDIT*EG	5666.663	3.414031
BANKING	0.043043	3.137178
BANKING *EG	0.001087	3.314817
PUBLIC DEBT	6.66E-05	4.112631
PUBLIC DEBT *EG	2457.518	3.325938

It can be seen that the variance inflation factor of all variables is less than 10; so, the collinearity of the independent variables can be neglected.

Diagram 1, in addition to the Jarque-Bera test, also shows the histogram diagram of the disturbance component.

Table 6

*Descriptive variables of the disorder component of the model (Research findings)*

Mean	Median	Max.	Min.	Sd.	Crookedness	kurtosis	Jarque-Bera	Sig.
-1.46e-16	-0.001	0.244	-0.267	0.113	0.105	2.314	5.221	0.073

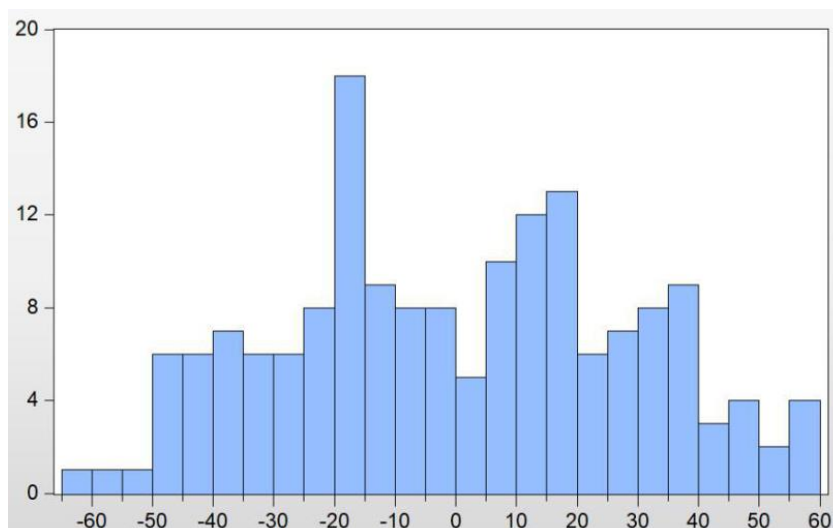


Diagram 1-4. Checking the normality of the disorder component (Research findings)

In order to check whether the model follows a normal distribution or not, the Jarque-Bera test was used. As can be seen in graph 4-1, the Jarque-Bera statistic is equal to 5.221 and its significance is 0.073. Therefore, the null hypothesis of this test, that the distribution of disorder components is normal, is not rejected, and it can be claimed that the distribution of disorder components is normal.

**Testing Research Hypotheses**

For this, the significance of the difference between the economic growth coefficient and each coefficient obtained for which of the independent variables (BANK CREDIT), (PUBLIC DEPT) and (BANKING) should be examined separately. If the obtained value was greater than the value of the critical statistic at the significance level of 5%, that is, there is a significant difference between the two coefficients and then the three main independent variables have a significant effect on economic growth.

The regression equation is:  $Y = a + bX$

Table 7  
Comparison of model coefficients (Research findings)

Variable	Coefficient	variable	Coefficient	Test statistic	Sig.	rank
Economic Growth	0.2744	BANK CREDIT	0.1407	11.3081	0.000	2
		PUBLIC DEBT	0.5928	31.0643	0.000	1
		BANKING	0.1287	58.3879	0.000	3

According to the table 7, it can be seen that the coefficient of economic growth has a significant difference with the coefficients of banking, bank credits and public debts, at the error level of 5%. It can be concluded that banking financial institutions), bank credits and public debts have had a significant impact on the economic growth of six selected ASEAN countries. In general, the results of the research questions test can be seen in the table below.

Table 8

*Summarizing the results of questions testing (Research findings)*

Research question	Result
What is the impact of bank credit on economic growth?	The effect is significant
What is the impact of development of banks on economic growth?	The effect is significant
What is the impact of Public debt on economic growth?	The effect is significant

### Conclusion

To conclude, the research is able to meet the designed objective and find the results of the data analysis. All the three factors, bank credit, public debt and financial institutions, does play an important role in the growth and development of an economy. However, the intensity of each factor varies in different countries as it depends on the policy framework of the government.

### Implications of this Study

The study implies that all three factors, bank credit, banking and public debt are important for economic growth of a country. However, the intensity of the factors varies in different countries. In some countries the bank credit has been more significant factor for economic growth whereas in other countries, public debt is more significant. It happens due to the strength and weakness of other factors affecting the economic growth and development of a country. Thus, it is important that all the three factors should be taken care by the government and the variables should be made strong in the country to avoid its negative impact on economic growth of the country (Hacievliyagil, N., &Eksi, I. H. (2019).

The findings of the research clearly show that governments, policymakers and legislators have an undeniable impact on the economic growth of countries, which are briefly discussed here:

#### *A- The role of governments*

Economic conditions often indicate policy changes that governments choose. In a broad sense, a country's economic activity represents what people, businesses, and governments want to buy or sell. However, the government may decide to regulate some aspects of this economic activity, and be able to create economic growth, or prevent negative economic conditions in the future. In general, the active role of the government in responding and influencing the economic situation of a country in order to maintain and advance the economic interests of the beneficiaries or general citizens is very important. Some of the most common methods that a government can have to influence the economic activities of the country are adjusting the cost of borrowing (by lowering or increasing interest rates), managing the money supply, and controlling the use of credit, and collectively these policies are called policies. Money is mentioned. The government can also regulate spending and tax rates or introduce tax incentives, which are collectively called fiscal policy. The considered financial and monetary policies quickly reduce or increase the growth of the economy, and in turn, they can affect the price level and the employment rate in the country.

#### *B-the role of policymakers*

It seems that, if the policymakers adopt a policy that is associated with instability, this political instability can affect economic growth through multiple channels. Political instability or

instability of policymakers can be considered as instability of plans, policies and economic decisions, and in this situation, economic activists do not see a clear prospect in front of them, and this issue can stop investment. or the exit of the investor from the market. Instabilities in political programs, or weak policies suggested by inefficient policymakers, can affect the government's behavior and replace political priorities with economic priorities. This instability can lead to an increase in military, administrative and security costs, face other sectors with limited resources, and harm economic growth. Political instability can prevent political and economic reforms. In such conditions, adjusting spending will not be easy, and many governments prefer to change the mix of government spending in favor of current spending. Finally, it can be imagined that, in political instability which is caused by the incorrect performance of incompetent policy makers rights will be changed and damaged in some way, and this issue can have a deep impact on the economic activities and economic growth of the countries.

### *C-the role of regulation*

The public choice theory argues that regulation hinders economic growth by creating excessive burdens for economic actors (Niskanen, 1971). Regulation can disincentivise firms to upscale, enter a market, innovate, and invest in skill formation (Fonseca et al. 2001, Nicoletti and Scarpetta 2003, Ciccone and Papaioannou 2007, Braunerhjelm and Eklund 2014). However, the introduction of detailed property rights and more broadly, the establishment of a rule of law can safeguard consumers, incentivise investors, and encourage companies to create new technologies (Dam, 2007). A certain level of regulation is needed for the economy to grow (Di Vita, 2017), as it reduces uncertainty (Slemrod, 2005; Graetz, 2007): incomplete laws can be understood as incomplete social contracts (Weisbach, 2002; Holtzblatt and McCubbin, 2003; Givati, 2009).

In countries with lower quality and lower accountability, the effects of greater completeness of the social contract may just be over-complexification, without the benefits detected in this study. The 'contingent' nature of the relationship between regulation and growth calls for more research at this time of need for fast reforms.

The research paves way for future research by inclusion of more countries with different economic status to understand the variables more closely and also to generalize the effect of the variables across the world. Further, it is recommended that the country should take care of public debt and bank credit as it has larger impact on economic growth as compared to that of financial institutions. The countries bank credit if increases, it increases development, but care should be taken to reduce the number of defaulters and Non-performing assets of the banks as higher defaulters and larger NPA will have a negative effect on economic growth.

### **Recommendations**

1. It was found that these politicians have a very serious impact on the economic situation of any country. Perhaps, a country with a lot of resources cannot improve the economic conditions of the country due to the improper performance of its rulers, or a country without natural resources is among the economically progressive countries. Therefore, people should choose a reliable and competent person if there is an election process in their country.
2. Based on the results of the research, it was found that banks and financial institutions will get the most long-term profits when they only perform legal economic activities. Therefore,

it is better for the institution that oversees the performance of banks to consider such an issue and deal with the wrong banks, which engage in gambling and behind-the-scenes work.

3. It was found that one of the factors of economic growth is bank credit. Banks should try to strengthen their credits in correct and legal ways.

4. Legislators are advised to think about a better and broader connection with the world when making laws, so that the path of investment in the country is smoothed and economic growth is guaranteed.

5. Institutions supervising the law must continuously review the provisions and implementation of the laws and remove the obstacles in the direction of economic growth.

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