

## The Effectiveness of Knowledge-Based Economy on China's Economic Growth

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### ABSTRACT

*This study discusses the Effectiveness of Knowledge-Based Economy on China's economic growth. The research design used was quantitative correlation, which is a study that investigates the extent to which variations in a factor are related to variations in one or more other factors based on the correlation coefficient, while what is meant by quantitative research is research where the data used is in the form of numbers. In this knowledge era, the potential of natural resources owned by a country does not guarantee that a country can develop and grow the economy sustainably. In this case, many developed countries also implement a knowledge-based economy, especially China, where China is able to implement a knowledge-based economy and can be declared successful and able to grow its economic growth well, when compared to countries that follow the basics of a knowledge-based economy. China's level of development, which is no other than implementing the concept of a knowledge-based economy, can be considered successful by looking at the level of economic growth, which every year shows increasingly positive results where the growth is 10%. In the 1980s, China was still experiencing a political dilemma of the state by adopting a socialist stream that still could not develop well, but when the change of leadership and the change of stream where the stream adopted was capitalism showed drastic changes.*

*Keywords: Effectiveness, Knowledge-Based, Economy, China, Economic*

### Introduction:

With increasing economic growth since the country began to be formed and humans began to understand economics, economic growth began to be prioritized because economic growth is a guideline that can improve the welfare of society and a benchmark for a country; the benchmark here is an assessment of a country where the country is worthy of being said to be a developed country or a country that is still in development or can be called a developing country, as well as a comparison between other countries and shows the strength of the country (Yang, Liu, Hu, & Gao, 2022).

In terms of many economic experts developing a formula on how to increase effective and stable economic growth by creating several factors that are able to increase economic growth; in this case, many countries create an innovation or breakthrough, such as in China. which created the concept of a knowledge-based economy where it is very effective in increasing economic growth considering that China's economy was very far from being developed, even worse than a primitive civilization even though it has been declared independent. China, which is far from being developed, is now able to compete with the US, which is a country that is the center of the economy where when the United States experienced a decline, many countries also received an impact such as Indonesia itself, but now China is able to compete or even surpass the United States economy (Li, Rim, & An, 2023).

In terms of the world, almost all countries, including Indonesia, are paying attention to China. China's economic growth is increasing day by day, where the revival is not felt in just one city but is also felt by all cities in China, in media discussions at that time where only China, the main topic and the interesting thing is the superiority in manufacturing, with such a large population level, is able to change a developing country into a developed country with an advanced civilization. This is because since China changed the socialist stream to capitalism, everything has become extraordinary (Mohamed, Liu, & Nie, 2022). The evolution of modern China will eventually lead to political reform, where the capitalist system will become an indicator of political control and is indiscriminate; on the other hand, the private sector is currently the most dynamic

economic component, where economic growth has almost reached 10% per year. Here, the most important role in increasing the rate of economic growth in China is the most dominant entrepreneurs, who plays an active role in encouraging and modernizing all changes and progress in China; the government also plays an active role in making things more efficient at a speed that does not create a lot of unemployment at any given time (Ma & Guo, 2023).

Moreover, at the level of China's direction, it is able to change it into an economic opportunity in the global era where the ability to read the situation is needed, even in small situations, to become an opportunity for cooperation with other countries to increase China's economic opportunities. China in the economic and financial crisis that affects the recovery process of countries that have just emerged from the crisis, China itself is still said to be unstable because of the large total GDP and so on to reduce the impact of the crisis that occurred in the United States, in the process of globalization which will continue to experience acceleration both in terms of economics and information that continues to move across world countries, China is able to implement a knowledge-based economy where this basis is very appropriate with the existing level of competition, which is likely the level of competition will be very detailed and more even with the existing level of risk, China is declared ready to face the era of globalization (Alghazali et al., 2022).

Many world media have reported that China is active in several organizations where China joins the World Trade Organization (WTO), which can penetrate several world markets, including ASEAN itself. China has also joined other organizations and made it a strategy to increase China's economic income.

In the realm and time that is still running where China is still actively seeking to penetrate all global markets. This is aimed at gaining economic benefits to drive the economy and guarantee the security needs. China's needs are increasing. China has begun to expand its investments in mainland Africa,, which has a lot of wealth, even though it has not been fully utilized (Song, Zheng, & Wang, 2022).

The instruments used by China to deal with its unexploited wealth are by providing more aid and debt, as well as promoting trade, investing, and treating forgive. debt and treats free trade with Africa, making it the main goal.

Although many parties, especially European parties, consider Where China is too imperialistic by making large-scale investments by flooding its products in Africa, China still does positive things by helping African people who are categorized as poor people, supporting alliances, and providing government solutions that are considered very effective in the wheels of African politics (Lin & Zhou, 2022).

Through this cooperation, China has proven its ability to maximize its existing situation by trying to exert its influence without intervening in domestic politics and making it an option for African governments in terms of deciding. With China's ability to target its market, China is able to continue and develop the economic sector and is able to improve the defense sector from a military perspective (Liu, Luan, Wu, Zhang, & Hsu, 2021).

China's reforms, along with the change in leadership, enabled China to raise its status as a country capable of competing with countries of the same class as the United States. This is related to reform policy changes that caused the Chinese economy to develop rapidly from year to year (Zhao, Ma, Shang, Yang, & Shahzad, 2022). China can influence the economies of other countries, leading to interdependence. Between the two countries, namely the United States, China is a new pole of cooperation in the financial and economic sectors, making it a new hope for developing countries (Shen et al., 2021). China is unique in this regard. On the one hand, China is classified as a developing country, making any Chinese approach to developing countries relatively easier.

## **Literature Review:**

### **Economic Growth**

Through the results of observations and research by experts on economic development, theories were born, which later became the foundation of the development process, including the following:

#### **Linear Growth Theory**

The basic idea behind this theory is that the evolution of the development process experienced by a country always goes through certain stages (Xiong & Xu, 2021).

#### **Adam Smith's Growth Theory**

According to Smith, there are two main aspects of economic growth: total output growth and population growth. Total output growth involves three basic elements in a country's production system: available natural resources, human resources, and capital stock. According to Adam Smith, available natural resources are the most fundamental vehicles for society's production activities. If all natural resources are fully utilized, output growth will cease. Human resources play a passive role in the output growth process, whereas capital stock is

a production element that actively determines output levels. In population growth, the population will increase if the prevailing wage rate is higher than the subsistence wage, which is barely enough to live. Furthermore, Adam Smith, in his thinking, divided economic growth into five stages: the hunting period, the livestock period, the farming period, the trade period, and the industrial period (Cheng, Zhang, Wang, & Jiang, 2023).

### Marx's Theory

Marx proposed his theory based on the history of social development, which describes five stages: communal society, slavery, feudal society, capitalist society, and socialist society. Marx divided economic development into three stages: feudalism, capitalism, and socialism.

Marx argues that entrepreneurs' ability to accumulate capital lies in their ability to exploit the surplus value of the productivity of the workers they employ.

### Rostow's Growth Theory

Rostow divides the economic development process of a country into five stages: (1) traditional economy, (2) preconditions for take-off, (3) take-off, (4) maturity, and (5) high mass consumption.

(Q. Wang & Zhang, 2021).

#### (1) The Traditional Economy.

In a traditional society, the level of productivity per worker is still low; therefore, most of the community's resources are used for agricultural activities.

#### (2) Pre-Takeoff Conditions

Rostow defined this prerequisite stage for take-off as a transition period in which society prepares itself to achieve growth based on its own strength ( self-development). sustained growth )

Characteristics and efforts:

1. Increase investment in the infrastructure sector, especially transportation.
2. Revolution in agriculture to meet increasing population demand.
3. Expansion of imports, including capital imports by efficient production costs and marketing of natural resources for export.

#### (3) Take off

The take-off stage as an industrial revolution is related to the revolution in production methods and is defined by three interrelated conditions:

#### (4) Stages Towards Maturity.

The transition to maturity is characterized by the effective application of modern technology to existing resources. Three important changes occurred during this stage.

- a. The workforce is changing and not being well educated
- b. Changes in the character of entrepreneurs from hard and rough workers to efficient managers who are smooth and polite (He & Wei, 2023).
- c. Society is fed up with industrialization and wants further change.

#### (5) High-consumption stage:

The high consumption stage is the final stage of Rostow's growth theory. This stage is characterized by the mass migration of people from urban centers to the suburbs (urbanization), as the city center becomes a workplace.

### Structural Change Theory

This Structural Change Theory explains the mechanism of economic transformation experienced by developing countries, which was originally subsistence in nature, focused on the agricultural sector towards a more modern economic structure, and was heavily dominated by the industrial and service sectors.

#### A. Arthur Lewis's Theory of Development

This theory discusses the development process that occurs between urban and rural areas, including the urbanization process that occurs between the two places.

#### B. Chenery's Development Pattern Theory

Chenery's Theory of Development Patterns focuses on structural changes in the stages of the economic,

industrial, and institutional structures of a developing country's economy, which is undergoing a transformation from traditional agriculture to the industrial sector as the main engine of economic growth. According to Chenery, in line with increasing per capita income, a country's economy shifts from relying on the agricultural sector to the industrial sector. industry.

### **Dependency, Neoclassical (Solow-Swan), Endogenic, New Theories “( New Growth Theory, Ngt), ( New Economic Geography, Neg), ( New Trade Theory, Ntt)”**

Dependency Theory attempts to explain the causes of the economic underdevelopment experienced by developing countries. The basic assumption of this theory is the division of the world economy into two groups: economic of developed countries and economies of developing countries. Andrea Gunder Frank presents three main relevant hypotheses, which are related to the pattern of relations between developed and poor countries (Guan, Zhang, Ahmad, & Naqvi, 2021), namely:

1. In the metropolis and satellite structure as above, the metropolis will develop rapidly while the satellite will move towards continuous backwardness.
2. Poor countries that are now satellites can experience healthy economic development and are able to foster autonomous industrial development if links with the metropolis of the international capitalist world are non-existent or very weak.
3. The regions that are currently very backward and in situations similar to those of the feudal system are those that in the past had strong ties to the metropolises of the international capitalist system. These regions were producers of primary raw material export commodities that were neglected as a result of the conjuncture of international trade in these commodities.

#### **4. Neo-Classical Opponents of the Revolution**

The 1980s marked the emergence of the neo-classical development theory, which responded to the rebuttal of dependency theory. Neo-classical development theory, which is anti-revolutionary, is often referred to as supply-side theory. side theory ). This theory recommends the privatization of state-owned enterprises, increasing the role of planning and establishing economic regulations that create a conducive climate for increasing the role of the private sector in development. In other words, they state that underdevelopment is not caused by external influences but rather by internal influences within developing countries. The high degree of government intervention in economic activities, widespread corruption, lack of economic incentives, and errors in resource allocation are the main sources of this underdevelopment. This theory states that the incorrect allocation of resources causes ineffective pricing policies and is compounded by excessive government intervention in the economy (Zhou et al., 2021).

#### **5. Neoclassical Growth Theory ( Solow -Swan)**

According to the Solow-Swan theory, economic growth depends on the availability of production factors (population, labor, and capital accumulation) and the level of technological progress. Based on his research, Solow (1956) stated that technological progress plays a dominant role in economic growth. Solow's findings show that the US economic growth of 2.75 percent per year from 1909 to 1949, more than half (1.5%) was contributed by technological progress, while the rest was caused by an increase in the number of uses of the production factors.

This theoretical view is based on the assumption underlying classical economic analysis that the economy is at a full employment level. employment), and the level of full utilization of production factors. In other words, the economy will continue to grow, and this depends on population growth, capital accumulation, and technological progress.

#### **6. Endogenous Growth Theory**

This endogenous growth model provides a broader theoretical framework for analyzing economic growth. This theory attempts to identify and analyze factors that influence the process of economic growth originating from within ( endogenous ) the economic system itself.

Technological progress is considered endogenous and economic growth is the result of economic actors' decisions to invest in knowledge. Furthermore, the definition of capital is broader, encompassing not only physical capital but also human capital.

**“New” Theories****New Growth Theory (NGT)**

New growth theory, essentially endogenous growth theory, provides a theoretical framework for analyzing endogenous growth because it assumes that GNP growth is determined primarily by the production process system rather than by external factors. This contrasts with traditional neoclassical theory, which views GNP growth as a result of a long-run equilibrium. The basic motivation of the NGT theory is to explain differences in growth rates across countries and a larger proportion of observed growth.

**New Economic Geography (NEG) Theory**

One of the most important contributions of the neoclassical theory is the recognition of the benefits of agglomeration. The pioneers of neoclassical theory put forward the argument that agglomeration arises from the behavior of economic actors seeking agglomeration savings, both localization and urbanization savings. As Krugman identified, the location of economic activity within a country is an important topic in its own right. Second, the lines between international economics and regional economics are becoming increasingly blurred, and third, the most important reason for revisiting economic geography is the intellectual and empirical laboratory it provides ((W. Wang et al., 2022).

**New Trade Theory (NTT)**

The theory of comparative advantage proposes that: (1) countries trade to gain advantages from the differences in natural resources they possess; and (2) regions will specialize based on the comparative advantages they possess.

**Methodology:**

The research design used is quantitative correlation, where this study investigates the extent to which variations in a factor are related to variations in one or more other factors based on the correlation coefficient, while what is meant by quantitative research uses data in the form of numbers (Wulandari et al., 2024).

According to the time approach, the research design used is to take several journals as the parent material which will later be developed through one's own words and used as basic material in analyzing a case study "The Effectiveness of Knowledge-Based Economy on China's Economic Growth " through the journal, in this case it can be said to be a design itself without using tools or media in designing the research.

**Research Sample**

Arikunto (Hanifah, Kadir, & Yulianita, 2017) is of the opinion that the sample is largely representative of the entire research design, where the sample is taken from existing journals and managed into an article with analyses that are in accordance with the predetermined theme.

**Research Instruments**

Research instruments are tools selected and used by researchers in their data collection activities so that these activities become systematic and easier (Afaz, Syah, Catri, & Gusman, 2024). The tools used in this instrument were journal entries and analyses.

**Research Results and Discussion:**

How to increase economic growth by implementing a knowledge-based economy where not only the government is capable of implementing it but also the community is able to increase economic growth. Continuing with increasing regional economic growth, where each region or city is competitive, regional income in China is very efficient, especially in areas that are in fact the capital or large cities (Saud, Asterina, & Trisha, 2020). In addition, small cities in China also contribute to the existing GRDP. Where starting from industrial development and also openness to investment and carrying out national-scale development in this case within the internal context, China is able to equalize every economy in each each region and is able to reduce economic inequality in every economic activity (Osunmuyiwa & Ahlborg, 2022).

In the external context, China is able to make many investments through the products they sell, where these products are able to penetrate the world market and even almost beat the products that already exist in the world market, and what shocked the world was the large investment in oil in Africa. where African oil is still untouched and unexploited by humans, and it turns out that China itself already knows about it (Lin & Xu, 2024).

China takes an emotional approach to Africa by providing assistance to poor Africans. Then providing options

or choices of opinions about the best politics to the African government, this is what causes negative opinions among European Union countries (Nurrul Jannah, 2023). China was accused of imperializing African countries, but this has all been straightened out by the African government itself, so that it has become a positive thing for the Chinese government by providing positive things for the African countries themselves (Nur Aini, 2022).

The results of this study indicate that a knowledge-based economy significantly impacts economic growth because it encompasses all aspects such as technology and human resource development.

A knowledge-based economy can compete in the era of globalization with a population capacity that may be in line with the expectations of the Chinese government. and both in terms of economics and information that continue to move across the world's countries (Siyi, Yu, & Al-Samawi, 2023).

China, which is now the center of Asia and almost controls most of Europe, is able to provide effects and benefits for countries whose priorities are the same as China's economy. China began to combine economic resources with military power and its political role in the late 1980s. If economic growth continues, this conversion process will become very important. During the 1980s, China's military experienced a decline, but between the middle of the year, China's military expenditures doubled, and its income increased. In the current era, in the big scenario, China aims to penetrate all world markets in order to gain economic benefits in order to drive the wheels of the economy and guarantee national security related to security needs (Karima, Alfirdaus, & Yuwono, 2022).

As a country with a strong industry, China is very interested in its exchange rate. Thus, China can export its industrial products at a low cost. In fact, the impact of this monetary policy is able to make prices much cheaper because the products are... China mostly imitates goods or products that are almost the same as products on the market with a quality level that is close to being bad, but most consumers do not care about quality; they prioritize more affordable quantities, so it is not surprising that the products are... China sells well in the market. In this era of knowledge, the potential of natural resources owned by a country does not guarantee that a country can develop and grow its economy sustainably. In this case, many developed countries, especially China, are implementing a knowledge-based economy. China can implement a knowledge-based economy and can be declared successful and able to grow its economic growth well when compared to countries that follow a knowledge-based economy (Alsaad, Hamdan, Binsaddig, & Kanan, 2023).

China, in its development stage, which is none other than implementing the concept of a knowledge-based economy, can be said to be successful, looking at the level of economic growth which every year shows increasingly positive results, with growth of as much as 10% (Hendratmi, Agustina, Sukmaningrum, & Widayanti, 2022).

In the 1980s, China was still experiencing a political dilemma in its state by adopting a socialist ideology that is still unable to develop well, but when the leadership and ideology changed to capitalism, it showed drastic changes (Kencana, Fajrillah, & Hanafi, 2022).

## Conclusions

In this era of knowledge, the potential of natural resources owned by a country does not guarantee that a country can develop and grow its economy sustainably. In this case, many developed countries, especially China are implementing a knowledge-based economy. China is able to implement a knowledge-based economy and can be declared successful and able to grow its economic growth well when compared to countries that follow a knowledge-based economy.

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