The analysis of different economic growth rates among countries

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Abstract

Nowadays, there is great diversity of economic growth in the world. This paper is going to analyze some reasons which bring about such differences and if possible, motivate rapid economic growth in the future. Herein, a lot of decisive and influential factors have been proposed and most importantly, three crucial factors of governance, technological progress, and population growth have been discussed critically. Meanwhile, it is also significant to realize the fact that there is mutual influence between economic growth and these relevant factors, just like the relationship of eggs and chickens. So far, with our limited knowledge about economic development, it is still quite difficult to explain clearly why growth rates differ among countries. We need to trace economic growth for a long time, accumulate valuable experiences and revise them from time to time.

Keywords: economic growth, governance, technology, population, development

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Introduction

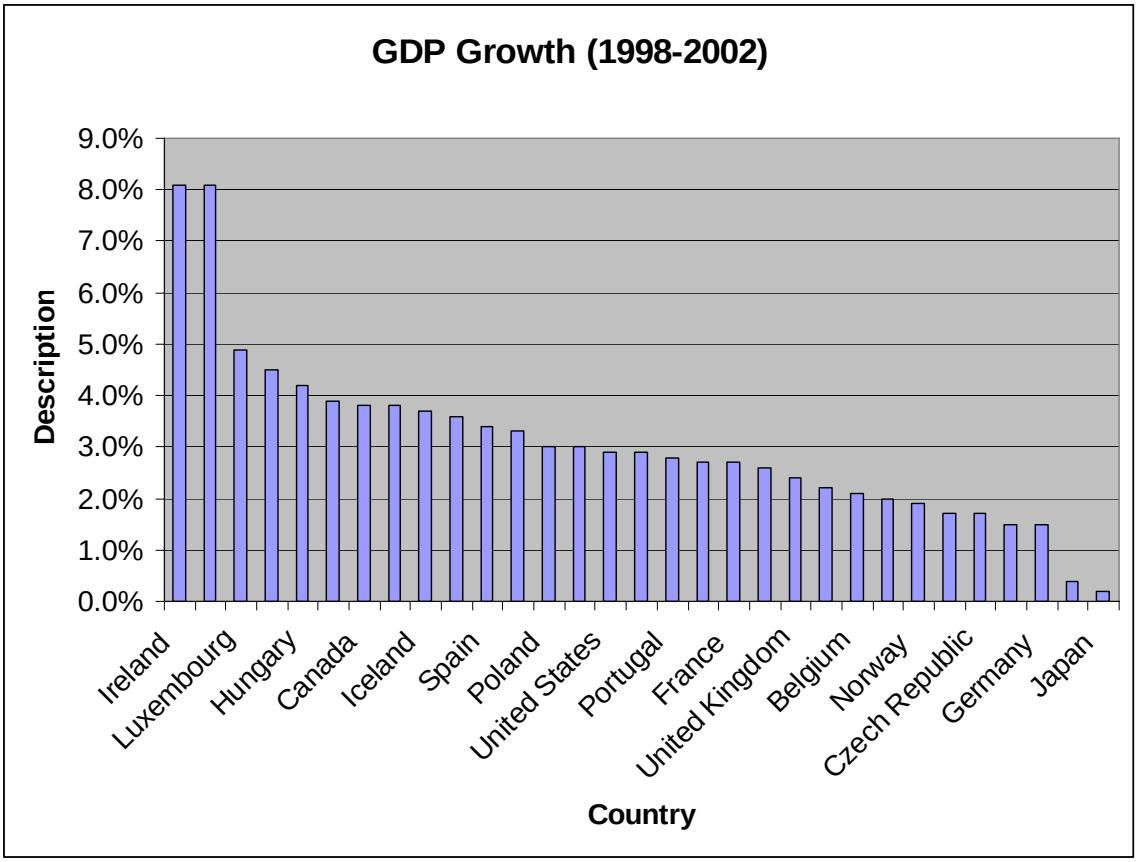
Nowadays, the diverse economic growth patterns are very common in the world. This paper is going to deal with the question “why growth rates differ among countries”. I take a closer look at the current diversity of economic growth. Most importantly, three possible causes are proposed and analysed in details. Clearly economic growth is a complex interaction of numerous factors, such as quality of governance, technological progress, population growth, physical capital, human capital, industrial structure, religious beliefs, geographic location, quality of land, stock market, inflation etc. According to different impacts, these relevant factors could be further divided into exogenous and endogenous factors, or determinant and influential factors. Actually, there are mutual influences between economic growth and these relevant factors mentioned above. For example, model of endogenous growth theory suggests that an active role of public policy will promote economic development through direct and indirect investments (Todaro and Smith, 2003). In turn, the economic development will encourage governance improvement, making it more effective and efficient for policy implementation and more suitable and applicable for economic development.

After this brief introduction I move on to look at current situation of diverse growth rates by statistics from OECD followed by the analysis of three crucial factors: governance, technological progress, and population growth. Subsequently I discuss that our available knowledge about economic growth is still limited. There have been both development “successes” and development “failures” in economic growth process (Kenny and

Williams, 2001). Finally, an integrated conclusion has been drawn and possible implications for current practice of economic growth are suggested.

The current situation of diverse growth rates in the world

Economic growth is conventionally measured with the percentage of increase in Gross Domestic Product (GDP). According to statistics from OECD, the GDP annual growth rates between countries from 1998 to 2002 differ greatly. The top GDP growth rate of Ireland and China is 8.1%, while the bottom GDP growth rate of Japan is only 0.2%.



Statistics Source: OECD

However, it does not mean that the greater rate is much better than the lower one because different countries have specific economic background and development speed. Considering the general trend in 21st century, the worldwide economic growth has slowed down than before, only about 2% on average. Most surprisingly it appears significant difference among countries. In 2003, the annual economic growth rate of USA is about 2.5%, compared to 0.5% of Japan and 7.5% of China.

The analysis of possible reasons

The quality of governance is a very important factor in driving economic growth. What is the meaning of governance? And why good governance is beneficial to economic development? According to World Bank Institute, governance is the process and institutions through which decisions are made and authority in a country is exercised. The governance is responsible for providing necessary infrastructure and social environment for economic development of the whole society. The first appearance of "good governance" came in 1989 from World Bank report on African (Leftwich, 2000). As Kauffmann and Kraay (2002) point out, there are six aggregate indicators to evaluate the quality of governance: accountability, political stability and lack of violence, government effectiveness, regulatory framework, rule of law and control of corruption. Nowadays, in many developing and developed countries, the main purpose of governance has always been set to stimulate the economic development. Accountability means officials should be responsible for their actions and social policies (Leftwich, 2000). Stable political environment and lack of violence are also necessary for continuous economic development. As for government effectiveness, it is closely related to the quality of

public regulation, quality of bureaucracy, performance of civil servants, independence and justice (Jalilian et al, 2003). It was found by Olson et al. (1998) that the quality of regulation influences economic performance and productivity development is strongly correlated with the quality of governance as well. Then good governance requires clear separation of legislative, executive and judicial powers and efficient performance of each sector. Meanwhile good governance still insists on transparency, control of corruption and consultative process between government and private interests (Leftwich, 2000).

An example was given by Glaeser et al. (2004) to show the distinctive influence of different governances to economic growth. North and South Korea were both extremely poor in 1950. Between the end of the Korea war and 1980, both countries were dictatorships. Yet South Korean dictators chose capitalism and secured property rights and the economy grew rapidly, reaching per capita income level of US$1589 in 1980. In contrast, the North Korean dictator chose socialism and the country only reached the level of income of US$768 in 1980. Clearly different types of governance can lead to significant diversity of economic growth. Which one is more suitable to domestic development and whether it is really satisfied by national people will eventually determine the economic growth rates. Of course, the author here does not mean that the capitalism is much better than the socialism. In my personal opinion, different regime systems are applicable to different countries. The most important is to choose a favorable regime which can meet the domestic situation fairly well. Another dominant debate recently is that there are interactions between good governance and economic growth,

just like the relationship between chicken and egg. It is hard to decide which effect comes first. But, in general, both sides of influence are equally important to social development.

The technological progress is a primary factor in stimulating the economic growth. As Clinton (1993) pointed out that technology is the engine of economic growth. With the rapid technological progress, it is easy to create new jobs, build large industries, and improve living standard. Furthermore, technology is also a powerful tool for making government more efficient and effective, harmonizing economic growth and environmental objectives, providing foundation for economic and military durable development. There are three basic classifications of technological progress: Neutral, Labour-saving and Capital-saving (Todaro and Smith, 2003). The different speeds of adopting advanced technology and transferring it into real productivity will eventually influence economic growth rates between countries. Schumpeter (1939) put forward a theory about the existence of long waves in economic growth and focused on the radical innovations in his book “Business Cycles”. As Fulvio (2003) stated later that capitalist system could be divided into techno-economic and socio-institutional by neo-Schumpeterian. It was the joint evolution of these sub-systems to determine the mode of economic growth, and consequently the rise or fall of long waves. We can summarize so far that technological progress has played a crucial role to promote rapid economic growth in the form of a continuous series of scientific inventions and innovations. However, many other historical economists (Veblen, 1915; Gerschenkron, 1962; Landes, 1969; Abramovitz, 1986) have stressed that the economic growth can be traced to a

variety of factors. It is a complex transformation and not a simple and steady technological transition.

The population growth is a significant factor to influence economic growth. The modern population growth is characterized by high fertility and relatively low mortality (Kuznets, 1966). In my opinion, the rapid population growth in LDCs is an objective reflection of economic growth. Otherwise we can not afford to raise children with limited resource and poor living standard. Modern population growth has both positive and negative influences to contemporary economic growth. The Malthusian Population Trap (Todaro and Smith, 2003) provided a theory of the relationship between population growth and economic development. Malthus postulated a universal tendency for the population to grow at a geometric rate, doubling every 30 to 40 years. Then whether population growth is a serious problem to economic growth or not? Coulter (2003) illustrated the strong negative correlation with comparing two industrial countries. China has implemented strict one-child policy for nearly 20 years, and on the other hand, India has not pursued population limitation. Therefore, per capita GDP is rising in China while India shows no similar rise. But does population growth really mean economic problem? Professor Simon (1987) held a different opinion in his journal “Population Growth, Economic Growth, and Foreign Aid”. He insisted that population growth was not inimical to economic development. Indeed the population growth was not definitely associated with slower economic growth. “Larger populations provide the needed consumer demand to generate favorable economies of scale in production, to lower production costs, and to provide sufficient and low-cost labour supply to achieve higher

output levels" (Todaro and Smith, 2003:287). It had been indicated that a moderate population growth would produce considerably better economic performance in the long run (120 to 180 years) than a slower growing population did, though in the short run (up to 60 years) the slower growing population performed slightly better (Simon, 1981). So clearly population growth does not definitely hamper the economic growth, if maintaining a moderate growth rate, it can encourage the economic growth as well. Moreover, different population policy, age structure and growth speed will eventually influence economic growth rates between countries.

The limited knowledge about economic growth

As Kenny and Williams (2001) have suggested that at present we do not know too much with certainty about exact causes of economic growth. Sometimes, there is mismatch between actual economic world and imagination of economic models. It is evident that all historical models have specific assumptions and applicability. For example, the Solow neo-classical growth model assumed that technological progress was independent of all other factors. Obviously, such assumption is unrealistic in most cases. So the later endogenous growth theory amended this fault where the rate of technological change varied across countries depending on other factors (Ruttan, 1998). Nowadays, we try to explain why countries experience different growth rates and want to find more effective countermeasures to stimulate rapid economic growth. Yet the available evidence suggests that none of the traditional theories has been able to do this successfully, there has been development "successes" and development "failures" simultaneously (Kenny and Williams, 2001).

Conclusion

In general, the economic growth is more complex than we have expected. Actually, there are a variety of factors which influence economic growth correspondingly. Meanwhile, economic development is an integrated reflection of all these relevant factors.

In this paper, the author has analysed three main factors. Firstly, there is close relationship between good governance and economic growth. The quality of governance is a crucial factor to influence growth rates. The indicators of good governance include accountability, political stability, government effectiveness, regulatory framework, rule of law and control of corruption. Subsequently, technological progress is also important to stimulate economic growth. Both the timing of adopting advanced technology and the speed of transferring it into real productivity will eventually determine the growth rates between countries. Finally, population growth has short-term and long-term effects on economic growth. Controversial opinions were discussed in this section. It has been approved that moderate population growth is beneficial to economic growth in the long run. Different population policy, growth speed, age structure and dependency ratio will affect economic growth rates to some extent.

The economic growth takes place over a long period of time. With our limited knowledge about economic development, the phenomenon of different growth rates among countries is still quite difficult to explain clearly. Most importantly we should accumulate our current practical knowledge and revise them from time to time. The analysis in this paper is speculative and illustrative rather than complete and definitive.

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