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**„Economic growth of Japan. Causes of stagnation and economic policy”**

**A summary of a doctoral thesis written under the scientific guidance of  
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Economic growth is without a doubt one of the most important subjects of economic research. The effectiveness of varied tasks carried out by economic policies of countries is ultimately reflected in changes of aggregate production growth. Empirical analyses of determinants of economic growth focus on countries with very high GDP growth rate and countries in economic stagnation. Over the last six decades Japan has been an excellent example of both these groups. The secular stagnation theory, currently popular in macroeconomics, bases on the analysis of secular trends over decades or even centuries. Because the period of very low economic growth in Japan is now tremendously long, it is often cited in economic literature as an empirical example of a country experiencing secular stagnation.

In order to fully understand the complex economic situation of modern Japan it is necessary to study the difficult history of this country. The Meiji Restoration is one of the fastest industrialization processes in economic history of the world, as well as the most crucial years for the economic development of Japan. During the Meiji era far-reaching reforms and social changes had occurred, which resulted in Japan's transformation from a quasi-feudal economy to a global economic power in just a few years. Institutional and traditional cultural factors developed at the time of the Meiji Restoration became the basis of two economic miracles, and their influence has been visible in the economy of Japan to this day.

If institutional and cultural historical factors have rightfully been identified as one of the driving forces of the post-war economic miracle in Japan, then could this country's past at least partially influence its current economic stagnation? The analysis of the very long-run economic growth which is presented in the following thesis allows to further our understanding of causes of current economic stagnation of Japan. Conclusions from this analysis might help in solving similar issues in other highly developed countries – many of which will soon have to face similar challenges.

The main research aim of the following thesis is the identification of determinants and barriers of Japan's economic growth, with special attention for the causes of the long-run economic stagnation after 1989. Additionally, four complementary aims have been selected:

- I. Review and critique of selected issues in economic theory regarding economic growth and secular stagnation, and systematization of available in scientific literature knowledge in context of the topic of thesis.
- II. Presentation of stages, rate, and scale of economic growth of Japan during the 1868-2018 period, with special consideration for institutional factors and important historical events.
- III. Demonstration of the role played by the most important causes of Japan's long-run economic stagnation after 1989, and comment on other causes of low economic growth.
- IV. Characteristic and evaluation of economic policy of Japan after World War II, with emphasis on economic reforms which have been undertaken since 2012 by the cabinet of prime minister Abe Shinzō, in context of stimulating economic growth and ending economic stagnation.

The main hypothesis is: The rate of economic growth of Japan was the result of many economic, institutional, and cultural factors, some of which had originated as far as the Meiji Restoration. Additionally, four research hypotheses have been formulated:

- I. Economic stagnation of Japan in the "lost decades" is a secular stagnation.
- II. Both post-war economic miracle and subsequent economic stagnation were results of prior political and economic events.
- III. Main causes of economic stagnation of Japan after 1989 are: long-run deflation, increase in the amount of public debt, and aging population along with low birthrate.
- IV. Economic policy of Japan after 2012 contributed to the improvement in economic situation in this country.

The realization of abovementioned aims has determined the structure of the thesis.

Chapter one titled *Economic growth and secular stagnation in economic theory* presents issues regarding economic growth. This chapter is theoretical in nature. Extensive literature review of both Polish and foreign sources was conducted. Chapter one comprises four parts. In part one

the essence of economic growth and its importance in history of economic thought is presented. In part two selected determinants of economic growth are presented. Part three shows theory of secular stagnation, new theory of secular stagnation, and views on secular stagnation of other economists. In this part a synthesis of the most important theoretical elements of secular stagnation is carried out, and a new definition of economy in secular stagnation is created, based on literature review. Part four concerns available policy instruments and the importance of economic policy during secular stagnation.

Chapter two titled *Economic growth of Japan 1868-2018* presents macroeconomic indicators describing economic growth of Japan. The descriptive and statistical analysis is based on available historical data and divided into five parts. Part one is a description of economic situation in quasi-feudal Tokugawa Japan. Next four parts are divided according to chronological criterium and align with Japanese historical eras which since 1868 have been identical with rule of subsequent Emperors of Japan. The main element of analysis is the rate of real GDP growth for each of these eras. Part two concerns industrial and institutional revolution in Meiji era (1868-1912). Part three describes changes in relatively short Taishō era (1912-1926). Part four presents the tumultuous history of Shōwa era (1926-1989), from the Great Depression, through World War II, to the post-war Japanese economic miracle. Finally, part five concerns economic stagnation of Heisei era (1989-2018), and the famous policy reforms of prime minister Abe after 2012. Additionally, an attempt was made to answer the question whether during the economic stagnation of Japan occurred an improvement in the quality of life sufficient enough that it might compensate for many years of very low economic growth.

In chapter three titled *Causes of economic stagnation of Japan after 1989* the most important causes of economic stagnation are presented: long-run deflation, increasing amount of public debt, and demographic changes causing shortages of labor. These causes are important from the view of economic sciences as they become increasingly universal from the perspective of other highly developed countries. Chapter three is empirical in nature, with selected econometric methods being used. This chapter comprises four parts. First three parts contain analysis of previously mentioned causes of economic stagnation: deflation, public debt, and aging population. Part four describes six different causes often cited as the reason for stagnation in Japan, and some of them were later considered as not being the direct causes of low economic growth.

In chapter four titled *Economic policy of Japan* a review of post-war economic policy is undertaken, with emphasis on economic reforms after 2012 aiming to stimulate the economy. It contains a critical analysis and recommendations for economic policy. The reform package of current prime minister Abe Shinzō, often called “Abenomics”, is considered to be a chance for Japan’s economic recovery. Important part of this dissertation is the evaluation of actions undertaken by the Japanese government. The so called “three arrows of Abenomics” are: monetary, fiscal, and structural reforms. This chapter comprises three parts. Part one presents economic policy of Japan since the end of World War II until 1989. Part two concerns the difficulties encountered by economic policy during the so called “lost decades” – in this period a zero-interest rate was first introduced in Japan. Finally, part three contains analysis of Abenomics – economic policy which has been realized since December 2012. It also presents actions undertaken during implementation of all “three arrows” of Abenomics. The revolutionary changes in Bank of Japan’s monetary policy are the most important and controversial element of Abenomics.

The following thesis is of theoretical and empirical nature. The subject of research is the economic growth of Japan during the 1868-2018 period, with special attention for the economic stagnation after 1989. Theoretical analysis was based on the most important literature on economic growth, economic policy, secular stagnation, economic history of Japan, and modern economy of Japan. Empirical analysis was carried out using secondary sources (Japanese and international databases). Undertaken research covers a very long period. The evolution of Japanese institutions is presented after analysis of historical sources. The following research methods were used: bibliometric analysis, literature review (books, journals, documents), synthesis of information, descriptive and statistical analysis, comparative analysis, correlation analysis, and national accounts growth rate analysis.

All four research hypotheses have been verified positively. The first hypothesis has been verified based on occurrence of five out of six characteristics of economy in secular stagnation, which were identified in chapter one. From the perspective of the new secular stagnation theory the most important characteristic (natural rate of interest lower than the real rate of interest, with zero nominal interest rate) has occurred. The second hypothesis has been verified based on descriptive and statistical analysis and analysis of historical sources describing the evolution of institutions in Japan. The third hypothesis has been verified based on econometric analysis, with emphasis that public debt influences economic growth of Japan visibly less and not as clearly as in

the cases of deflation and aging society. The fourth hypothesis has been verified based on analysis of prime minister Abe's reforms, central bank's statements, reforms of fiscal policy and the most important macroeconomic indicators in Japan.

As a result of conducted research, the main hypothesis has been verified. The Meiji Restoration has been a revolution in almost every part of the economy. Changes in Japanese society were fundamental and rapid – then in turn contributed to a very high rate of economic growth. Economy of Japan has developed in stages of very high and very low economic growth. This country was very proficient at adapting western institutions, and at the same time retained its remarkable national identity. Economic growth of Japan after 1868 has been a story of the opposites: tradition and technological progress, war and peace, population explosion and aging society, stagnation and economic miracle. Stages of growth were unique, and in each of them the rich history of this country could be seen. The Meiji Restoration is currently an inspiration for modern economic reforms, that may ultimately end decades of stagnation and push Japan toward path of high economic growth.