

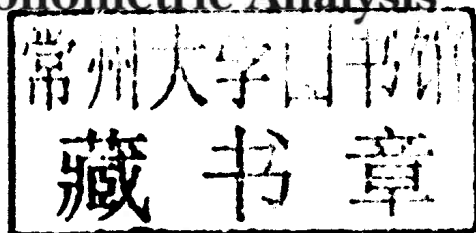
OSAMU NAKAMURA

INCOME DISTRIBUTION AND ECONOMIC GROWTH OF JAPAN UNDER THE DEFLATIONARY ECONOMY

Theory and Evidence based
on an Econometric Analysis

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To
Dr. Daisaku Ikeda
Founder, Soka University

Preface

Recently, the term “Japanization” has found widespread usage throughout the world. Japanization implies the Japanese society is very mysterious in terms of its economic system, in which the supply-side is very strong with high technology, efficient capital and qualified labor. However, the demand-side of the economy is stagnant, therefore, the actual economic performance is weak and prices are declining, with a huge amount of deflationary gap, large current account surplus and fiscal deficits, which cannot be explained by economic theories. Indeed, the supply-side of the economy and factors of production, including capital, labor and technology, are viewed as sort of national assets and wealth of nations. Therefore, the Japanese people are automatically assumed to be rich; however, this is not the reality. It is said that, “Japan is rich, but the Japanese are not, economically.”

The Japanese society has experienced this prolonged economic slump since the bursting of the bubble economy and the “Lost Two Decades”. The Japanese people have experienced this prolonged stagnation for two decades, but can no more endure such a situation, fraught with uncertainty, in the future. However, most policy makers, business leaders, economists and politicians misunderstand the causes of the long-term stagnation and measures to improve this situation. It is noteworthy that we need to recognize the power of the domestic demand, which could revive the whole economy through improving distorted income distribution and reconsider a true great nation as an advanced one.

As Karl Marx believed, capitalism collapses through “inner contradictions”, reducing corporate profit share for competition and substituting capital for labor, which result in decreasing effective demands. The prolonged stagnation of the Japanese seems to rely on inner contradictions, with lower wages and hence limited effective demands. It seems that the

difference between the capitalism, as interpreted by Marx, and the current Japanese economy may be dependent on socio-economic environments in which *entrepreneurs* employ workers with lower wages and the workers continue to work with lower wages, as Keynes criticized in the second fundamental postulate of neo-classical employment theory. In other words, the current long-term economic deflation might be explained by the anticipation of Keynes rather than that of Marx.

This study, therefore, introduces the demand-side oriented growth model incorporated with the supply-side in order to analyze the current Japanese economy focusing on the prolonged stagnation and measures to improve its situation. So far, we might have been excessively dependent on the public policies and have ignored the importance of roles of the distribution of income, particularly between profits and wages. In other words, this study elucidates the structural impediments for growth of Japan and examines appropriate policies to solve these complicated problems with theories and empirical studies on an econometric analysis.

With respect to the results of scenario simulations and future forecasts in this volume, I utilized the econometric model of Japan which was revised in December 2010 (Dec. 2010 Version) based on the available data up to FY2009 and conducted the baseline projection and various scenario forecasts in January 2011. The actual Japanese economy and the world economy are changing day by day, and hence our research work continues unceasingly to cope with these changes.

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CHAPTER 1

Introduction

The Japanese economy has had a structural deflationary gap since the mid-1970s. Although the gap was decreasing in the bubble period, the deflationary economy has become more serious since the bursting of the bubble. The gap is estimated to exceed 95 trillion yen as of FY2009, according to the estimation of this study. With the strong supply side of the economy, nevertheless, the demand-side has been stagnant, which has resulted in the structural deflationary economy. As a result, the annual average growth rate of real GDP has remained stagnant at around 0.86 per cent during the past two decades, which is referred to as the “Lost Two Decades”. Accordingly, the growth performance of Japan is extremely weak compared to that of the other developed countries, with large trade surplus even after the Plaza Agreement held in 1985 and large amounts of fiscal deficit.

In addition, with a huge amount of financial assets in the household sector, domestic demands, particularly household expenditures, have been dormant since the bursting of the bubble. Moreover, household disposable income has also remained stagnant as an aftereffect of the bursting of the bubble. At the same time, household financial liabilities have remained at a higher level and become a heavy burden for the household sector and its expenditures. A number of financial corporations suffering from financial insolvency overcame a bad loan problem with public funds by the end of the 1990s, while a number of households have continued to face the financial difficulties associated with debt under the deflationary economy. The persistency of high financial insolvency is one of the leading causes of the stagnation of household expenditures in Japan.

1.1. Research Objectives

Accordingly, this study attempts to examine the causes of the Japanese deflationary economy, characterized as a structural deflation, and discusses how to alleviate the prolonged slowdown in order to restore Japan to a trajectory of high economic growth, with a special focus on the function of income distribution. In addition, not only income distribution flows but also accumulation of assets and debts in the household sector are taken into account for improving the prolonged economic stagnation of Japan by employing an econometric analysis with modeling and forecasting techniques. Furthermore, this study makes a long-term forecast of the Japanese economy up to the FY2030 with policy scenario simulations in order to capture the long-term growth path of the Japanese economy and analyze the effects of alternative policies on the economy.

Concerning the extensive Japanese deflation, many studies have emphasized the importance of Keynesian demand stimulus. For example, Klein *et al.* (2007) and Shishido *et al.* (2010) have stressed the significance of combined conventional fiscal and financial policy to recover the Japanese growth performance. However, due to the large national fiscal deficit, the central government has had a pessimistic view of the conventional Keynes policy. Thus, the government investments have been declining since the mid-1990s under the domestic policy for a reform of public finance and administration.

On the other hand, some studies analyzed the causes of the deflationary economy of Japan from the viewpoints of income allocation and asset and debt accumulation in the household sector and found that distorted income allocation resulted in the stagnation of the demand-side economy in Japan. For example, Ando (2002) and Ando *et al.* (2003) examined the stock basis SNA (System of National Accounts) structure in the non-financial corporate sector and found that the corporate sector's policies to increase accumulated savings distorted the income allocation for the household sector based on Tobin's q and its flow-basis measure. Hayashi (2006) supported Ando's thesis as the "over investment hypothesis," and Saito (2008) discussed this conjecture with Tobin's q ratio employing the latest Japanese SNA and examined substitutability between consumption and investment from a supply-side viewpoint.

On the contrary, Horioka (2006) examined the causes of the prolonged stagnation of the Japanese economy, focusing on household consumption expenditure with a demand-side approach. He summarized that the stagnation of household disposable income, the declines in household wealth and future uncertainty are the major causes of the stagnation of household consumption. Hence he stressed the importance of the demand-side approach to analyze this issue. In addition, Nakamura (2008) examined the causes of the Japanese stagnation of the demand-side economy from the viewpoint of income distribution, including both income flows and asset and debt accumulation in the household sector, and analyzed the effects of these factors on the Japanese economy using an econometric analysis. In Nakamura (2008), the regression analysis of household expenditures on disposable income in addition with three stock variables, such as financial assets, non-financial assets and financial liabilities, revealed that debt effects were more than asset effects, on a static basis.

This book also analyzes the causes of the Japanese deflationary economy, focusing on the influences of not only income distribution flows but also asset and debt accumulation to the household expenditures from both the demand-side and the supply-side points of view because many studies underestimate the role of stock variables in the demand-side economy. This study also examines the role of the supply-side to stimulate the demand-side, considering the interactive relations between income, demand and supply and the national economic framework. Econometric analysis is conducted on all three aspects with a view toward understanding the deflationary economy within Japan.

Concerning econometric modeling and forecasting analysis on the Japanese economy with respect to the long-term economic stagnation, there exist many research projects in Japan. In particular, with regard to the econometric study on the deflationary economy of Japan by explicitly utilizing GDP capacity, some projects including Japan-US Global Modeling Center (Shishido and Adams, 1990; Shishido *et al.*, 2011), Cabinet Office of the Japanese government and the Hokkaido Electric Power Company (HEPCO) Research Institute — the International University of Japan (IUJ) Project (Kido, Shimizu, Nagao and Nakamura, 1997–2010) have continued their research activities on this issue and published economic forecasts periodically.