### Comments on "Medium-term Economic Prospect for Japan"

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#### 1. General Remarks

- 1. Kinoshita paper provides us with useful information on future prospect for Japan until 2025. It starts with the labor shortage issue and discusses the three scenarios over the future. Finally, it provides the assessment on monetary and fiscal policy.
- 2. My comments are four. First, I address the issue on the underlying potential growth rate, notably with respect to the role of capital inputs and the total factor productivity (TFP). Second, I compare the three scenarios with the medium-and long-term JCER forecast. Third, I take up the issue whether the BOJ can achieve 2% inflation rate target within two years. Fourth, I discuss the alternative ways to accomplish the fiscal consolidation.

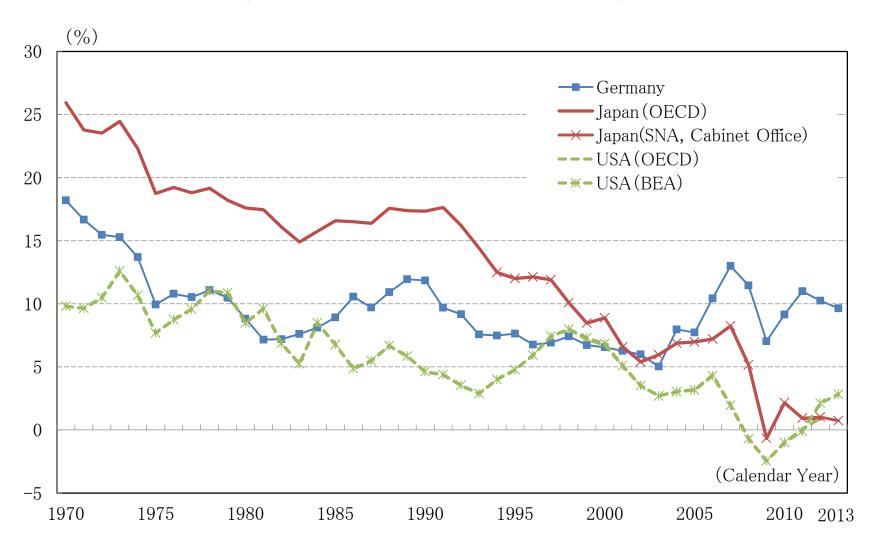
# 2. Potential Growth Rate and the Current Account Balance

- 1. For assessing the future development of the Japanese economy, it is important to examine the underlying potential growth rate and its determinants.
- 2. Apparently, the aging and smaller number of children are associated with the decline of labor inputs, due to the diminishing size of working age population.
- Thereby, we should not overlook the declining saving and investment activity in the process of demographic changes.
  In addition, even the TFP is adversely affected by the decline of working age population.
- 3. All the fundamental determinants of growth rate (the labor inputs, capital inputs and the total factor productivity) tend to lower the future potential growth rate.

# 2. Potential Growth Rate and the Current Account Balance

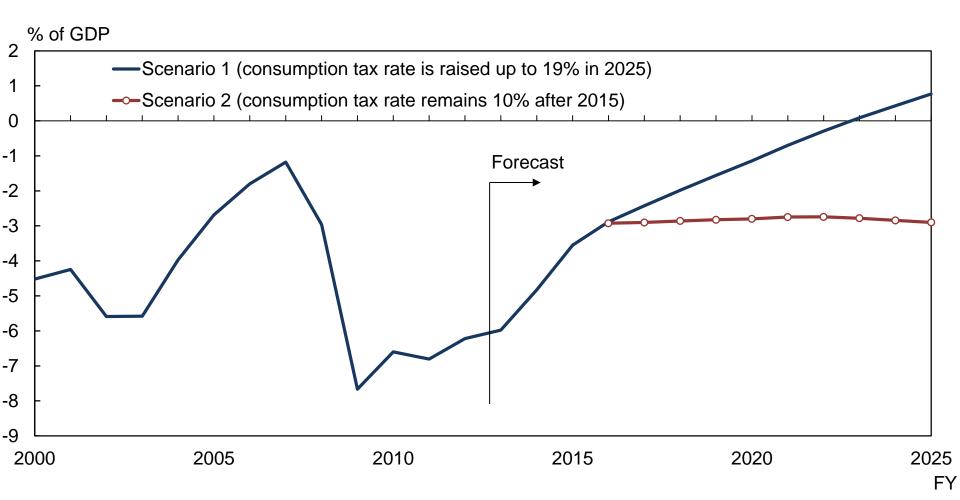
- 4. The future course of current account balance depends on the relative speed of decline of national saving ratio and domestic investment.
- The household saving ratio records negative 1.3% in FY 2013. Over the future, the JCER predicts negative 5% in 2025. This is precisely what the life cycle hypothesis predicts.
- The net national saving ratio is now zero. It is similar to the US. More than twenty years ago, I argued that the Japan's current account surplus will turn into deficit in the 2020s (Iwata(1991)).
- The JCER medium-term forecast predicts that the current account balance will turn into deficit in 2018.

Fig.1 Net National Saving Ratios



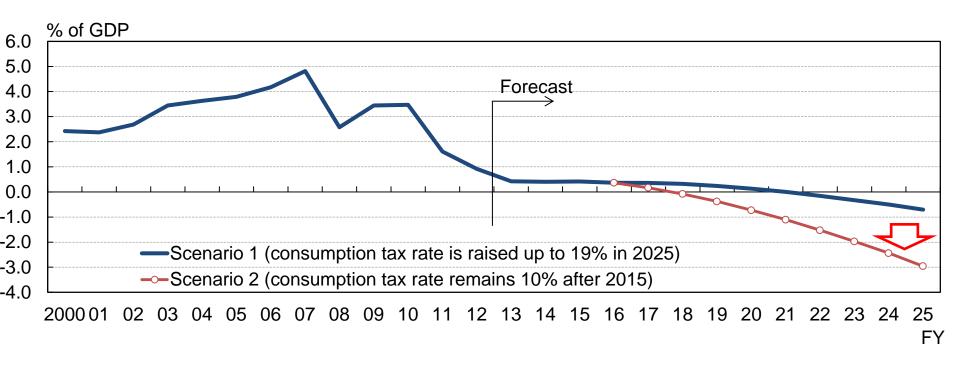
(Note) Net National Savings/Net National Disposable Income (Sources) OECD/System of National Accounts, Cabinet Office

Fig.2 Primary balance of state and local government



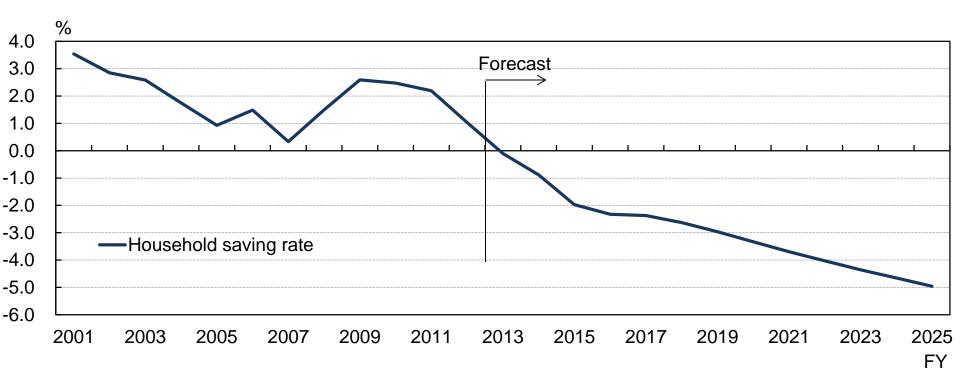
(Sources) Cabinet Office "Annual Report on National Accounts." Forecasts are by JCER.

Fig.3 Current account balance



(Sources) Ministry of Finance and Bank of Japan "Balance of Payments Statistics", Cabinet Office"Annual Report on National Accounts"

Fig.4 Household saving rate



(Source)Cabinet Office, "Annual Report on National Accounts"

# 2. Potential Growth Rate and the Current Account Balance

- 5. The recent publication of net real private capital stock by the ESRI, Cabinet Office, which has not been available so far, demonstrates the fact that the net capital accumulation rate turns into negative since 2000.
- This changes the composition of potential growth rate into capital inputs and the TFP as a residual. The contribution of capital inputs decreases, while that of the TFP increases. Now the recent productivity growth is estimated to be about 1%, instead of about 0.5% in the Kinoshita paper's three scenarios.
- Given 1% TFP growth rate, the future growth rate will be higher than 1% (close to the case of the upside scenario), in the balance growth path with labor augmenting technology.

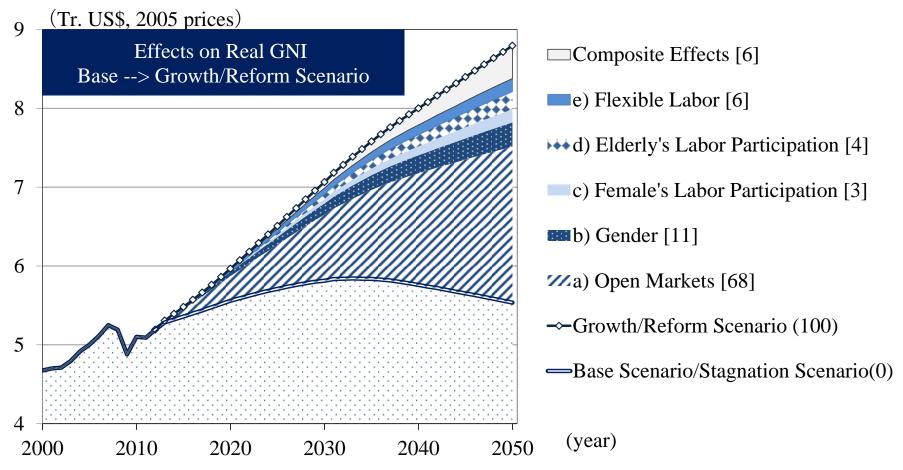
### Table1 Growth Accounting by Capital Sock Statistics (CY1994–2012, annual average growth rate)

	GDP	Labor contribution	Capital Contribution	Total Factor Productivity
Real Net Capital Stock	0.8%	-0.4%	0.2%	1.0%
Gross Capital Stock of Private Enterprises	0.8%	-0.4%	0.6%	0.6%
OECD Productive Capital Stock	0.8%	-0.4%	0.4%	0.9%

- 1. The JCER also provides the three long-term scenarios over the future until 2050. One is the base case scenario of virtually the zero growth rate(though the per capita growth rate is estimated to be 0.7% on average), the second is the fiscal bankruptcy scenario and the growth scenario of 1.4%, similar to the upside scenario in the Kinoshita paper.
- 2. Under the recognition of the importance of institutional factors (political, economic and social) as the determinants of the TFP, we have decomposes the difference between the base case and the growth scenario, employing the institution evaluation function.

- 3. Main differences between the two scenarios arise from the following institutional factors.
- The primary difference arises from the opening up our economy. The second is the more flexible labor market and the diminishing the gender gap.
  The third is the easiness to start-up business.
- 4. The first factor points to the critical importance of the successful conclusion of the TPP, while the last factor bears implications for innovation in the "second machine age".

### Fig.5 Difference between base scenario and growth/reform scenario

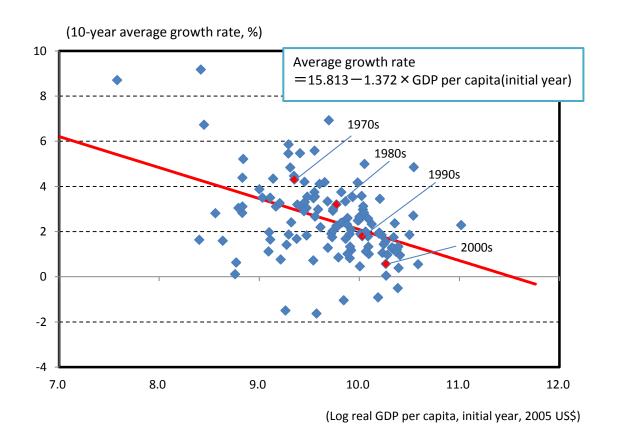


(Note) Numbers in brackets are average contribution share in the gap between Base scenario and Growth/Reform Scenario in percent (Source) JCER Long-Term Forecast:Vision2050

- 5. Japan lags behind the IT revolution in enjoying the benefits of higher productivity growth which the US economy has experienced.
- Japan ranked 18<sup>th</sup> in the indicator of the open innovation by the OECD.
- The future growth path can be positively affected by the complementary interaction between institutional reforms and innovations.

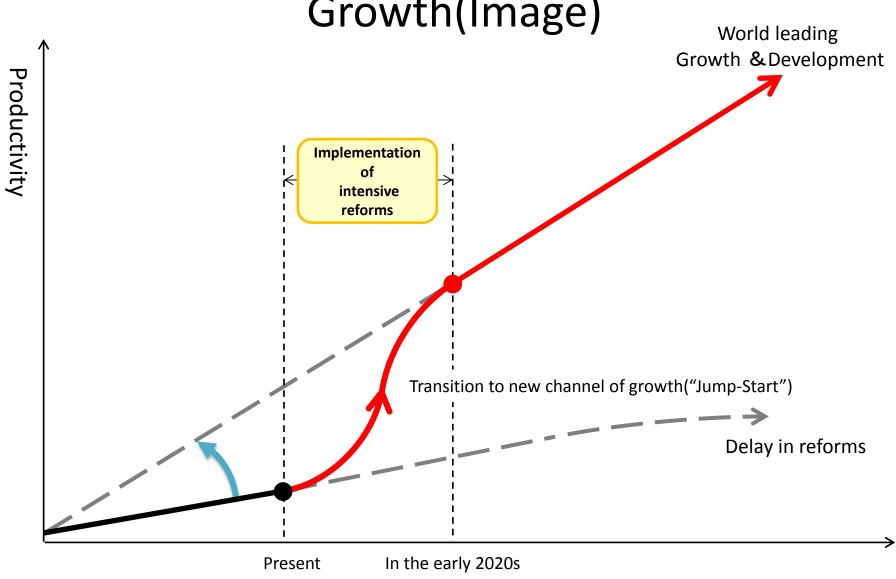
- 6. In the 2000s both the level and growth rate of Japan's per capita real GDP (or the TFP) has deviated from the convergence path of the world economy.
- The desirable scenario is to return to the convergence path by achieving relatively higher growth until the early-2020s, and then achieve the growth rate on the convergence path.

## Fig.6 GDP per Capita by Country - Level and Growth Rate



(Note) The graph plots the average GDP per capita growth rate for each decade(1970s-2000s) against GDP per capita in the initial year(1970, 1980,1990,2000) for 34 countries, using the Penn World Table database.

Fig.7 Transition to New Channel of Growth(Image)



- 7. There is some empirical evidence that the 1% decline of the working age population is associated with 0.3% decrease of the TFP.
- The second version of revival strategy included the goal of maintaining the size of total population at 100 million in around 2060, by raising the fertility rate from 1.4 to 2.1 in the early-2030s.
- According to the JCER assessment, it requires Yen 13 trillion to achieve the increase in fertility rate. This point to the fundamental reform of existing social security system favoring the elderly people.

8. The JCER made a proposal one year ago to announce the national target to maintain the size of total population at 90 million in 2060 by raising the fertility rate from 1.4 to 1.8 and accept the increase of foreign workers from the current 50 thousand to 200 thousand a year in 2050.

#### 4. Fiscal Policy

- 1. I agree to the conclusion of Kinoshita paper on the likely development of fiscal balance and the debt-nominal GDP ratio, namely the difficulty to achieve the government target to half the size of the primary deficit in FY2015 and the achievement of zero primary deficit in FY 2020.
- The JCER predicts that the consumption rate hike to 19% is needed to achieve the zero primary deficit target in FY2023.
- From the long-term perspective it is desirable to attain both 25% consumption tax, while cutting the corporate tax rate to 25%, thereby implementing the partial privatization of public pension scheme.

#### 5. Monetary Policy

- 1. On the possibility to achieve 2% inflation rate within two years, I argued from the start of Abenomics that the 2% target setting is reasonable to completely eradicate the persistent deflation, yet it will take at least five years under the assumption of effective implementation of growth strategy.
- 2. This is due to the two reasons;
- The first is the recognition that both the BOJ and market participants are in an adaptive process of learning the true structure of our economy(the 1990's adaptive hypothesis)(see more in details. lwata(2014))
- In the sense of utilizing all the available information, market participants are rational. But it does not imply that the BOJ can arbitrarily manage the inflation expectation.
- In the past history we see that the 2% inflation appeared when the unemployment is below 3% or the inflationary GDP gap was 4%.

#### Reference

- [1]K.Iwata (1991), "Budgetary Balance, Aging and External Balance: The Future of the U.S.-Japan External Imbalance", Journal of the Japanese and International Economies, Volume5 Issue4
- [2]K.Iwata (2014), "Abenomics: How to Overcome Japan's Long Depression and the Global Financial Crisis", Keynote Speech at the 12<sup>th</sup> international conference of the Japan Economic Policy Association
- [3] Japan Center for Economic Research (2014), *The Engine of Japan's Revival*, (in Japanese) (ed.) Kazumasa Iwata, Nikkei Publishing Inc.