Prospects for APEC and the Australia and Japan Relationship

Crawford-Nishi Lecture
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I. Balanced Growth (I)

(1) Balanced Growth
Issues in recovery process from “Great Recession”
  : bumpy exit process (as indicated by the case of Greece)
Sizable drop and the subsequent V-shape recovery in Asia
  : rapid urbanization and massive increase in middle income class (China’s consumption (21.1%)
    will exceed the U.S.(20.8%) in 2020), yet subject to demographic changes in the coming decade (Annex I).
New normal” after the financial crisis in the U.S. economy implies that the main engine of world growth will shift from the U.S. consumption to the emerging economies’ consumption.
The shift of main engine tends to enhance rebalancing, yet there remains uncertainty on future budgetary balance and the exit process, in addition to the trade conflicts between the U.S. and China.
I. Balanced Growth (II)

Exit strategy from unconventional policy regime
:Is the IMF view correct? (fiscal policy tightening first in the current account countries, while monetary policy tightening first in the surplus countries)
:We should not overlook the divergence in financial fragility and deflation risk among different economies.
:What is optimal balanced growth path under the demographic changes? (Annex II)
2. Inclusive Growth

(2) Inclusive Growth
Japan: widening income inequality: not only elderly, but also young generation coupled with rise in suicide rate after 1997/98

- Index of Life Satisfaction or Happiness, amendment of GDP statistics on NPO activity, voluntary works and environment costs.

- Increase in non-standard workers and importance of human resource management at the corporate sector (creation of career path) and active man power policy.

- Human capital defined as the present value of wages decreased since 1997 under the assumption of wage growth equal to the sum of human capital depreciation and the discount rate (Annex III).
Life Satisfaction

Fig. 7. The collapse of communism and falling life satisfaction in Russia and Hungary since 1982 as compared with other European and Asian countries. Gross domestic product (GDP) is shown as purchasing power parity estimates.
National Wealth and Human Capital in Japan

Sources: Annual report on national accounts, Labour force survey.
3. Sustainable Growth (I)

(1) Green growth: Hatoyama Initiative
25% Reduction of CO2 Emission in 2020, with the base year of 1990: the proportion of international credit purchase is not yet determined.

(2) Introduction of “Cap and Trade” is important for pricing the environment costs.
   The remaining issue is as to whether the government takes into account the target based on energy efficiency in setting the total limits.

(3) Costs to attain the target (Progress Report (2009.12))
   25% reduction implies the lowering of GDP by 3.2-5.6%.
   Marginal costs reduction ranges from 50 to 100 thousand per ton.
   The loss of GDP will become smaller by 1.3-2.2% through purchasing international credit of 10% under the assumption of emission price of $50 per ton.
3. Sustainable Growth (II)

(4) Dynamic CGE model exercise on 50% reduction in 2050 (ESRI (2009))

The establishment of international market will lower the prices significantly. Spillover of Japan’s environmental technology is important in reducing the global costs reduction (11.6% reduction).

If developing countries join the commitment on “population based global emission reduction” or “per capita income weighted population based global emission reduction”, then it will make the costs bearable for advanced economies under the condition of implementing peer review on energy efficiency.

(5) Possibility of “Asian Basket” vs. “EU Basket”,

“Reduce Emissions from Deforestation and Degradation” (U.S.) and “Assigned Amount Units” (Russia and East European Countries)

(6) Sustainable budgetary position in the process of ageing society, notably after exiting from unconventional policy regime.
4. Knowledge Based Growth

1. Removal of trade barriers and lower tariff in the ICT-related to goods and services (telecommunication, content-providers), improvement of patent acquisitions and mobility of professionals

2. Intellectual Property
   TRIPS-plus in the FTAAP (as in the case of Japan-Switzerland Economic Partnership: strong protection against copy and pirated products and costs saving from supply chain tax burden by shifting assembly and IP to Swiss.)

Summing up of growth strategy:
Growth target to double the average GDP of developing APEC economies in 10 years.
IV. Road to the FTAAP(I)

1. The proposal on establishing the FTAAP was included in the growth strategy of Hatoyama government announced at the end of December 2009. The concept of “East Asia Community” includes Australia (EAS, ASEAN+6, APEC).

2. There are four paths to reach the FTAAP:
   - from open regionalism to regional integration
   - ASEAN+3 (China) EAFTA
   - ASEAN+6 (Japan) CEPEA: cooperation and development
   - Trans-Pacific Partnership (P4+U.S.+Peru+Australia+Vietnam+Pacific Arch 11 countries (?)) TPP: advanced liberalization in open accession to the APEC countries and an across-the-board necessity test on domestic regulation
   - Japan-China-Korea FTA JCK or Australia-Japan-China-Korea AJCK

PTT (FTA + reforms) vs. ASEAN+1 approach and China’s dominance (Bergsten-Schott(2010))

G10 of Asia-Pacific or “Asia Pacific Community” (PM Rudd)
Convergence of various FTAs to the FTAAP by making them consistent with the WTO.
IV. Road to the FTAAP(II)

3. Noodle Bowl of FTAs
   : 166 in Asia (FTAs and in pipeline(2009)) vs. global 171 FTAs
   : Japan 11 FTA and 6 in pipeline
   : low utilization, ROO hindrance and the need to establish “top-level management to substitute for WTO discipline
   : Japan’s exports share covered by FTAs is low (16.4%), as compared with U.S.(37.7%) and China(18.5%)
IV. Road to the FTAAP

4. Simulation outcome (GTAP(Kawasaki(2006)))
Wider liberalization is more beneficial, while the dynamic impacts are more important.
China’s gain is significantly larger in the case of the FTAAP, including the U.S., as compared with the FTA with ASEAN+3.
Benefits are larger, stronger the protection measures: Free-ride effects are minor.
The larger gain for Australia is the case of ASEAN+3 rather than the FTAAP.
Sectoral gains by global liberalization are large in textile for China, transportation machinery for Japan and agriculture products for the U.S. and Australia.
Regional vs. Global Trade Lib. (Real GDP Gains in Per cent)
IV. Road to the FTAAP

6. Sectoral Approach:
   supply-chain connectivity to deepen vertical integration such as transportation/logistics (based on the “fragmentation theory”)
   :port infrastructure, customs environment, regulatory environment, e-business infrastructure: trade increase of $377 billion (Wilson, Mann and Otsuki(2007))
   :open sky policy and internationalization of Haneda Airport, yet increasing traffic congestion is anticipated
   :tariff reduction on the environment goods and services,
7. New membership: India
8. Trade restriction measures after September 2008 and avoiding the death of the WTO Doha Round (world gain of $164.9-282.7 billion (Hufbauer(2010)): Anti-dumping measures chilled trade(5.9% reduction in Brazil, Mexico, Taiwan and Turkey)
VI. Australia-Japan Relationship

1. To attain the goal of the FATAP, the Australia-Japan FTA is a vital stepping stone for Japan under the perspective of converging the three routes: Gains for the two countries are ¥3.3 trillion and ¥2.3 trillion in 2020 respectively (Joint Study(2006)).

For the extension of the PTT to the APEC, the U.S.-Korea FTA may be a stepping stone.

2. Australia has achieved a high level of trade liberalization including services (adoption of negative lists) and government procurement in the six bilateral FATs. Yet, sugar and dairy products were treated differently in the Australia-U.S. FTA.
IV. Australia-Japan Relationship (II)

3. Japan’s success in agriculture reform is a precondition for concluding the bilateral FTA. The GDP loss arising from liberalization of agriculture products was estimated to be \(¥790\) billion (Ministry of Agriculture(2007), yet the increase in consumer surplus was entirely neglected.

4. Cooperation on infrastructure investment (PPP) coupled with financing investment projects and financial services, in addition to clean energy development (LNG, Carbon Capture Storage), food security (stable supply) and environment issues.
Annex I. Demographic Changes in Pacific Asia (from Bonus to Onus)

(1) Change from “demographic bonus” to “demographic onus”
: from increase in labor force combined with decrease in dependency ratio to the opposite combination
: Japan is in an “aged society” after 1995, not an “ageing society”, and it will enter into a “super-aged society” (with the elderly share of above 20%) in 2020.

(2) Increase and decrease in working age population
: explanation about “conundrum of long-term interest rate” and asset price bubbles

(3) Human mobility: wider scope for skilled workers, notably human-care service related workers and professionals and engineers
# Table 1. Ageing in APEC

<table>
<thead>
<tr>
<th>Country</th>
<th>Population Bonus Beginning</th>
<th>End</th>
<th>Aging Society (&gt;7%)</th>
<th>Aged Society (&gt;14%)</th>
<th>Growth Rate of WAP (&lt;0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>1965</td>
<td>2015</td>
<td>2000</td>
<td>2020</td>
<td>2020</td>
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<td>1985</td>
<td>2015</td>
<td>2015</td>
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<tr>
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<td>2010</td>
<td>2000</td>
<td>2040</td>
<td>2030</td>
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<td>1970</td>
<td>2025</td>
<td>2020</td>
<td>2030</td>
<td>2015</td>
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<tr>
<td>Thailand</td>
<td>1965</td>
<td>2010</td>
<td>2005</td>
<td>2040</td>
<td>2040</td>
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<tr>
<td>Malaysia</td>
<td>1965</td>
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<tr>
<td>Philippines</td>
<td>1965</td>
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<td>2030</td>
<td>n.a.</td>
<td>n.a.</td>
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<tr>
<td>Viet Nam</td>
<td>1970</td>
<td>2020</td>
<td>2020</td>
<td>2035</td>
<td>2025</td>
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<tr>
<td>Mexico</td>
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<td>2015</td>
<td>2035</td>
<td>2030</td>
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<tr>
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<tr>
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<td>2020</td>
<td>2045</td>
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<tr>
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<td>1965</td>
<td>2015</td>
<td>2025</td>
<td>2050</td>
<td>2020</td>
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<tr>
<td>Papua New Guinea</td>
<td>1965</td>
<td>2050</td>
<td>2050</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>
Fig. 1 Proportion of Working Age Population (1)
Fig. 2 Proportion of Working Age Population (2)
Fig. 3 Proportion of Working Age Population (3)
Fig. 4 Growth Rate of Working Age Population (1)
Fig. 5 Growth Rate of Working Age Population (2)
Fig. 6 Growth Rate of Working Age Population (3)
Annex II. Optimal Balanced growth under Demographic Changes

1. The “Goldenest Golden Rule” in OLG model:
Samuelson (1975) pointed out the additional constraint to “golden rule” (n=r) in neo-classical growth model, (where lower growth of workers raises utility on the golden rule path, due to higher capital intensity), because it is needed to support the elderly consumption after retirement. Thus,

Optimum population growth in OLG model

n*=(c⁰/k)^0.5,
Annex II. Optimal Balanced Growth under Demographic Changes

2. Assumption: utility function and production function are of Cobb-Douglas type.
   Then, optimal growth rate depends on the capital income share alone.
   \[ n^* = \frac{2a}{1-3a} \]: \( a = \) capital income share
   If \( a = 0.3 \) and one generation of thirty years, then
   \[ n^* = 6.7\% \] (in efficiency unit)
   Not only negative growth rate is excluded, but also higher labor input in efficiency unit is required.
   For \( 0 < a < \frac{1}{3} \), lower “\( a \)” implies lower optimal population growth.
Fig. 7 Growth Rate of Labor Input (efficiency included)

Japan
Annex III. Simplified Calculation of Human Capital

1. Human capital can be defined as the present value of future wages. Given the constant wage growth rate, the discount rate and depreciation rate, then

\[ H_t = w_t + w_t(1+g)/(1+r)(1+\delta) + \cdots + w_t(1+g)^T/(1+r)^T(1+\delta)^T \]

If workers retire at time \( T \), then the human capital can be approximated by the workers’ annual income multiplied by the number of years until retirement under the assumption of \( g = r + \delta \).
Annex III. Simplified Calculation of Human Capital

2. Alternative ways to calculate the human capital

(1) Micro-data (life time earnings and age profile of wages) based calculation (Takayama et al. (1990)): ¥4,406 trillion or ¥130 million per ordinary household in 1984

(2) Consumption based calculation (Hayashi (1982), Ogawa (1992)): ¥112 million per ordinary household in 1984
References


