Generational Accounts for Korea: An Update

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• Structure of Public Finance in Korea
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• Summary
Where we are?

• 3 Country teams already have results or experience in computing GA
  – Slovenia, Spain, UK

• 8 Country teams will present the results in Belo Horizonte conference
  – Finland, Hungary, India, Indonesia, Japan, Korea, Mexico, U.S.

• 3 country teams working on GA computing
  – Columbia, Peru

• 9 other Latin American countries have age-profiles ready
• New contributors:
  – Austria, Canada, Vietnam, Nigeria, Kenya,

• Schedule
  – Until May 2012, country reports, special issue chapters
  – Until August 2012, international comparison
Structure of Public Finance in Korea

- Korean Public Finance consists of:
  - Social welfare system
  - Government consumption
  - Tax system
– Social welfare system
  • Public pensions
    – National Pension (NPS)
    – Pension for Civil Servants (PCS)
    – Pension for Private School Employee (PPS)
    – Pension for Military Personnel (PMP)
  • Medical Insurance (MI)
  • Long-term Care Insurance (LCI, introduced in 2008)
  • Basic Pension (BP, Introduced in 2008)
  • Employment Insurance (EI)
  • Industrial Accident Compensation Insurance (IACI)
  • Social Welfare Services and Public Assistance
    – Minimum Living Standards Security (MLSS)
    – Other Social Transfer Programs (OSTP)
– Tax System:
  • Labor Income Taxes
  • Capital Income Taxes
  • Consumption Taxes
  • Tax on Asset-Holdings
  • Tax on Asset-Transactions
  • Other Taxes

– Government Consumption
  (Classified by function)
Government Cash Flow and Financial Capital

• Tax and non-tax revenue is about 32-33% of GDP.
  – During the period 2000-2008, Tax revenue increased from 18.8% to 20.7% of GDP.
    • Large proportion of consumption tax and capital income tax revenue
    • Small proportion of labor income tax
    • Larger proportion of taxes on asset transaction than taxes on asset-holding
– Social Insurance Contribution increased from 3.8% to 5.8% of GDP.

– Other revenue consists of:
  • Current transfers, Capital transfers from domestic non-governmental sectors and from abroad
• Government expenditure is about 30.4% (33.1%) of GDP in 2008 (2009).
  – During the period 2000-2008, it creased from 22.4% to 30.4%
  – Among the components of the expenditure, the health and the social protection show the largest increase
    • Extension of the coverage of the public MI
    • Introduction of LCI, BP
  – Large increase in Health
    • Extension of coverage of the treatment
    • Increase in proportion of MI benefits in treatment fee
• The fiscal balance had been the surplus for the period 2000-2008.
  ➢ 3.0% of GDP (2008)
• Net financial is positive.
  ➢ 37.9% of GDP (2008)
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Source: OECD Economic Indicator, May 2011.
National Pension Statistical Yearbook, 2010
OECD Revenue Statistics, 2010
Special Features

• The current fiscal policies in Korea are not sustainable, because:
  – The fiscal surplus now is due to the positive net property income and the primary surplus of the NPS.
    • Excluding the net property income reduces the fiscal surplus from 3% to 1.5% (2008).
    • Further excluding the primary surplus of the NPS reduces the fiscal surplus to 0.5% (2008).
– The large net financial asset is due to the large NPS fund.
  • Excluding NPS fund reduces the net financial asset from 38.4% (2009) to 9.0%.
  • New concept of the public finance in Korea (‘Management-target budget’):
    – Defined as the ‘consolidated budget’ excluding the ‘NPS budget’.

– Increase in the proportion of the entitlement programs to the elderly.
  • Fast population aging will increase the expenditure of entitlement programs (see Figure 3).
• Long-term fiscal imbalance
  – The revenue will increase from 26.6% to 27.1% (2020) then will decline to 24.2%.
    • Due to the decrease in the labor force.
    • The revenue includes only ‘tax’ and ‘social contribution revenue’.
  – The expenditure will increase from 26.8% to 34.5%.
    • Due to the increase in benefit payment of the public pensions, the MI, the BP, the LCI.
    • The expenditure includes only ‘government consumption’ and ‘government transfers’, ‘net current and capital’ transfer from the non-governmental sectors and from abroad.
Figure 1. Change in Demographic Structure

Source: Author’s calculation using NSO’s population projection assumption
Figure 2. total government revenue and expenditure.

Source: Author’s calculation
Figure 3. Projection of Major components of Expenditure

Source: Author’s calculation
Fiscal sustainability in GA

• The budget balance and the net financial debt are not adequate to evaluate the sustainability of the public finance in Korea.
  – They reflect the government cash flow of the present and the past.

• GA provides useful indices, because:
  – It reflects the government cash flows of the future.
• Generational Imbalance is 189% in benchmark economy.

• Required tax adjustment
  ➢ 23.9% of the tax revenue under current tax policies if adjusted in 2020.
  ➢ 31.4% (42.7%) if adjusted in 2040.

• Accounts for current generations
  – Net payment:
    • Positive value for the aged 0-50.
    • Negative value for the aged more than 50.
– Public Pensions

• Still not sustainable despite the NPS Act revision, which reduces the replacement ratio from 60% to 40% because:
  – Low level of NPS contribution rate 9%
  – Fiscal imbalance of the PCS, the PPS, the PMP.

– Medical Insurance (MI)

• The Fiscal imbalance is more serious in MI than in public pensions.
• The large gap between the benefit expenditure and the contribution revenue.
• The gap is filled with the subsidy from central government.

– Long-term Care Insurance (LCI)

• Contribution revenue is 50% of the expenditure.
• The deficit is filled with the subsidy from central government.
• **Minimum Living Standard Security (MLSS)**
  – The value of the benefit is large, despite its narrow coverage, because of the high level of benefit of the benefit recipients.

• **Basic Pension (BP)**
  – The value of the benefit is large, because its wide coverage, 70% of the population aged 65 and older.

• **Taxes**
  – Large share of consumption tax
  – Relative unimportance of the labor income tax
  – Large proportion of taxes on asset transactions
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Table 5. Generational Imbalance (GI) and Required Tax Change\(^1\) (unit: %)

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Note: 1) Percentage increase in tax burden to attain long-run budgetary balance  
   2) Tax burden of current generations is adjusted, while that of future generations not changed.  
   3) Tax burden of future generations is adjusted, while that of current generations not changed.  
   4) Adjust tax burden is adjusted for all age groups from the respective year.

   [3] Not incorporating the introduction of Basic Pension  
   [4] Not incorporating the introduction of Long-Term Care Insurance  
   [6] High fertility rate assumption  
   [7] Low fertility rate assumption
Policy Experiments

• Policy changes since 2007.
  – NPS Act revision
    • Lowered the replacement from 60% to 40%
  – Introduction of the BP
  – Introduction of the LCI

• Change in fertility rate
  – Low fertility rate assumption
    • Total fertility rate falls to 0.97 in 2040.
  – High fertility rate assumption
    • Total fertility rate rises to 1.58 in 2040.
• Disregarding the NPS Act revision ([1]→[2])
  – Raises the Generational Imbalance from 189% to 231%
  – Raise the required tax adjustment from 23.9% to 26.7%, if adjusted in 2020.
• Disregarding the BP ([1]→[3])
  – lowers the Generational Imbalance to 161%
  – Raise the required tax adjustment to 21.4%.
• Disregarding the LCI ([1]→[4])
  – lowers the Generational Imbalance to 166%
  – Raise the required tax adjustment to 22.0%. 
• Disregarding all the policy revision since 2007 ([1]→[5])
  – Deteriorates the fiscal sustainability
  – lowers the Generational Imbalance to 177%
  – Raise the required tax adjustment to 22.5%.

• High fertility assumption
  – lowers the Generational Imbalance to 155%
  – lowers the required tax adjustment to 23.6%.

• Low fertility assumption
  – Raises the Generational Imbalance to 236%
  – Raises the required tax adjustment to 22.2%. 
Summary

• The current cash flow and the financial asset data of the Korea government may cause the fiscal illusion that government budget is financially sound.

• It is necessary to take into account the future cash flow of the government finance and GA is a useful to evaluate the fiscal sustainability of Korean government.
  – Increase in the entitlement programs, especially for the elderly
  – Population aging