

Policies to boost savings via capital markets : Case of Korea

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Contents

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1

Motivation

2

Recent trends on savings

3

Issues on savings in Korea

4

Policy implications

❖ Definition of saving and its roles

- Gross saving metric based on national accounts
 - Gross saving is equal to gross investment(both domestic and foreign) in economy
 - Net borrowing by capital inflow and foreign investment if saving is less than domestic investment
 - Saving across the household, corporate, and government sector
- Gross saving represents the supply of capital available for investment
 - Real interest rate is determined by the demand and supply of capital
 - Investment is a key factor to induce economic growth

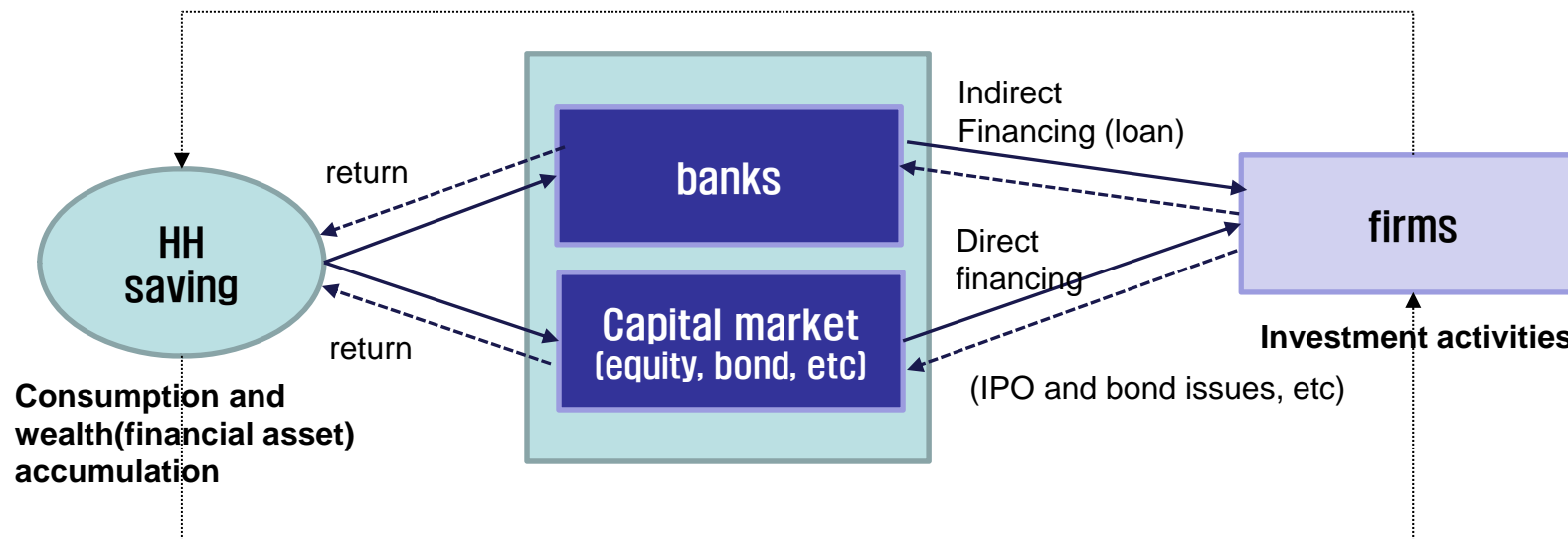
$$\begin{array}{ccccc}
 S & = & I & + & NX \\
 \text{Gross} & & \text{Domestic} & & \text{Foreign} \\
 \text{saving} & & \text{Investment} & & \text{Investment}
 \end{array}$$

Source	description
Household(HH)	<ul style="list-style-type: none"> • Gross term (disposable income – consumption expenditures) • Main channel to provide capital available for investment
Corporate	<ul style="list-style-type: none"> • Retained earning and depreciation (consumption of fixed capital) • Can be used for future investment, but also for precautionary purpose
government	<ul style="list-style-type: none"> • Revenue (including contributions to public pension) – expenditures

Motivation – why saving rate?

❖ Relation between saving and economic growth

- Trade-off exists between saving and economic growth
 - Positive correlation between saving and economic growth (not causality)
 - Saving(especially HH's saving)'s role as investment capital
 - But it lowers consumption, which may slow the economic growth
- The key is to ensure the mechanism that saving induces the investment
 - High saving rates are typically observed in developing process (emerging countries)
 - The research of Bank of Korea(2009) indicates that 1% decrease in HH saving leads to 0.25% decrease in investment and 0.19% decrease in growth rate

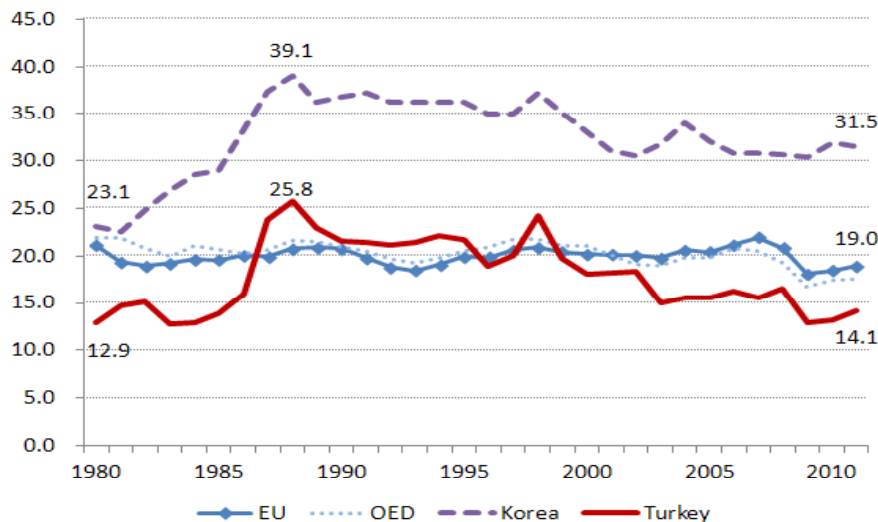


Motivation

❖ Turkey vs. Korea in terms of gross saving rates

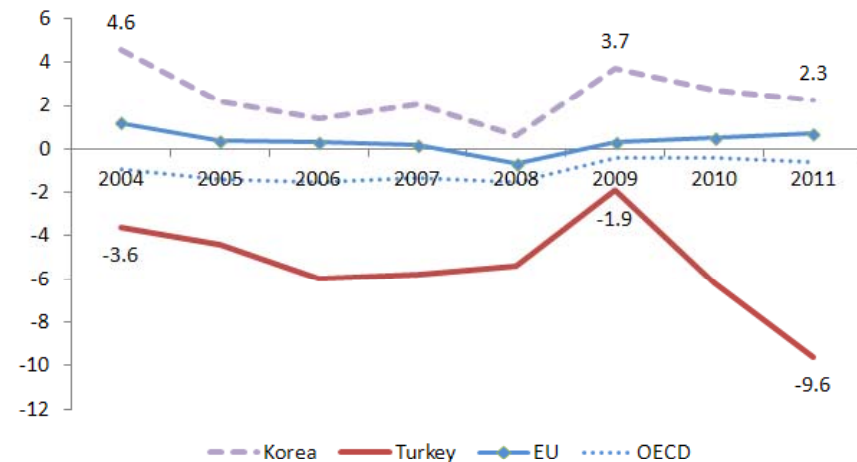
- Saving rates in both countries have declined since 1990s
 - Similar pattern as the decline of the global saving rate
- Low saving rate associated with current account deficit in Turkey
 - High saving rate and positive balance on current account in Korea
 - Vulnerability to the exogenous shock and the resulting risk of capital outflow
 - Need to boost savings used for investment capital

Gross saving rate (% of GDP)



Source: World Bank

Balance on current account (% of GDP)



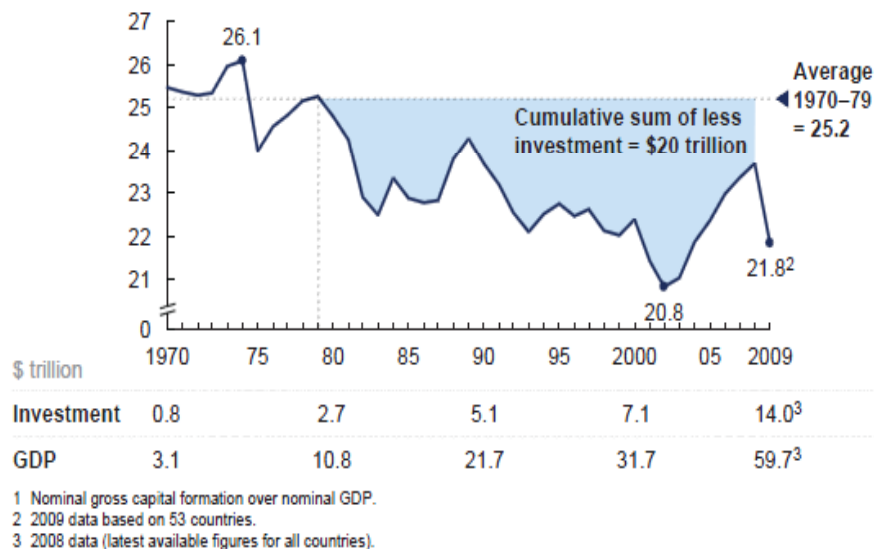
Source: OECD

Recent trends on savings

❖ Global Trends in developed countries

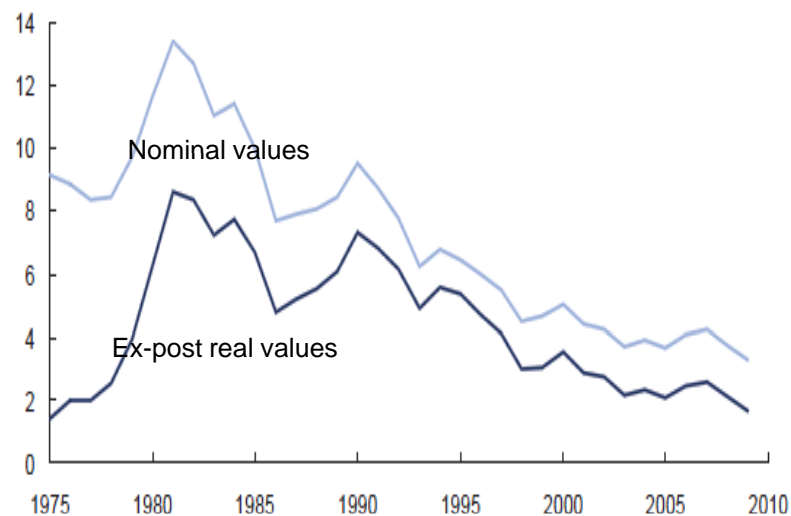
- Global investment rate has declined since 1980s, especially in developed countries
 - Cumulative sum of less investment is \$20 trillion from 1980 to 2009(MGI estimate(2010))
 - During the same period, global saving rate is relatively stable (24.0%(1980) to 21.4%(2009))
- Decrease in real interest rates in developed countries
 - Equilibrium interest rate at which capital demand(investment) and supply(saving) intersect
 - Decrease in real interest rate due to the decrease in the capital demand

Global investment rate (% of GDP)



Source: MGI(2010)- p.10, Exhibit 1

Real interest rates in developed countries



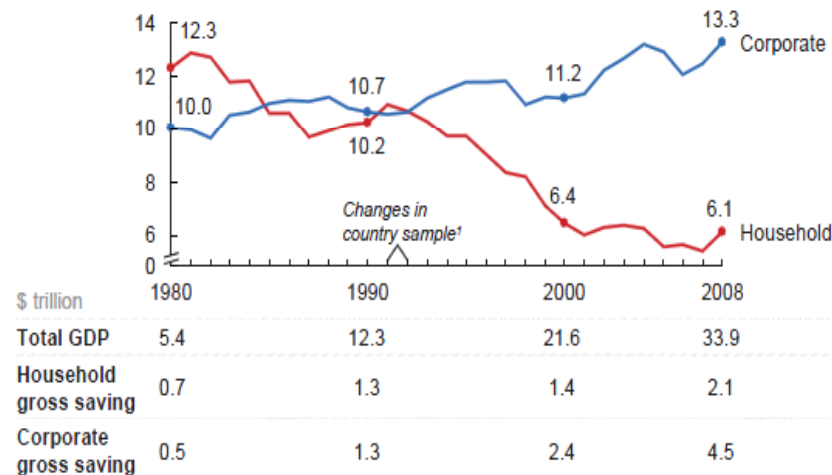
Source: MGI(2010)- p.16, Exhibit 7

Recent trends on savings

❖ Global Trends in developed countries

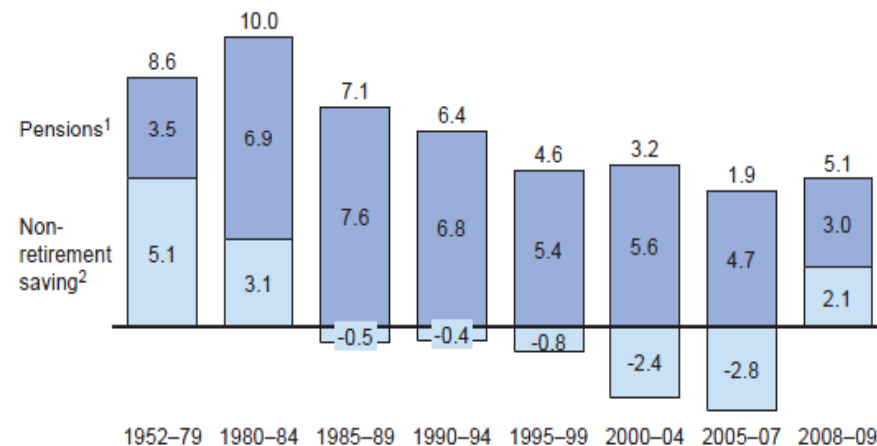
- Household saving rates in developed countries have declined significantly while the corporate saving rates have increased – why?
 - Impact of aging populations – incentive of consumption smoothing over lifetime
 - Increase of non-consumption expenditures (tax, pensions, and health insurance, etc)
 - Increasing availability of credit - taking out debt to finance consumption
 - Wealth effect of asset appreciation

Household and corporate saving rate (%)



1 Based on a sample comprising Australia, Canada, France, Germany (from 1991 onward), Italy, Japan, South Korea, the United Kingdom (from 1992 onward), and the United States.
 SOURCE: McKinsey Global Economic Growth Database; United Nations System of National Accounts; McKinsey Global Institute

Components of US household saving (%)



1 Includes public and private pension plans, 401(k) plans, and individual retirement accounts; does not include Social Security withholdings.

2 Other saving calculated through the change in household assets less liabilities, excluding retirement saving.

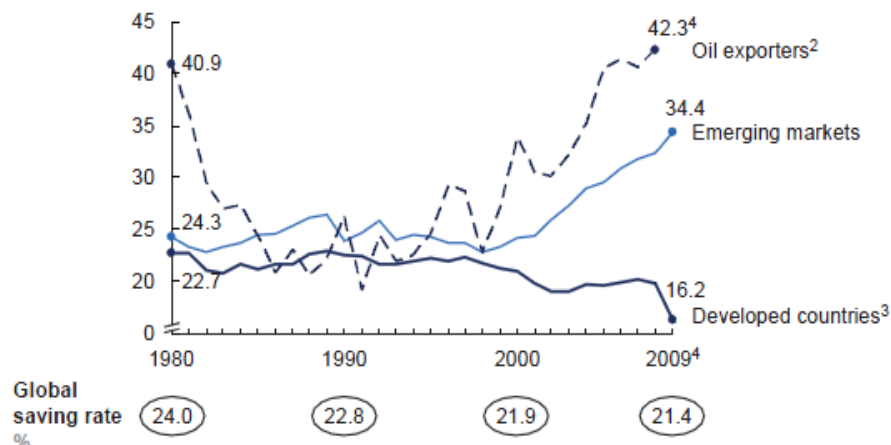
SOURCE: Bosworth & Bell (2005); US National Income and Product Account; US Federal Reserve Flow of Funds Accounts; McKinsey Global Institute

Recent trends on savings

❖ Global Trends in emerging countries

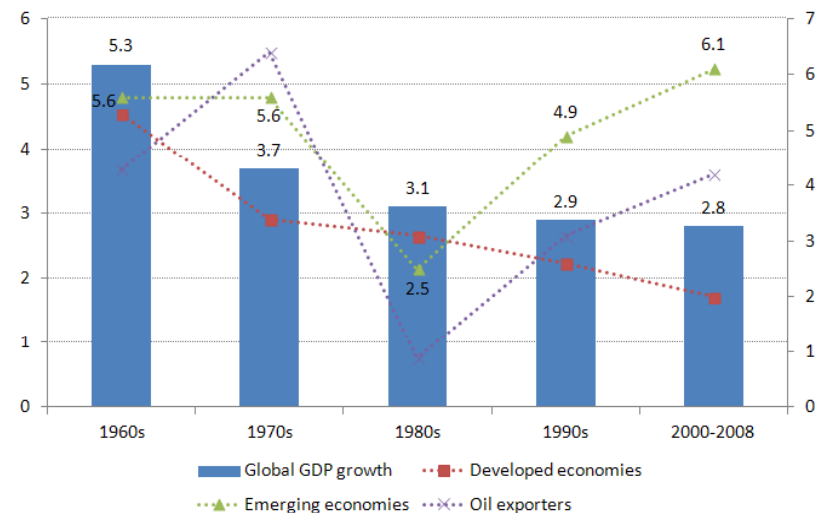
- Saving rates in emerging countries have increased since 2000s
 - Savings provide the capital for investment to induce economic growth
- Real GDP growth has increased in emerging countries since 1980s
 - Annual growth rate: 3.1% in the 1980s to 6.1% in the 2000s
 - On the other hand, It has slowed in developed countries

Saving rates from 1980 to 2009 (%)



1 Gross saving by households, corporate sector, and government sector for 111 countries.
 2 Algeria, Angola, Azerbaijan, Iran, Kazakhstan, Kuwait, Libya, Nigeria, Norway, Saudi Arabia, United Arab Emirates, Venezuela.
 3 Countries with average 2004–08 GDP per capita > \$14,500 (world average), excluding developed oil exporters.
 4 Estimates based on a sample of 52 countries (equivalent to about 85 percent of global GDP); data for oil exporters through 2008.
 SOURCE: CEIC; Haver Analytics; McKinsey Global Economic Growth Database; World Development Indicators of the World Bank; McKinsey Global Institute

Real GDP annual growth rates (%)



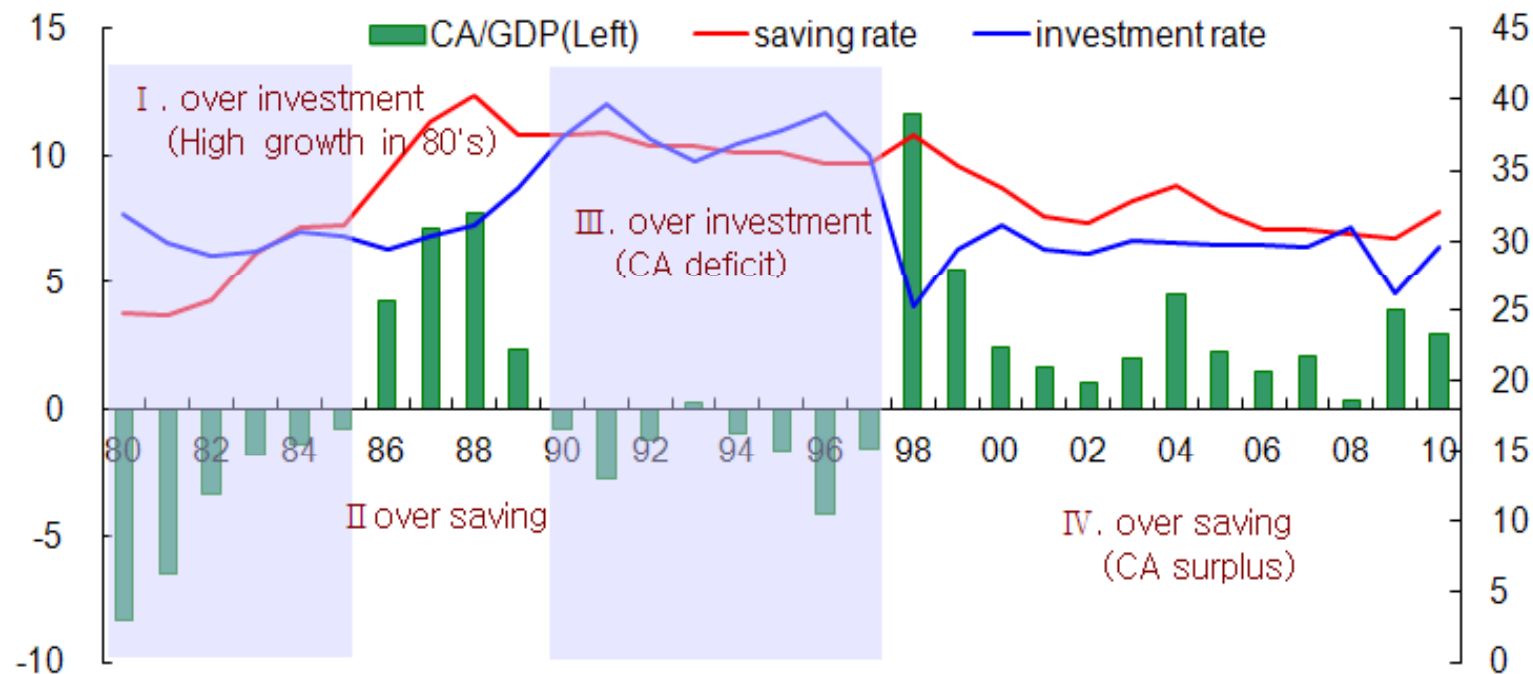
Source: MGI(2010)- p.11, Exhibit 3

Issues on savings in Korea

❖ Overview of saving trend in Korea since 1980s

➤ Relatively *high* saving rate during the period despite the declining trend in its level

- Experience of high growth with high saving until the 1980s, main channel to provide investment capital is bank (HH's deposit) that lends loan to firms for investment activities
- Over investment associated with current account deficit
- Over saving associated with current account surplus



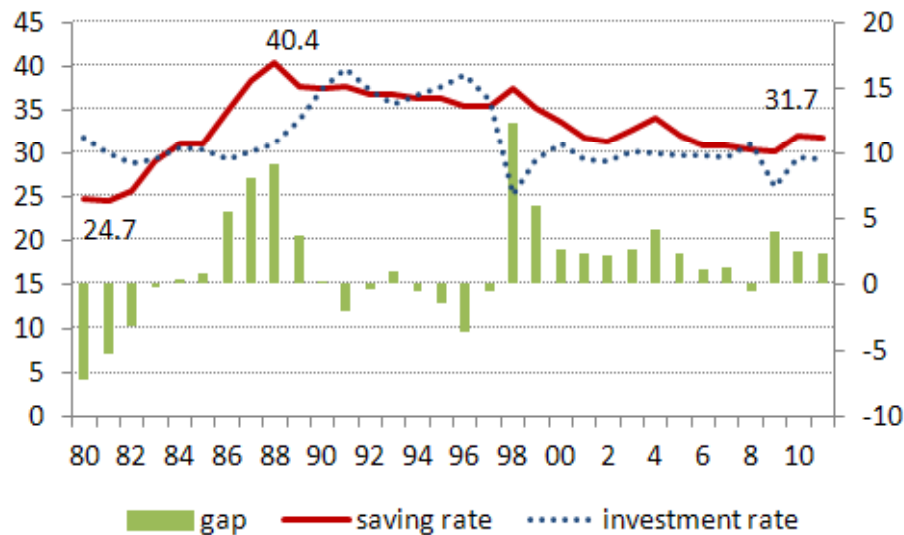
Source: BOK

Issues on savings in Korea

❖ Overview of saving trend in Korea since 1980s

- Relatively *stable* saving rate during the period despite the declining trend in its level
 - Its level is 31.7% in 2011, which is the second highest level among OECD member countries
 - Much higher than that of key developed countries when their GDP per capita is \$20,000 mark
 - High saving rate with CA surplus and saving-investment gap is not that large
 - → domestic financing for investment capital

Gross saving rate of Korea (%)



Source: BOK

Comparison of gross saving rates (%)

country	saving rate(%)	period
Japan	25.5~34.3	1991~2004
Korea	30.8~32.1	2003~2010
Germany	19.8~22.8	1991~2004
UK	15.0~17.9	1996~2003
Italy	19.7~22.6	1994~2005
US	14.0~16.8	1988~1996
Canada	14.5~24.2	1993~2002
Australia	21.0~22.0	1994~2001

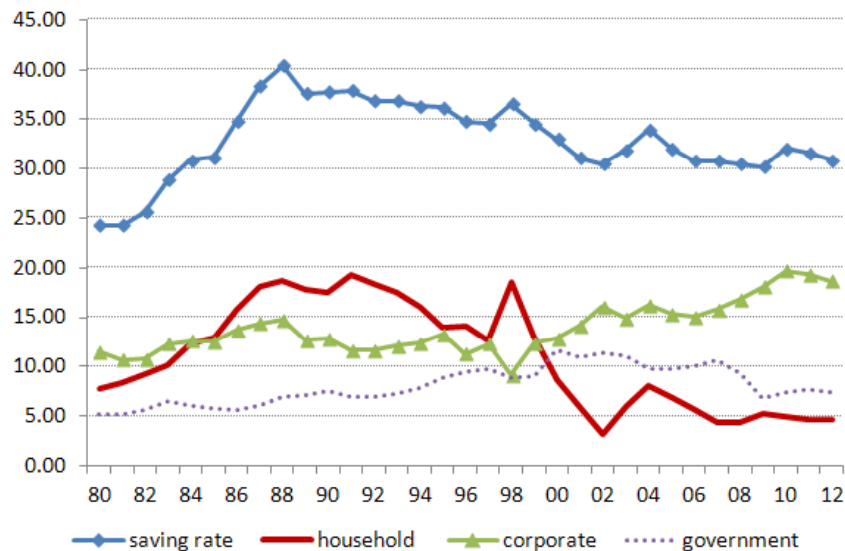
Saving rates when GDP per capita is \$20,000 mark in each country

Issues on savings in Korea

❖ Decrease of HH's saving rate

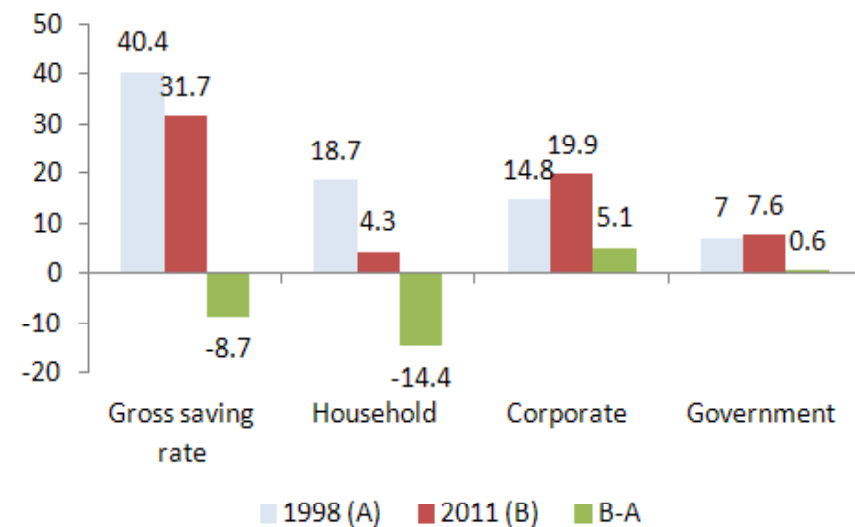
- Significant decline of HH's saving and increase of corporate saving
 - Gross saving rate (31.7% as of 2011) is still high, but composition has changed
 - HH's saving rate is 4.3% as of 2011, -14.4% decrease from 1998 to 2011
 - Corporate saving rate is 19.9% as of 2011, 5.1% increase during the same period
 - Similar pattern observed in developed countries

Composition of saving rate of Korea (%)



Source: BOK

Recent change of saving rate (%)



Source: BOK

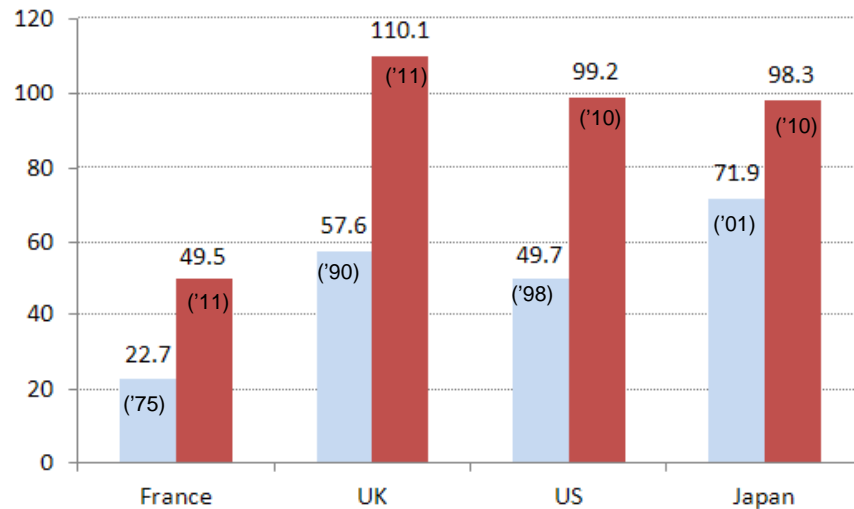
Issues on savings in Korea

❖ Increase of corporate saving rate

➤ Corporate saving rate has increased since 1998

- Similar pattern observed in developed countries
- This corporate saving is used for investment financing (internal financing)
- Why?
 - Capital-intensive industrialization and the resulting decrease in the relative price of capital
 - Internal capital accumulation due to the debt-capital ratio improvement since 1998
(424.6% in 1997 to 114.8% in 2010)

Change in share of corporate saving(%)



Source: MOSF

	Korea	OECD
Gross saving rate	31.7%	22.1%
Household	4.3% (13.6%)	6.9% (31.2%)
Corporate	19.9% (62.8%)	15.5% (70.1%)
Government	7.6%	-0.4%

() is share of each saving component

Issues on savings in Korea

❖ Key factors to affect the decline of HH's saving rate

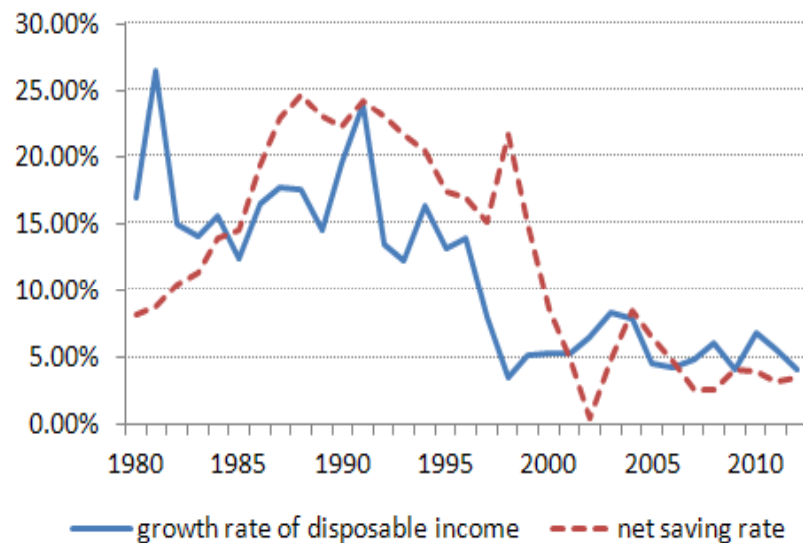
➤ Decrease in HH's disposable income

- Its annual growth rate has declined from over 10% in the 1990s to around 5% in the 2000s
- This limits the willingness and capacity to save

➤ Increase in non-consumption expenditures

- Its share in income has increased from 15.6% in 1990 to 18.8% in 2012
- Increasing expenditure on national pension and health insurance (since 1999)

Disposable income vs. net saving rate(%)



Source: BOK

Composition of non-consumption expenditures (%)



Source: NSO

Issues on savings in Korea

❖ Key factors to affect the decline of HH's saving rate

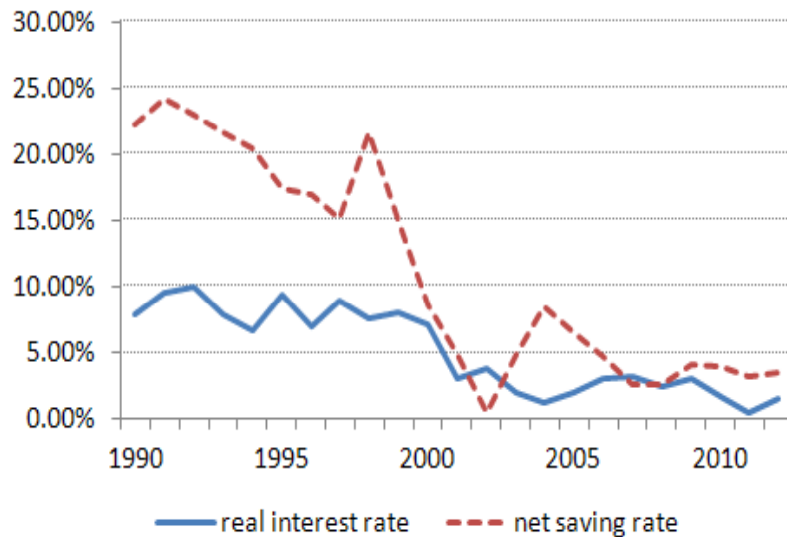
➤ Decline of real interest rate

- Its level was around 10% in the 1990s, but it is 1.57% in 2012
- This has lowered HH's saving incentive

➤ Sharp increase of HH's debt – accompanied by asset price bubble (especially real estate)

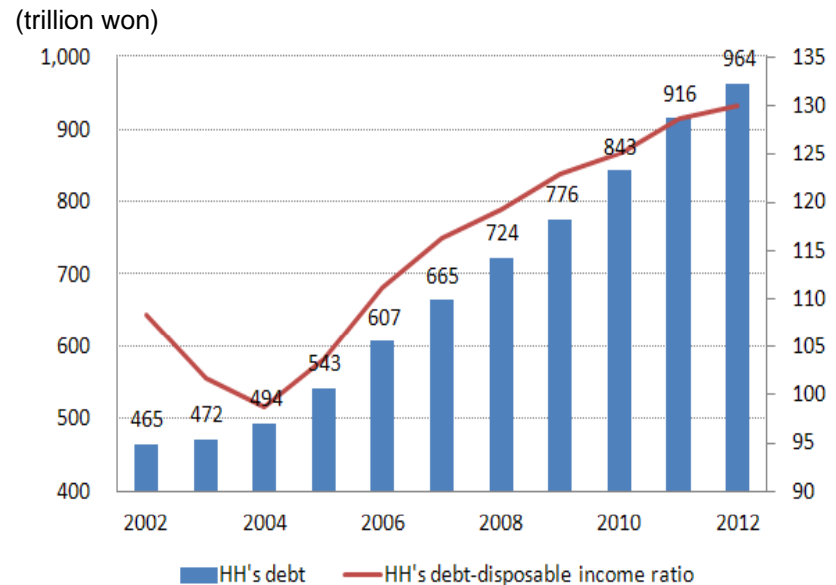
- HH's debt has almost doubled during the last 10 years
- Significant increase of loans with home collateral

Real interest rate vs. net saving rate(%)



Source: BOK

Increase of HH's debt since 2002

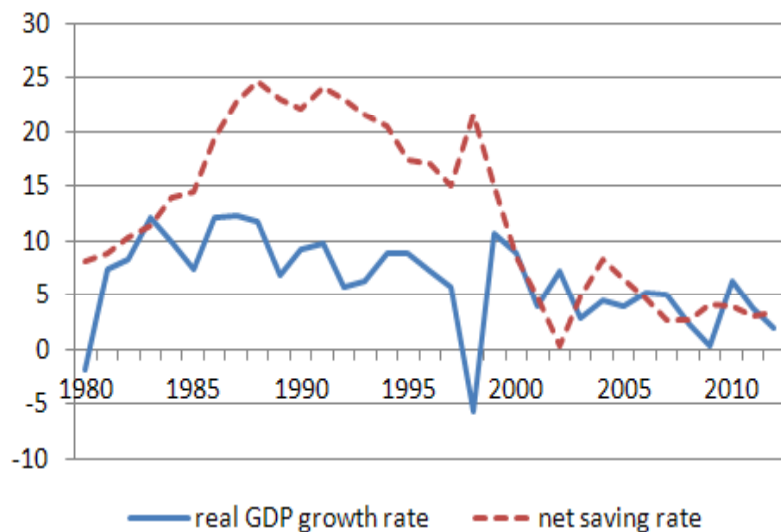


Source: BOK

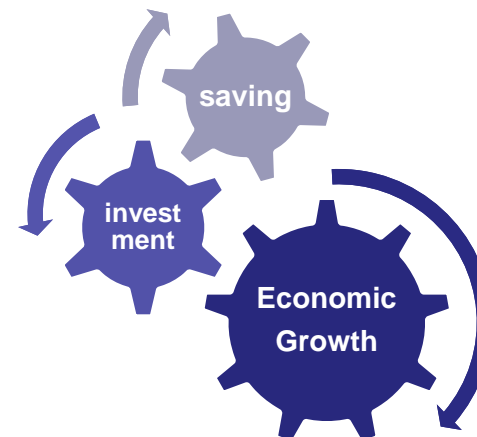
Issues on savings in Korea

❖ Implications – potential risk

- Gross saving rate of Korea is still high and relatively stable
 - Its level is 31.7% in 2011, which is the second highest level among OECD member countries
 - High saving rate with CA surplus and saving-investment gap is not that large
- However, there is a risk to limit the economic growth
 - Declining trend of HH's saving rate that potentially lowers the economic growth
 - 1% decrease of HH's saving leads to 0.25% and 0.19% decrease of investment and economic growth according to Bank of Korea(2009)
 - Especially, recent increase of HH's debt might further lower the saving in the future



Source: BOK

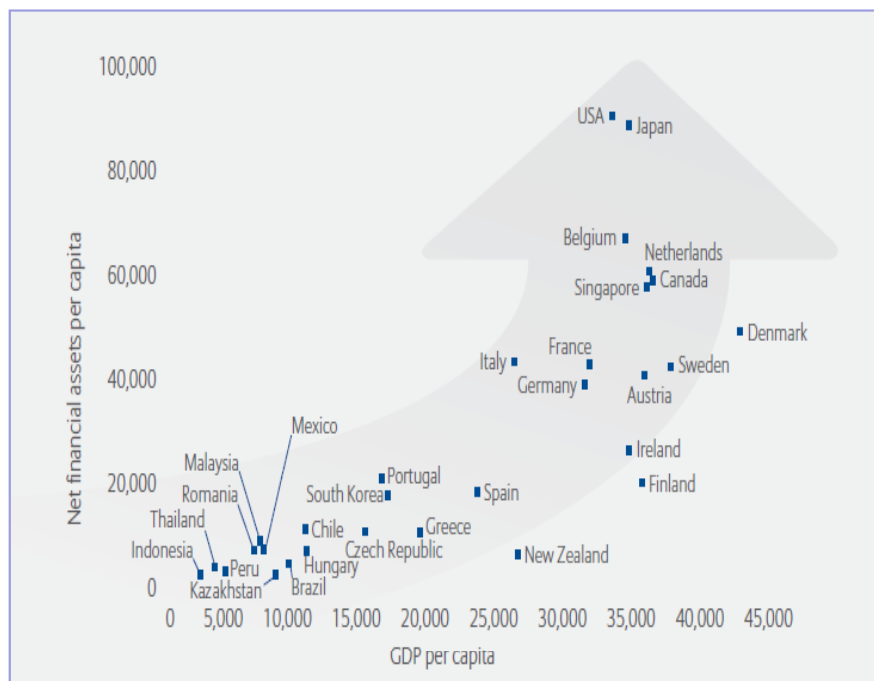


We need measures to boost HH's saving!

Policies to boost savings via capital market

❖ Focus on measures to increase HH's financial asset

- Strong positive correlation between financial asset and GDP per capita
 - Need measures for HH to increase saving by way of accumulating financial asset
 - This can be done by utilizing both traditional bank product and investment in capital market
- Provision of investment capital through capital market



Source: Allianz(2012)

- Korean HH's strong preference on real estate
- Bank-oriented market structure
- → need of asset diversification

Low level of financial asset in Korean HH's asset

	Financial asset	Non-financial asset
Korea	21.4%	78.6%
US	67.1%	32.9%
Japan	60.5%	39.5%

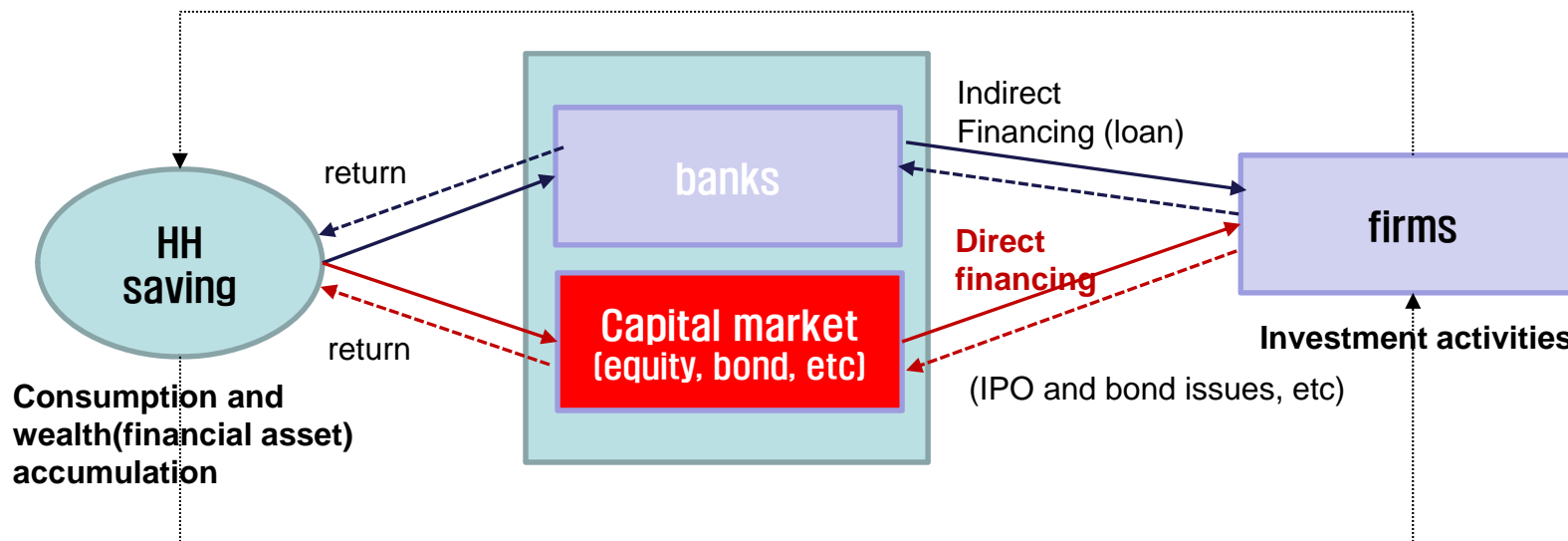
Source: KOFIA

Policies to boost savings via capital market

❖ Strengthening the capital market channel to boost investment

➤ Environmental changes to emphasize the role of capital market

- In Korea, firms have financed investment capital mainly through bank channel. *However,*
- (1) *Sharply decreased HH saving rate implies limited role of banks in the future*
- (2) *Aging society & growth potential of public pension and retirement pension*
- (3) *Low growth- low interest rate*
- → *increasing need for diversification and medium risk & medium return products*
- So, need to strengthen another channel, i.e., direct financing channel, especially for venture/SMEs as new growth engines in the future → This also may contribute to HH's asset accumulation



Policies to boost savings via capital market

❖ Recent policy changes in Korea

Policies focusing on venture/SMEs under the so-called slogan “Creative Economy”

- Emphasis on the creativity + ITC technology → **employment & economic value-added creation**
- Paradigm change from “***lending***” to “***investment***” to financially aid venture/SMEs
- Setup “Growth Ladder Fund” with \$2 billion investment capital per year for three years

Introduction of new financial products for HH's saving

- Property accumulation savings & property accumulation funds with **tax benefits**
- But, these products are not so popular because of some strict restrictions
- e.g) People who can actually afford to buy these products are excluded by qualifications in income

Measures to strengthen the link between retirement pension and capital market

- Increase the investment limit in equity funds & ETFs (up to 40%)
- Tax benefit to pension products such as income deduction or tax deduction
- But, still need to increase these limit

Efforts to enhance investment capacity and improve the market infra

- Introduction of new alternative investment vehicle such as hedge funds in 2011
- Revision of Capital Market Acts to nurture IB and improve market infra (ATS)
- Other efforts to revitalize the equity and bond market
- → provide the investment capital to firms and wealth accumulation to investors

Policies to boost savings via capital market

❖ Caveats

Public Funding

- Consistent monitoring to prevent “government failure”
- Monitor “moral hazard” and minimizing crowding-out effect
- Public fund plays a role to complement the gap that private sector cannot cover

Financial Products

- Need to give investors incentive for long-term investment by effective tax benefits
- → Essential to provide enough long-term liquidity to the capital market
- *e.g) effective tax benefits to products for long-term investment purpose(education, retirement, home purchase, etc.) without any additional requirements*

Aging Society

- Provide financial devices to saving via capital markets especially for pension funds
- *e.g) US (401K) & Australia (Superannuation funds)*
- Essential to equip products with medium risk & medium return for diversification effects

Market Infra

- The key is to provide firms with various direct financing methods in capital markets
- Establishing the infra necessary for IB business (IPO and M&A activities, and corporate bonds market) & alternative investment (PEF & Hedge Funds)

Thank you.