



Korean Economy: Past, Present and Future

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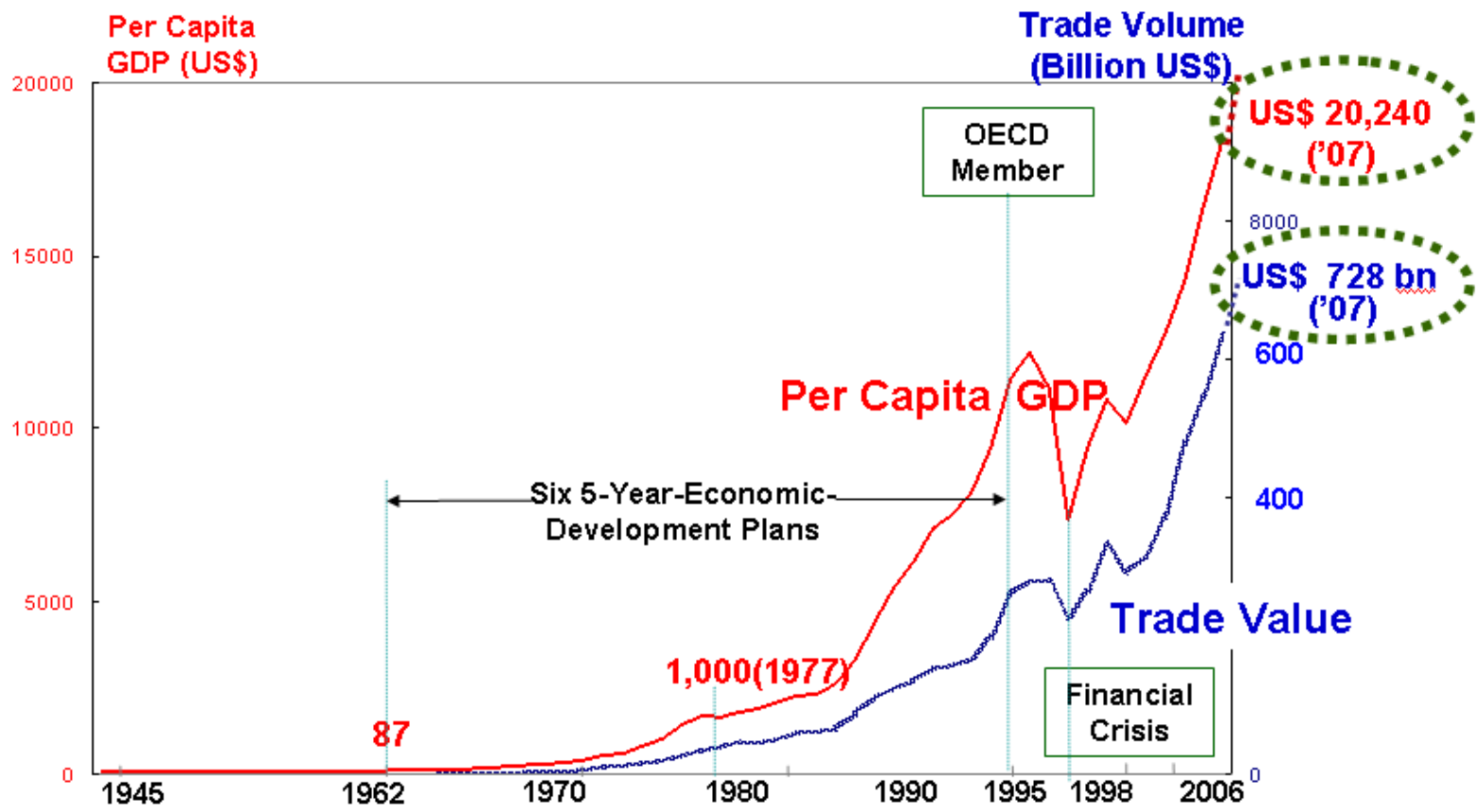


I. Korea's Economic Development

Economic Take-Off

The Human-made Miracle

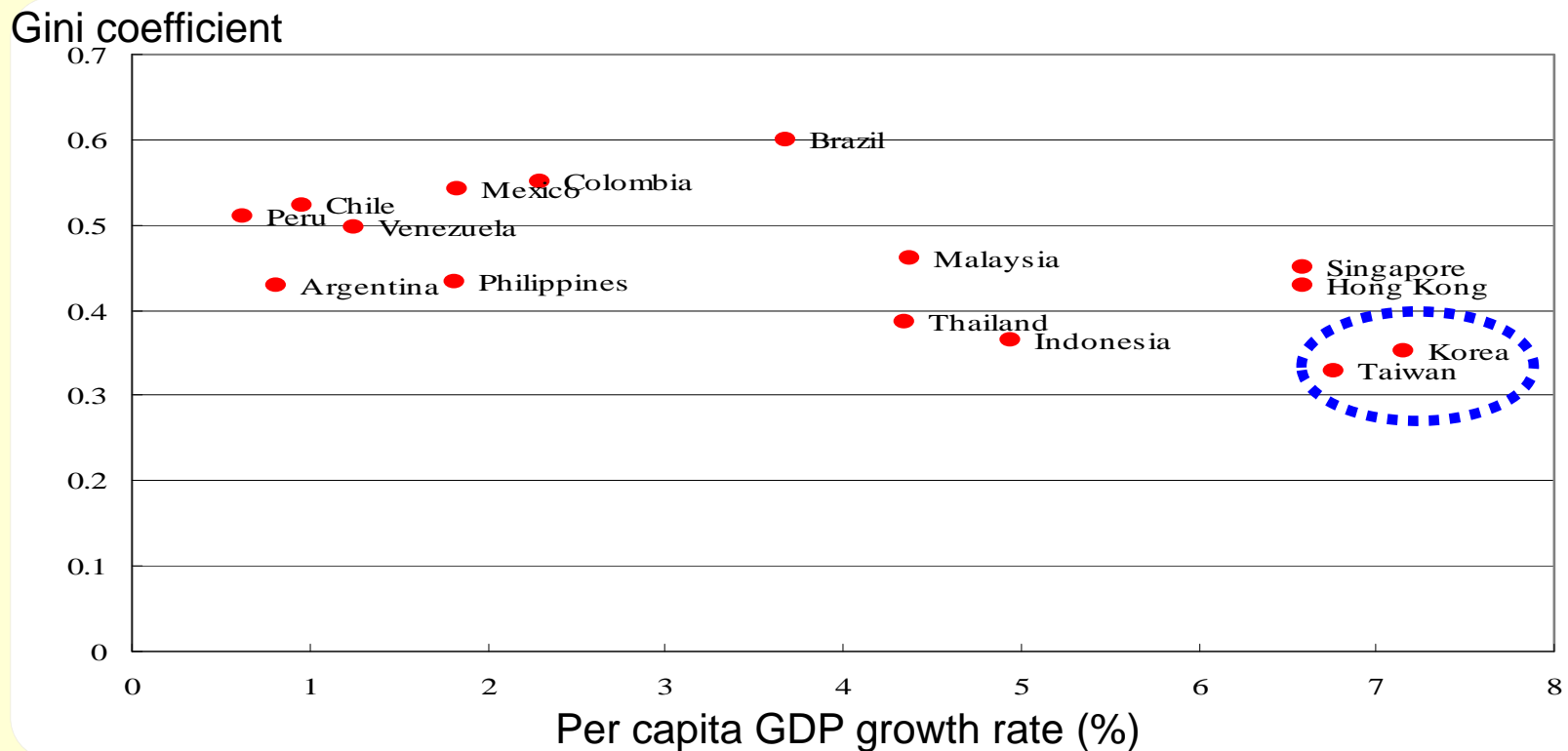
Never before have the lives of so many people undergone so rapid an improvement in one generation.



Rapid Growth and Low Income Inequality

Korea has been cited as one of the successful countries which has achieved **rapid growth** while maintaining relatively **low income inequality**.

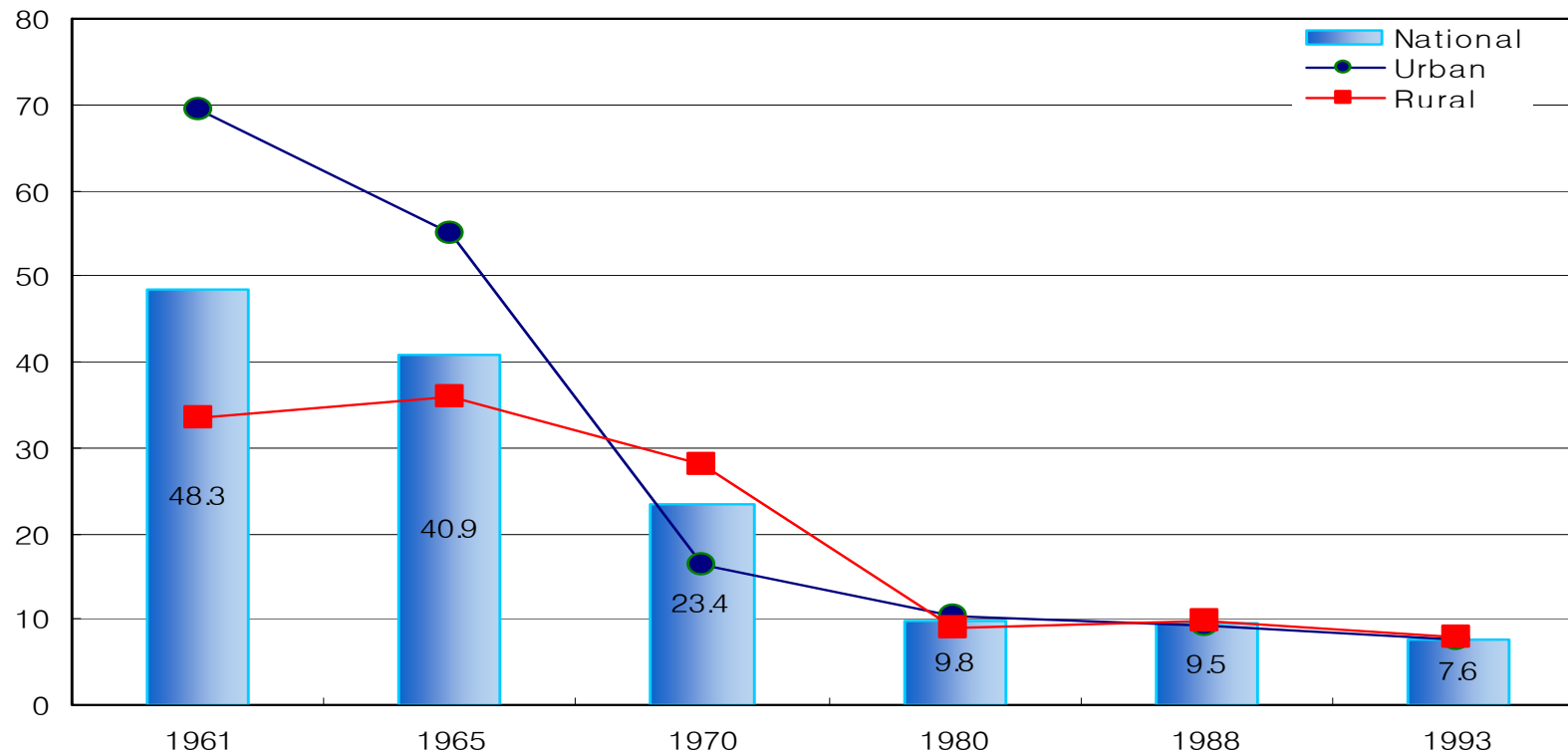
Gini coefficient and GDP per capita growth rate : 1965-1990



The Human-made Miracle

Absolute poverty declined steeply from 48% in 1961 to less than 10% entering 1980s.

Absolute Poverty (%) : 1965-1993



Making a Miracle



I do not think it is in any way an exaggeration to refer to this continuing transformation of the Korean society as **a miracle**.....
Never before have the lives of **so many people** undergone **so rapid an improvement** over **so long a period**, nor is there any sign that this progress is near its end.”

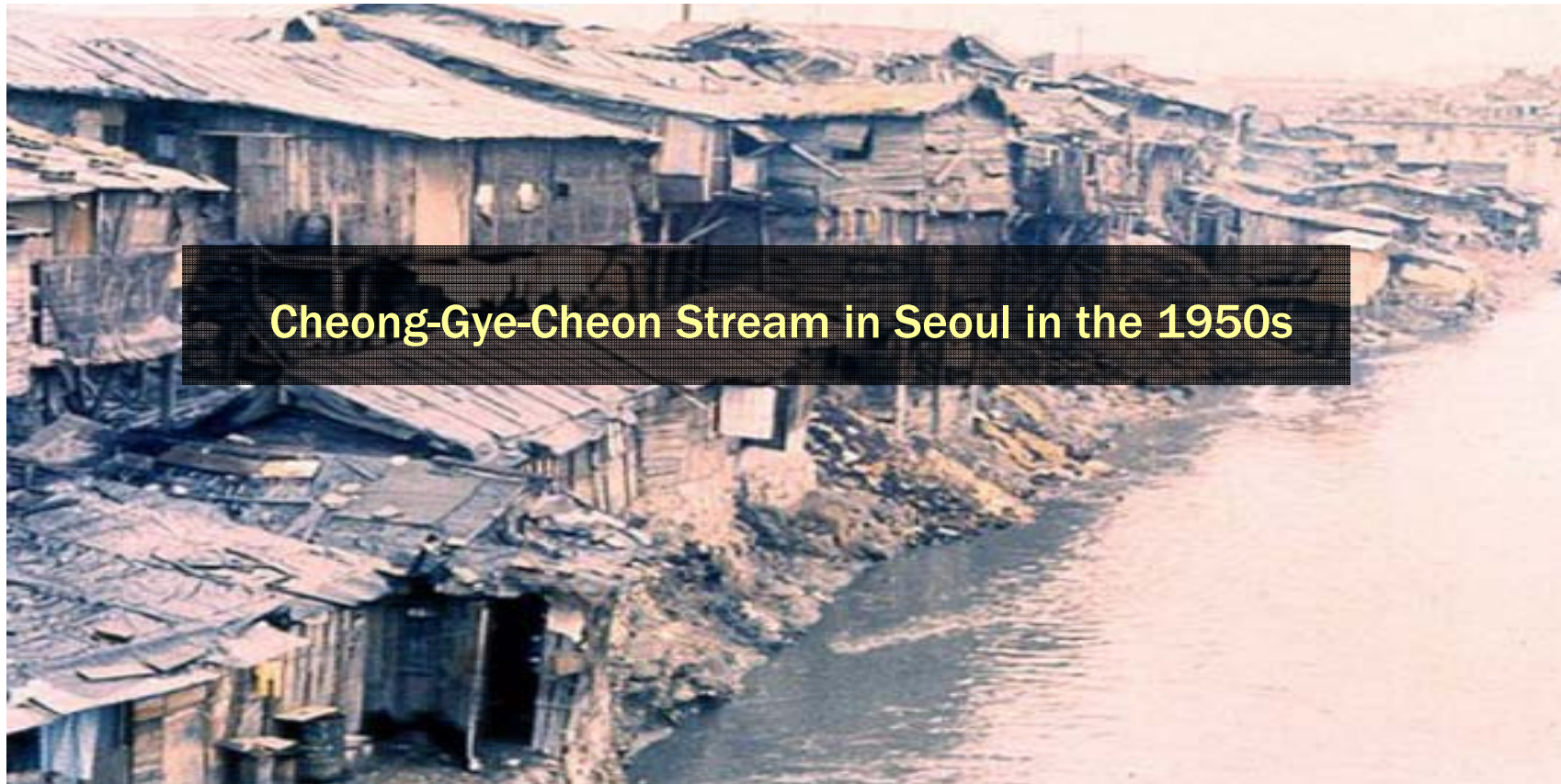
Robert Lucas, Jr., “Making a Miracle”
Econometrica, 1993 (pp. 251-252)

Korea’s policy conversion towards outward-looking is **the most dramatic and dynamic** among the various policy changes in developing countries after the Second W.W .

Anne O. Krueger
Trade, Foreign Aid and Economic Development (KDI, 1980)

From Poverty to Prosperity

With no natural resources, capital and technology.....



From Poverty to Prosperity

However, Korea achieved the Miracle of Han River.



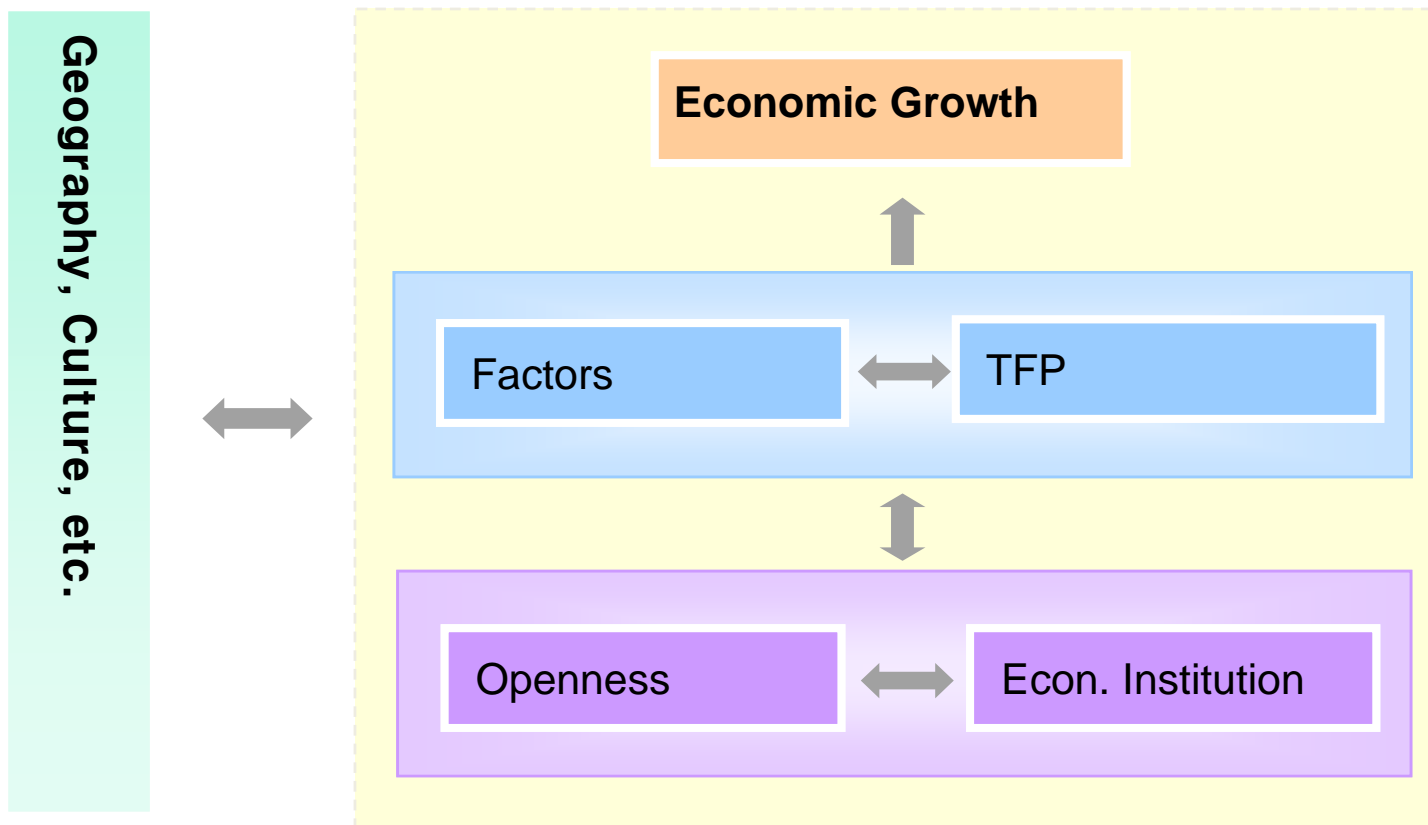
Growth and Development are Important

- Growth and Development is the best way to eliminate poverty.
- Defining the poverty line as daily living cost under \$US 1.25, 1.4 billion people are living below the poverty line.
- 2,700 children under age 5 are dying everyday due to famine.



Determinants of Growth

Determinants of Economic Growth



All Happy Families Resemble One Another

Common Features of HPAEs

Bottom

- Higher growth rates of **physical capital** supported by higher rates of **domestic savings**
- Higher initial levels and growth rates of **human capital**
- Proper **government intervention**
- Earlier and steep declines in **fertility**

Surface

- High average **growth rates**
- Rapid decline in **income inequality**
- Rapid output and productivity growth in **agriculture**
- Higher rates of growth of **manufactured exports**
- Rapid improvement in Human Development Indicator



Institution + Policy



History of Economic Policies

**ECONOMIC POLICIES HAVE BEEN DISTINCTIVE
IN NATURE FROM PERIOD TO PERIOD.**

1950s Industrialization through import substitution under protection

1960s Export Promotion

1970s Heavy and Chemical Industry (HCI) Drive

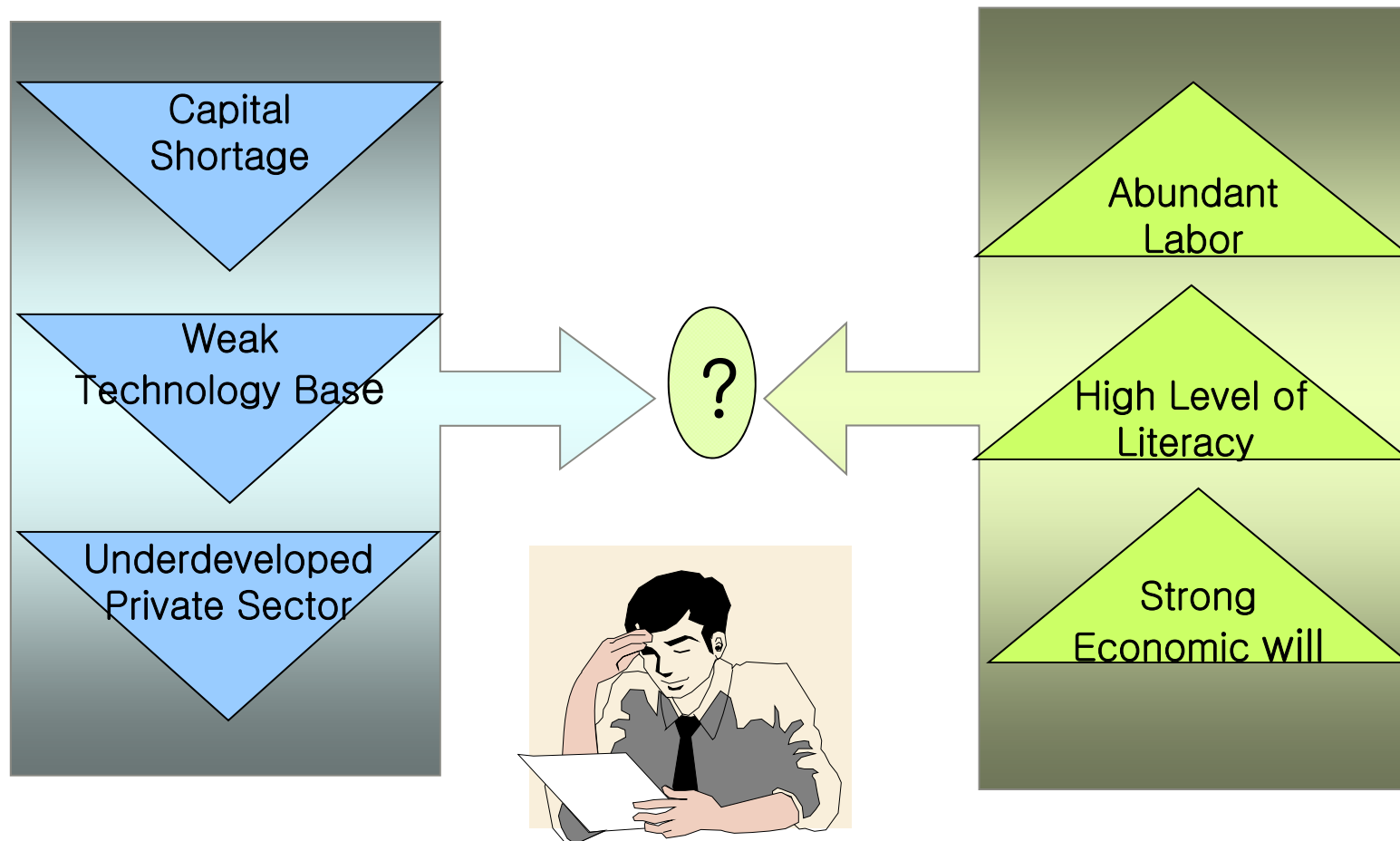
1980s Stability / Market / Trade Liberalization

1990s Institutional Reforms

- One commonality: extensive and intensive government intervention

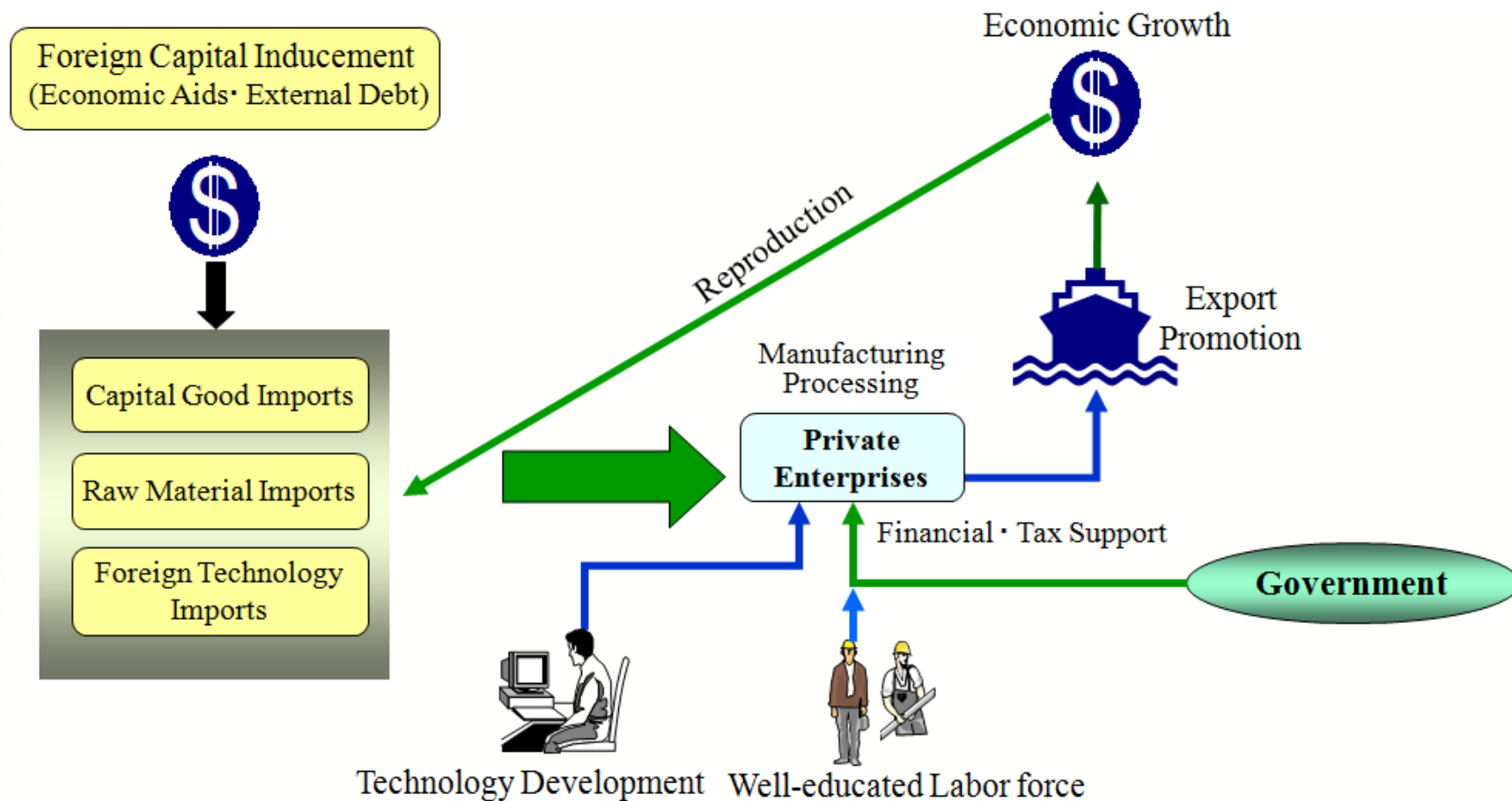
Economic Take-Off with Outward-looking Development Strategy

Economic Conditions in the early 1960s



Economic Take-Off with Outward-looking Development Strategy

Working Mechanism of Outward-looking Development Strategy



Education Investment Strategies

Sequential Government Budget Investment

- Primary → Secondary → Tertiary Education

Steady Increase in Education Budget

- MOE Budget/Gov't Budget: 9.8%(1963)→20.7%(2010)

Heavy Reliance on Private Contribution

- High School: 50.7%(1965)→61.7%(1990)→44.5%(2010)
- University: 75.4%(1965)→75.5%(1990)→78.9%(2010)

Efficient Use of Available Resources

- High Teacher Salary → High Quality Teacher

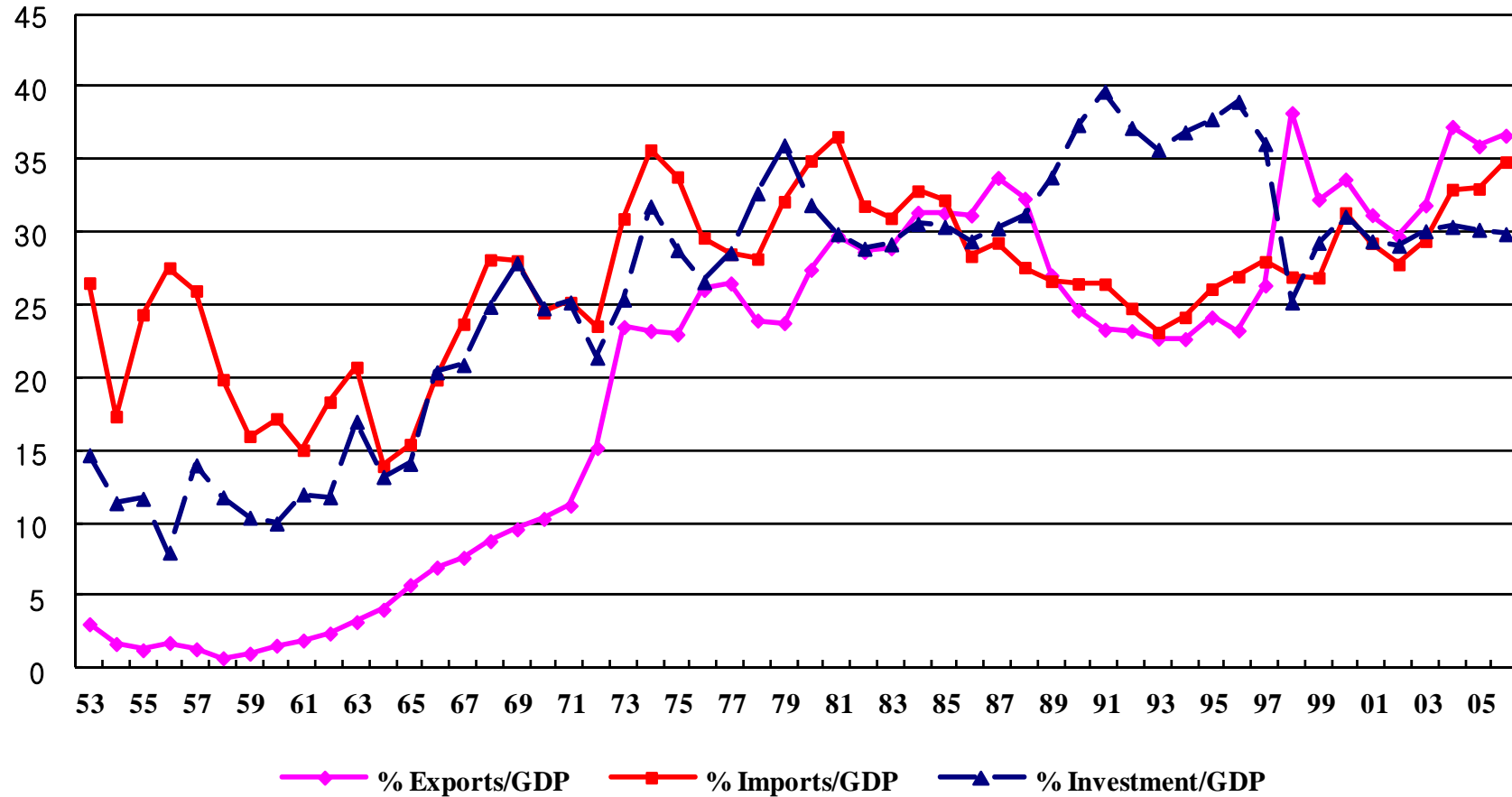


“ In South Korea, teachers are known as ‘nation builders.’ Here in America, it’s time we treated the people who educate our children with the same level of respect.”
- President Obama, Jan.25, 2011

Education and Human Resources

Steps for Econ. Development		Economic Development Policy	Education Policy
Phase 1 (1945-1960)		Agricultural Society , Rehabilitation, Seek for export-oriented growth policy	Establishment of elementary education system and universal primary education
Phase 2	1960s	Development of labor-intense industry (Esp. light industry- oriented)	Expansion of secondary education , reinforcement and expansion of professional advancement education
	1970s	Birth of conglomerates, Promote policies of heavy chemical industry	
Phase 3 (1980s-1990s)		Development of technology, knowledge, information- intense industry	Expansion of higher education
Phase 4 (2000-present)		Enter into the Global Era, Transform into the information and knowledge- oriented economy	Popularize higher education, informatization of education, lifelong education , efforts in developing human resources at national level

□ High Export and Investment



Source: IMF, *International Financial Statistics*.
Bank of Korea, *National Account*.



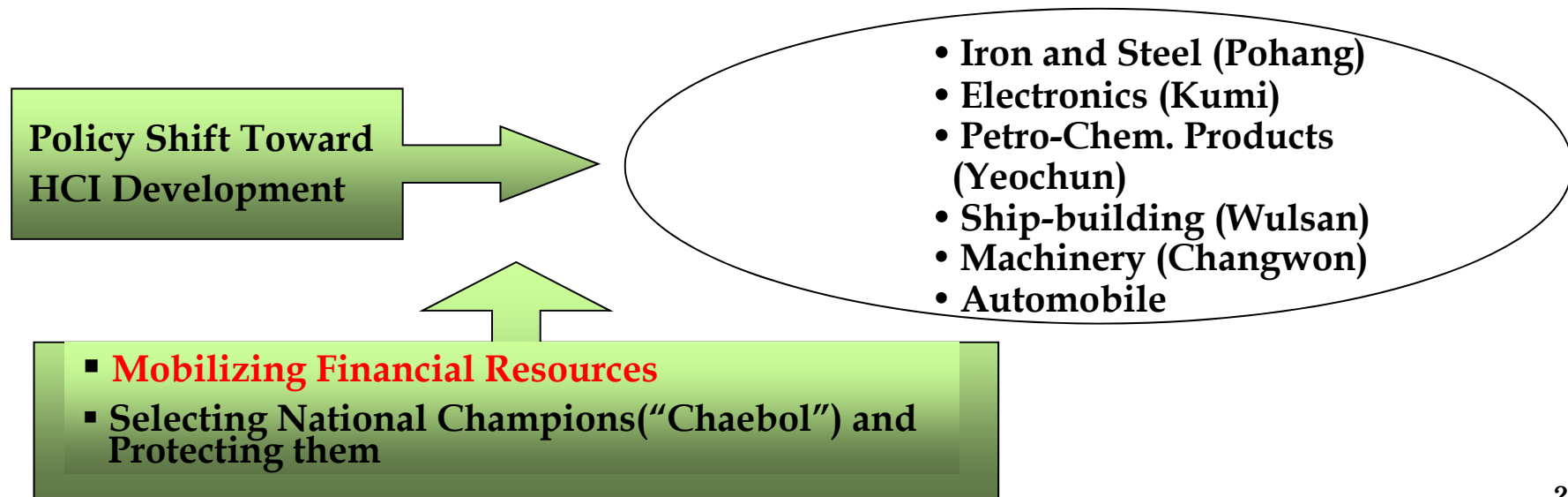
I. Korea's Economic Development

Industrial Dynamism

Towards Heavy and Chemical Industries

Export-driven policy focused on promoting **heavy and chemical industries** (HCIs) in the 1970s

- **Motivations:** To secure national security interests and competitive edge in light industry
 - * Nixon Doctrine (1969): “defense of each Asian nation lay in the individual nation itself”
 - Reduction of US forces stationed in Korea by a third in 1971
- **Confidence to move towards K-intensive HCIs.**



Policy Measures of the HCI Drive

Tax policy

- Reduction of direct tax, tax holidays, special depreciation of fixed capital, and temporary investment tax credits for selected industries

Trade policy : strengthened protection of heavy and chemical industries

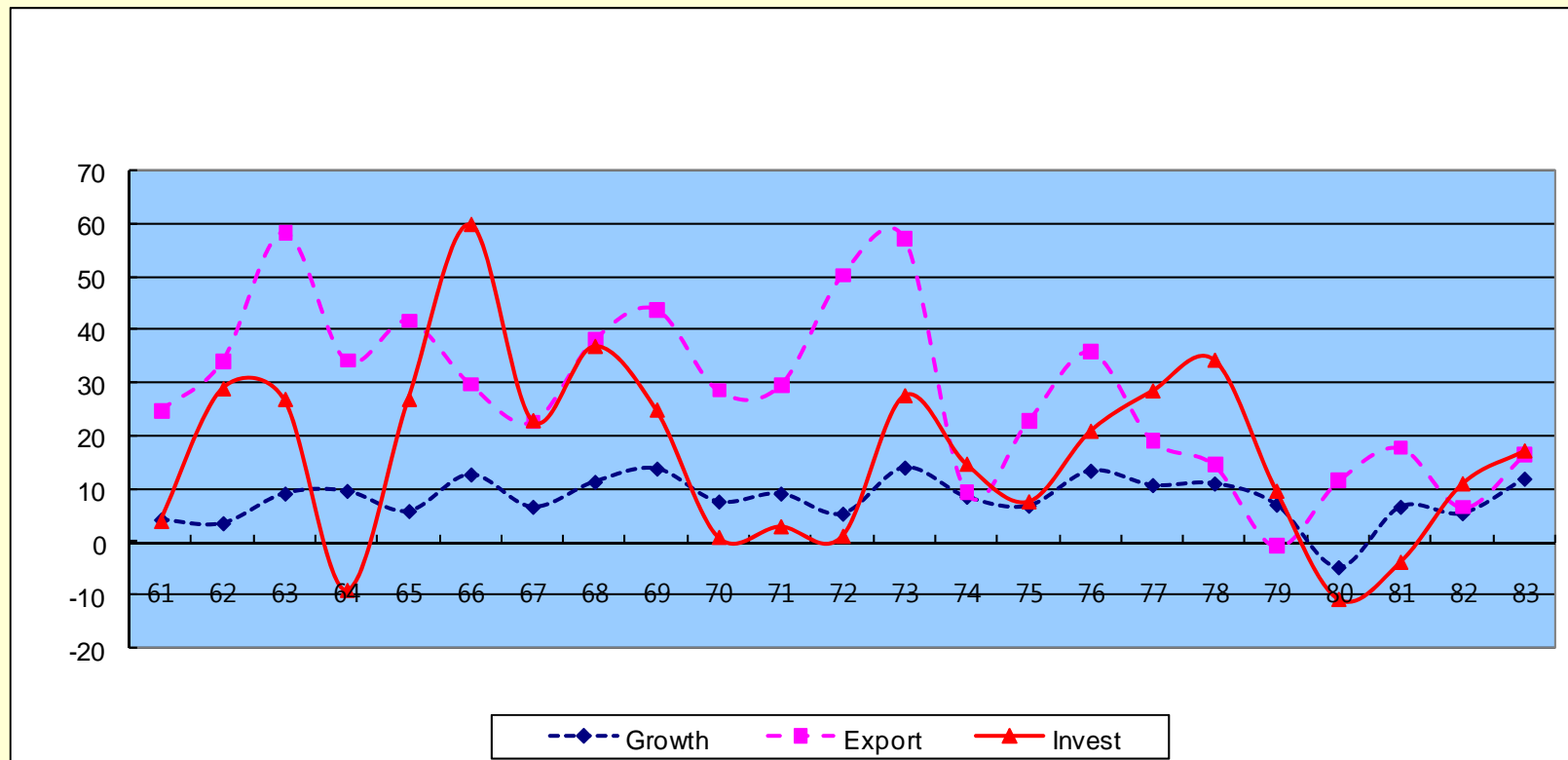
- Exporters continued to have access to foreign inputs at international prices through tariff rebate system.

Credit policy

- The government's direct intervention in the allocation of investment funds among industries, firms, and projects– through banks and other financial institutions that were under government control.
- National Investment Fund was created.

HCI Drive faced difficulties...

Exports, Investment and Growth



Expansion of *Chaebols* during the HCI drive

During 1974-78, it was not uncommon for the *chaebols* to triple their affiliates with new acquisitions in HCI.

	No. of affiliates		Acquisitions in HCI
	1974	1978	
Hyundai	9	31	Automobile, machinery, iron and steel, shipbuilding, aluminum, oil refining, heavy electrical, heavy machinery
Samsung	24	33	Shipbuilding, general machinery, electric switching systems, petrochemicals
Daewoo	10	35	Machinery, automobile, shipbuilding
Lucky	17	43	Petrochemicals, oil refining, electronics
Hyosong	8	24	Heavy electrical, machinery, auto parts, petrochemicals
Kukje	7	22	Iron and steel, machinery
Sunkyung	8	23	Chemical, machinery
Samhwa	10	30	Electrical, machinery
Ssangyong	17	20	Cement, heavy machinery, shipbuilding, heavy electrical
Kumho	15	22	Iron and steel, petrochemicals
Kolon	6	22	Heavy electrical, petrochemicals

Changes in the Development Strategy(1980-97)

Pitfalls of the Government-led Economic Development

Financial repression
due to prolonged
government intervention

Over-investment in
HCIs

High inflation and
large fiscal deficits

- Inefficient resource allocation
- Macroeconomic instability
- Rising inequality

Negative economic
growth (-3.9%) and
political crisis in 1980

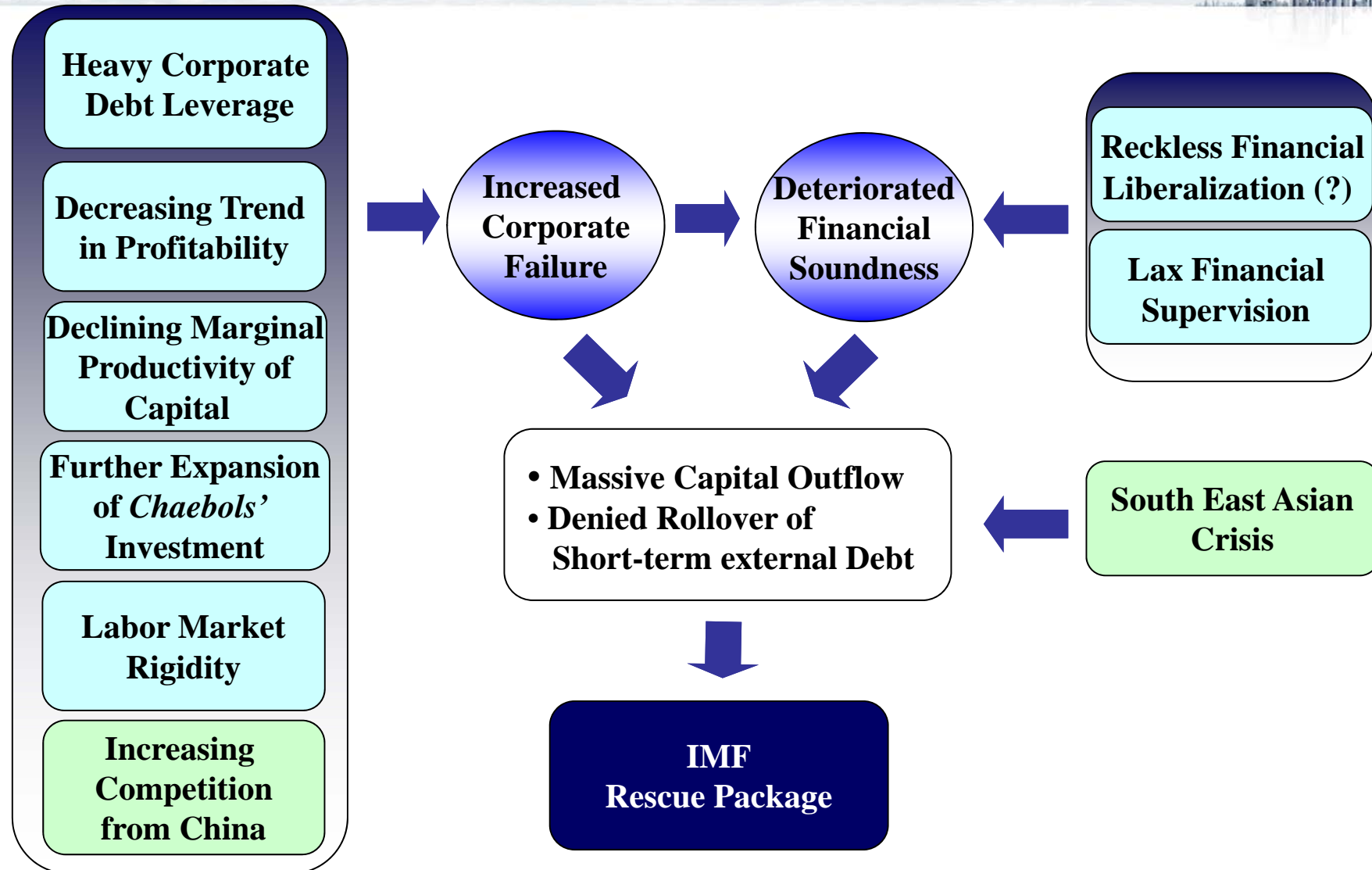
Change in policy stance:
“Liberalization and Stabilization”



I. Korea's Economic Development

Asian Financial Crisis and Reforms

Causes of 1997-98 Financial Crisis



Causes of 1997-98 Financial Crisis

Type I Crisis vs. Type II Crisis

- Type I: More traditional, Government failure
- Type II: Relatively modern, Private sector's failure

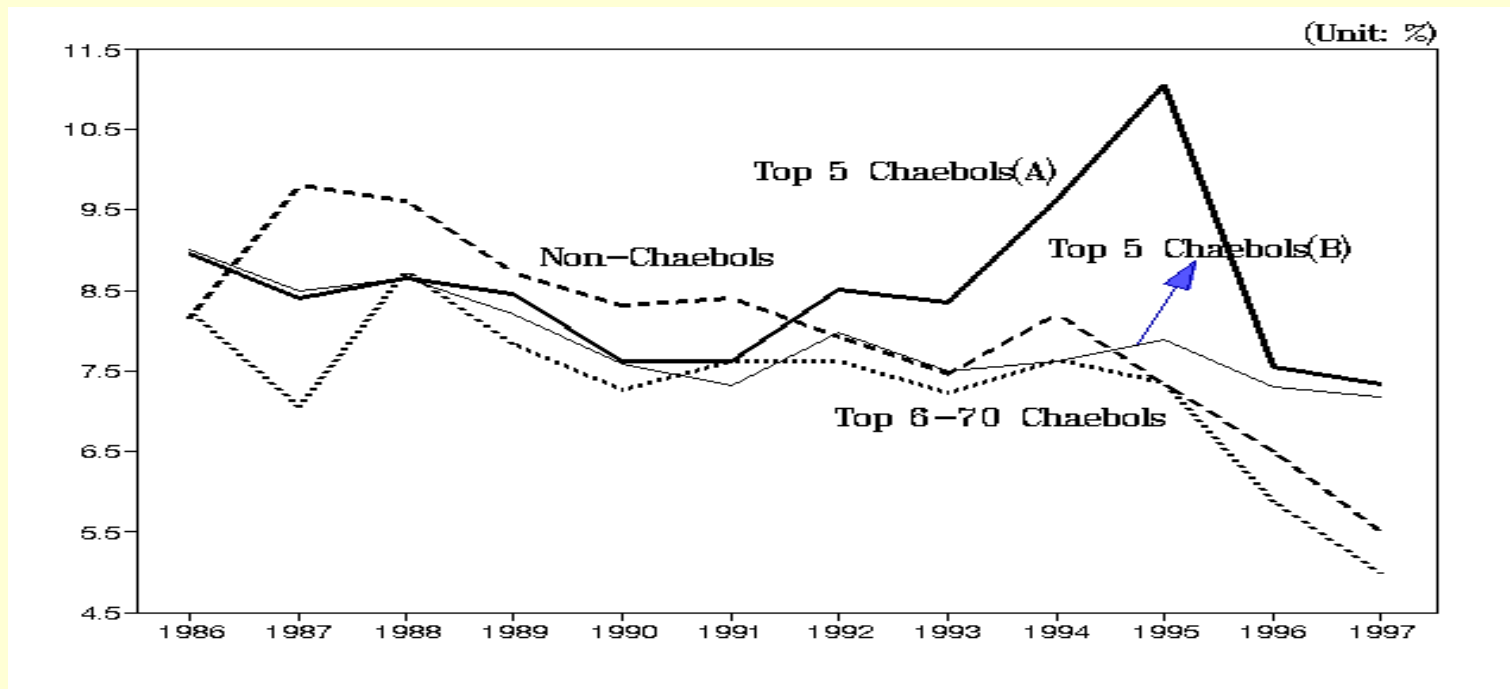
Corporate sector insolvency was the key factor behind 1997-98 financial crisis.

- Decreasing trend in **profitability** combined with increasing trend in **debt exposure** since the late 1980s resulted in weak debt servicing capacity.
 - ➔ Korean firm's financial vulnerability was not a temporary but **structural** phenomenon in nature.

Causes of 1997-98 Financial Crisis

Since the late 1980s, **profit** performance of firms **deteriorated** except for the semiconductor companies affiliated with the top 5 chaebols

Operating profits/total assets



Note : (A) includes all subsidiaries of the top 5 *chaebols* and (B) excludes semiconductor companies affiliated with the top 5 *chaebols* (Samsung Electronics, Hyundai Electronics, and LG Semiconductor).

Causes of 1997-98 Financial Crisis

Why the declining profitability in Korean firms?



Rising labor costs, combined with the **emergence of low-cost exporters such as China** weakened Korea's international competitiveness, especially **labor-intensive, low technology industries**.

- Korea was not able to compensate this loss in competitiveness with a rapid gain in competitiveness in **technology-intensive sectors**,
 - due to its weak capability to innovate and adopt advanced technologies

Causes of 1997-98 Financial Crisis

Why *Chaebols'* debt leverage was so vulnerable?



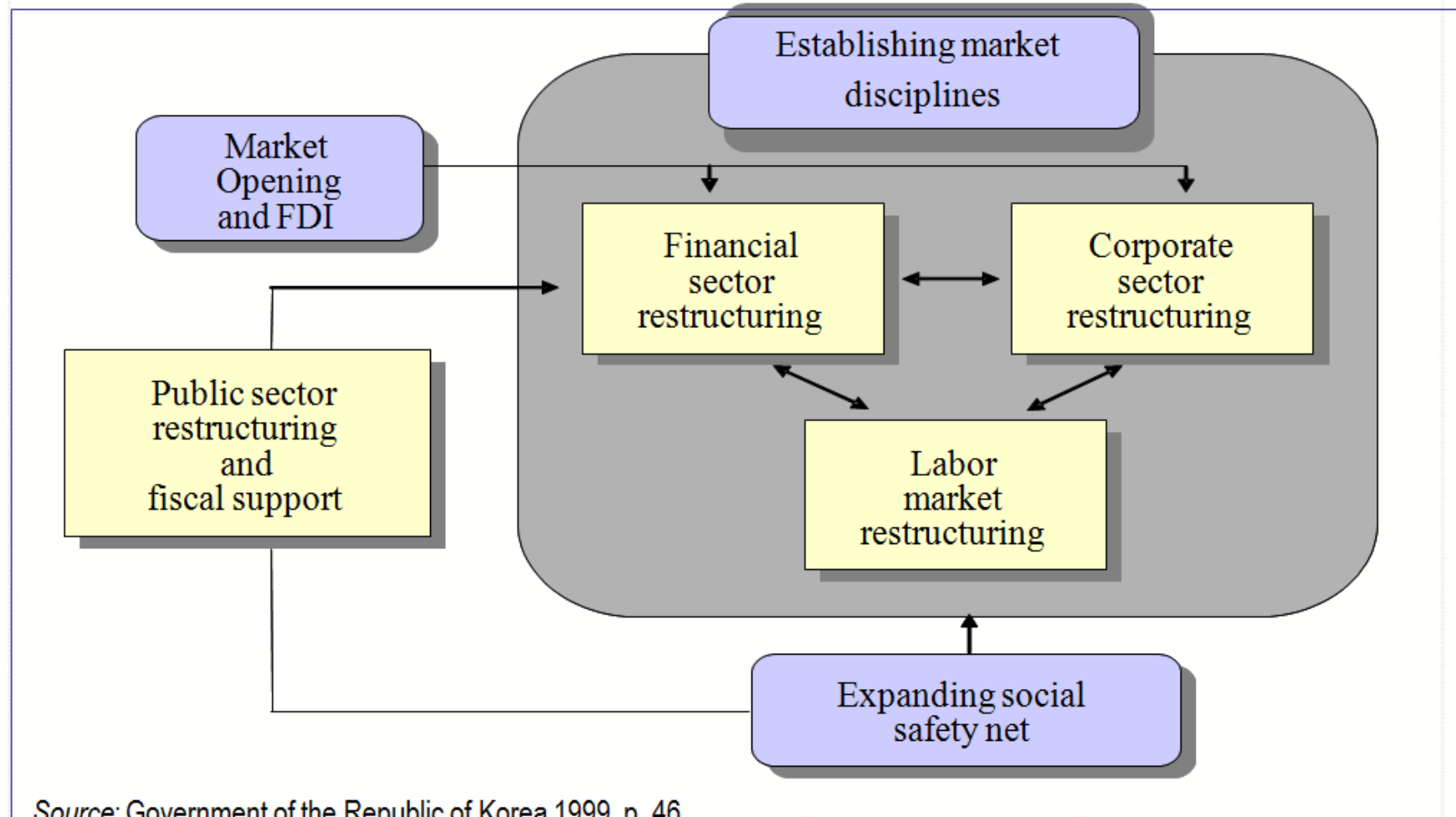
The collusive relationship between the *chaebols* and the *chaebol*-affiliated non-bank financial institutions(NBFIs) was one of the factors of the 1997 crisis in Korea.

- ***Chaebols'* ownership of NBFIs** resulted in excessively high debt leverage of the *chaebol's* (insider financing) and poor performance of the *chaebol*-affiliated NBFIs.
- As of 1997, the 70 largest *chaebols* owned a total of 114 financial affiliates.

● **The Survival of the Fattest !**

Overview of Restructuring

Scheme of Economic Reform after the Financial Crisis



Source: Government of the Republic of Korea 1999, p. 46.

Restructuring



The Korean government attempted to establish **the market discipline** and reduce government intervention: The structural reform was extensive, **covering most areas of the economy**.

More specifically,

- **The financial sector reform** was mostly about hardware, such as cleaning up of NPL or ailing FIs.
- **The corporate sector reform** improved the corporate governance system, revised bankruptcy procedures, and removed anticompetitive regulations.

Restructuring



More specifically,

- Labor sector reform aimed to make the market principles work.
- The government provided a level playing field and sound macroeconomic environments through institutional reforms and the provision of public goods.
- It accelerated privatization of state-owned enterprises.
- It also made effort to find, nurture and develop venture businesses.

Overview

- Swift Crisis Resolution and Economic Recovery

**Cleaning up
Non-performing Loans**

**Improving
Corporate Governance**

**Accelerating
Liberalization**

**Expanding
Social Safety Net**

**Improved
External
Positions**

- Early Graduation from
the IMF Program
- Foreign Reserves of more than
USD 200bn in 2004

**Rapid
Economic
Recovery**

- GDP Growth: -6.7% (1998)
→ 10.7% (1999)
- Unemployment: 6.8% (1998)
→ 3.5% (2004)

**Stronger
Corporate and
Financial Sector**

- Debt-equity Ratio: 396% (1997)
→ 110% (2004)
- No. of Banks: 33 (1997)
→ 19 (2004)



I. Korea's Economic Development

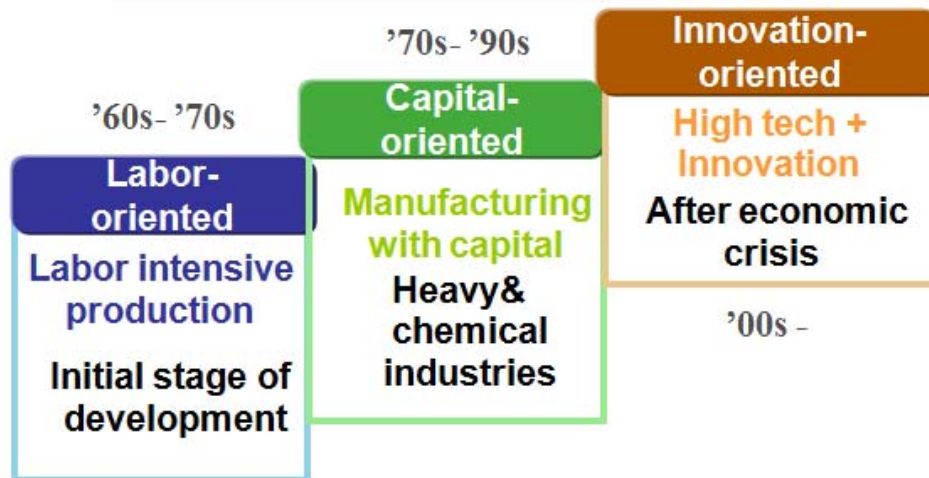
Knowledge-Based Economy

Growth Patterns of the Korean Economy

The Korean economy entered the stage of growth by innovation.

- Previously, the forces of growth were capital and labor.
- Innovation is based on knowledge, creativity and exploration.
 - At this stage, innovation and institution are more important than economic resources.

Stages of Economic Growth - Korea



Years for Transition

	UK	200 years
	Japan	100 years
	Korea	30~40 years
	China	30 years?

Moving Ahead

Korea is moving towards more innovative and knowledge-oriented economy.

- There exists a wide consensus on **the importance of R&D and innovation** for **sustainable economic growth and development**.
- **Investment in R&D** will increase continuously in order to promote basic research and innovation activities in all sectors and to find out potentials for future growth.
- **Green growth** has been emphasized as a locomotive for future.



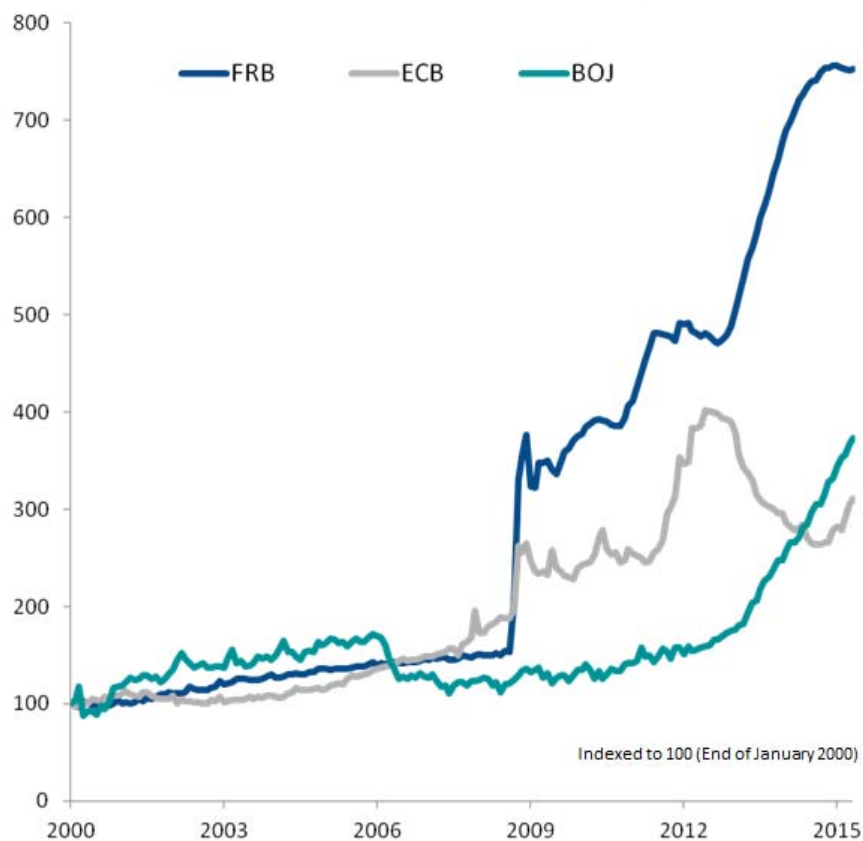
II. Economic Stability amid Global Uncertainties

World Economy at Crossroads

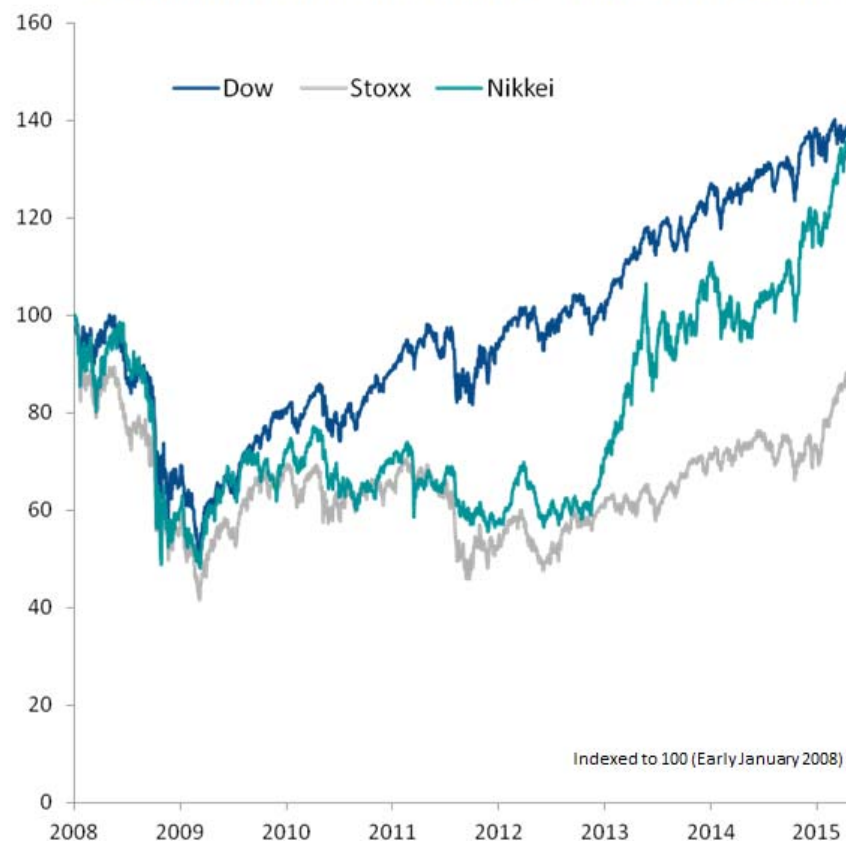
Seven Years Since the Onset of the Global Financial Crisis

Unprecedented policies have led financial market recovery

Central banks have boosted asset purchase



Stock markets have rebounded to pre-crisis levels



World Economy: Unbalanced and Moderate Growth



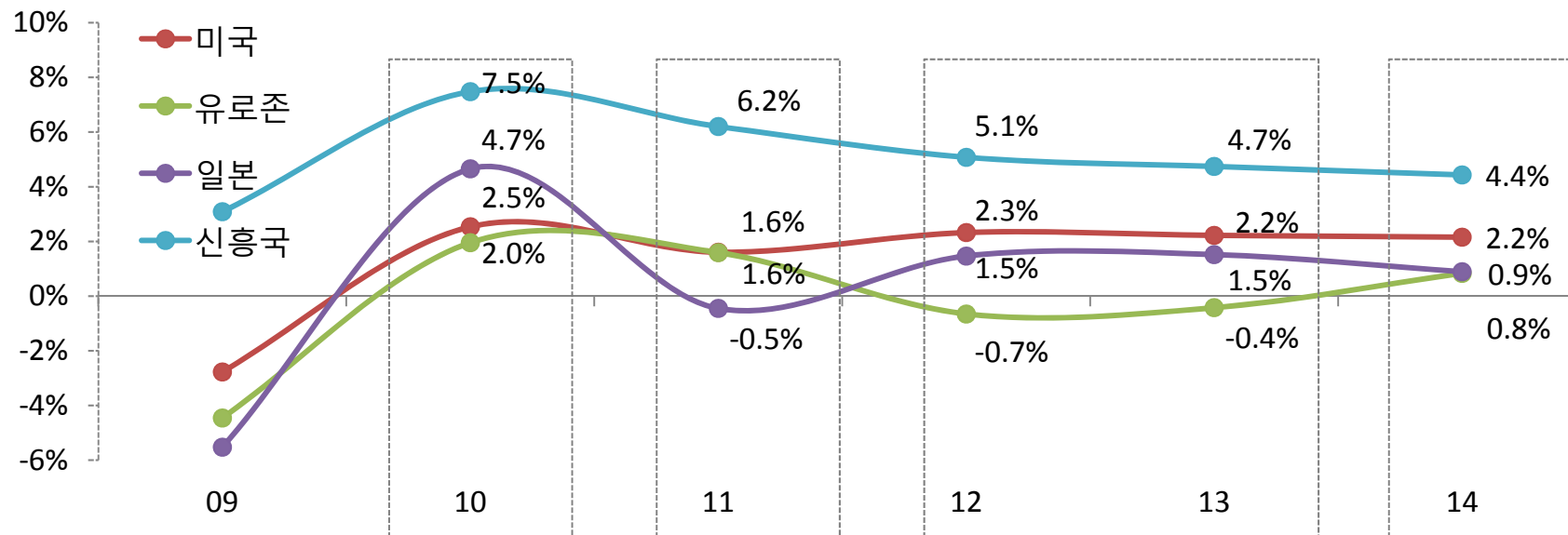
• World ↓

• Most ↑

• EE ↑
• DE ↓

• EE ↑
• US, Japan ↑
• EU ↓

• US ↑
• Others ↓



Growth Rates

	2013	2014	2015(IMF)	2016(IMF)
World	3.3	3.4	3.1	3.6
DC	1.1	1.8	2.0	2.2
USA	1.5	2.4	2.6	2.8
Japan	1.6	-0.1	0.6	1.0
EU	-0.3	0.9	1.5	1.6
Germany	0.4	1.6	1.5	1.6
France	0.7	0.2	1.2	1.5
UK	1.7	3.0	2.5	2.2
EE	5.0	4.6	4.0	4.5
China	7.7	7.3	6.8	6.3
Brazil	2.7	0.1	-3.0	-1.0
India	6.9	7.3	7.3	7.5
Russia	1.3	0.6	-3.8	-0.6
Korea	2.9	3.3	2.7	3.2

* IMF World Economic Outlook (October 2015)

Economic Growth and Trade

- Trade Elasticity Decrease
 - Trade Elasticity with respect to Income decreased: 2.0 (1986-2000) → 1.3 (2001-2014)



Source: IMF staff calculations.

Next Few Years Will Determine Future Growth Trajectories

Normalization towards solid growth? Or another market turmoil?



Fragile Five, Edgy Eight... Who's next?

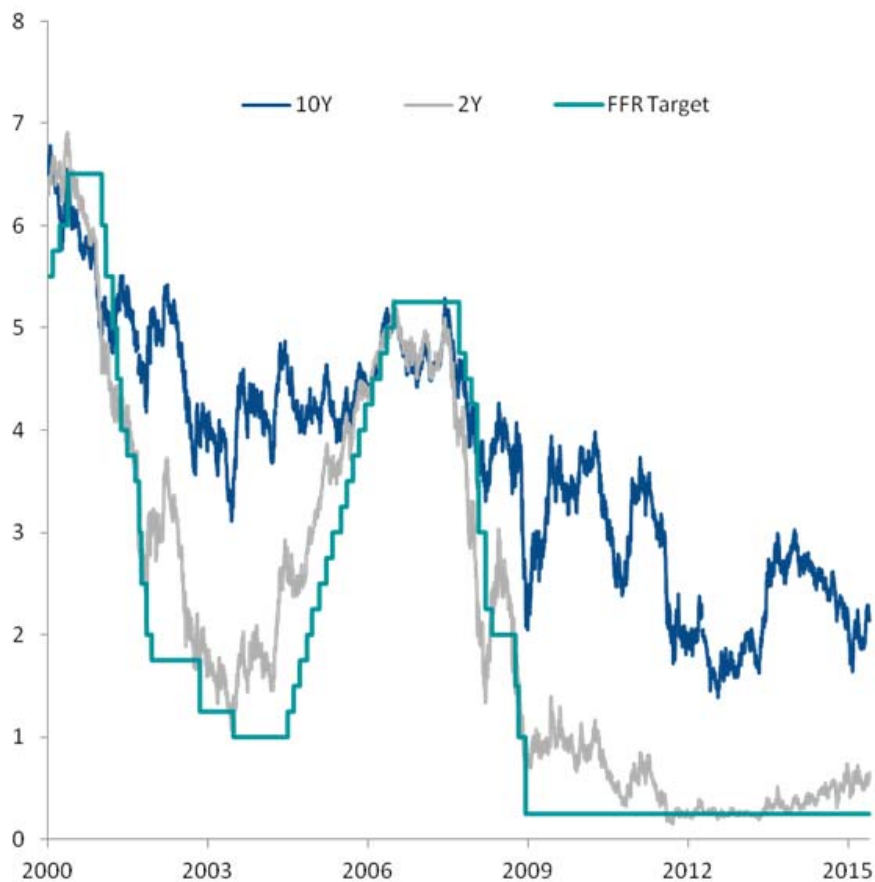
"You only find out who is swimming naked when the tide goes out."
- Warren Buffet -



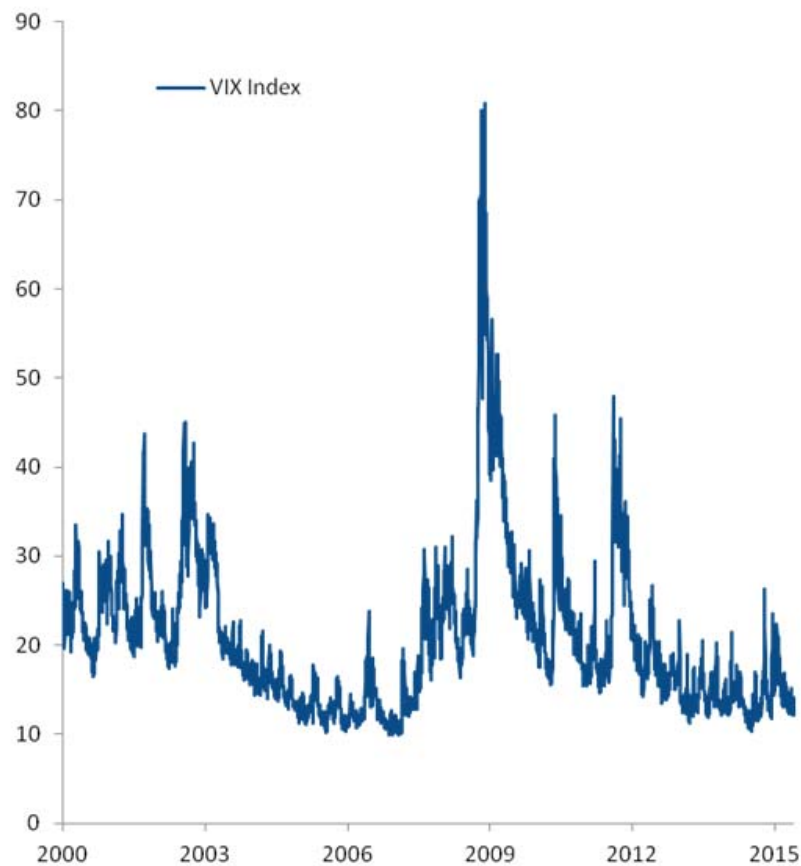
Global Economy Facing a Difficult Transition

Fed rate hike - “at some point this year” - may change things quickly

U.S. rates remain at historical lows



Market risks contained



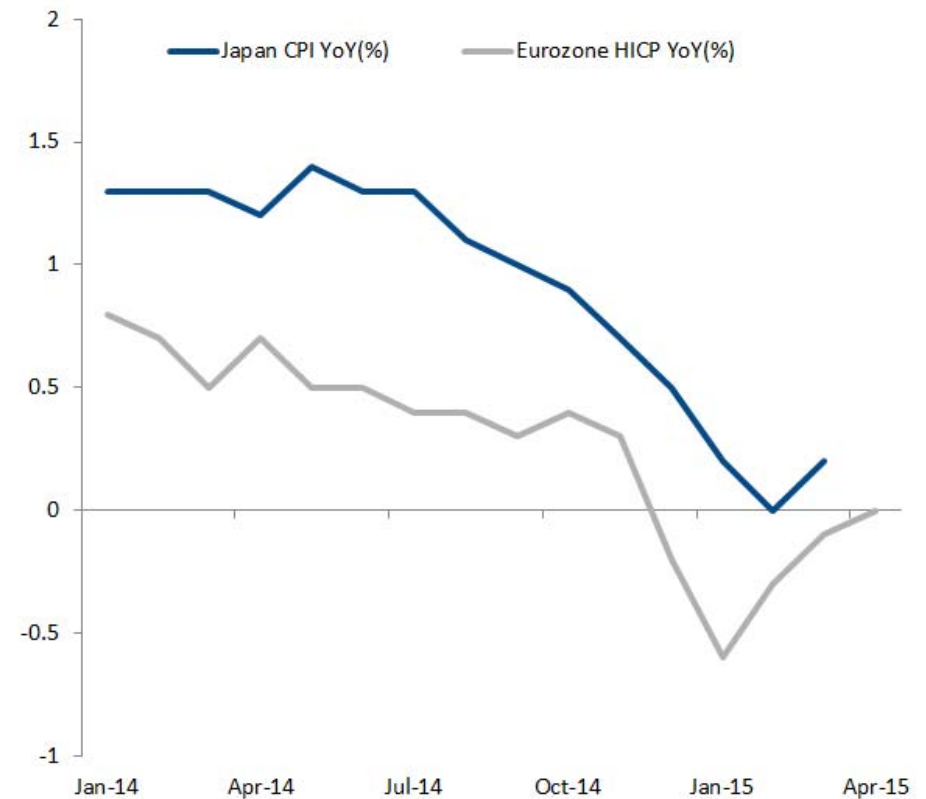
Uncertainties Are High

Downside risks exist

Chinese economy is slowing down



Monetary experiment of the BOJ and the ECB



Note: Japanese inflation is calculated with core CPI which excludes fresh food prices. 2%p is deducted from inflation rate since April 2014 to exclude tax hike effect.



II. Economic Stability amid Global Uncertainties

Preparation and Resilience of Korea Economy

Economic Fundamentals Upgraded

1997 Asian Financial Crisis → Corporate debt structure and bank financial stability improved

Level up!



2008 Global Financial Crisis → External financial position strengthened

Level up!



2013 Taper Tantrum → “A Newly Emerged Safe Haven”

Level up!



Federal Reserve System

“Both last year and more recently, the deterioration in financial conditions varied across the EMEs, suggesting that, even as the selloff of EM assets was in part driven by common factors, **investors nonetheless were also responding to differences in these economies’ situations.** ... For example, the currencies of Brazil, India, and Turkey dropped sharply in the middle of last year, **whereas the currencies of Korea and Taiwan were more resilient.**”

“Monetary Policy Report”, February 11, 2014



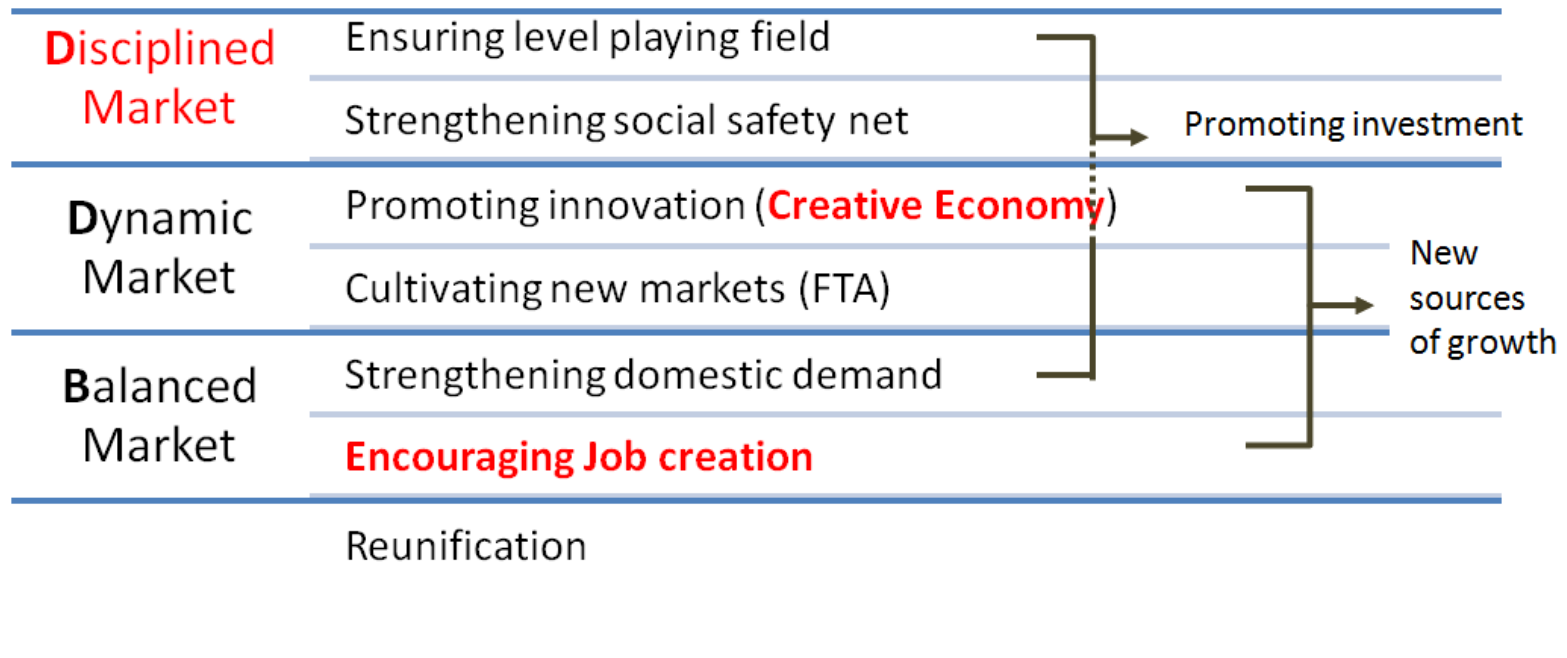
International Monetary Fund

“**Korea is reaping the benefits of prudent macroeconomic management and financial moderation.** It was affected relatively mildly by the recent global market turmoil, **being even dubbed a safe haven:** after some short-lived turmoil, bond yields rose only modestly and the exchange rate appreciated.”

“Staff Report for the 2013 Article IV Consultation Key Issues”, December 13, 2013

REFORM

Korea's response to aging and expected decline in potential growth is a policy package that would change the DNA (Three-Year Economic Policy Objectives)



Disciplined Market Strengthening the Fundamentals

Disciplined market for private businesses



- Level the playing field between large corporations vs. SMEs and manufacturing vs. services sectors
- Deregulate and introduce negative list
- Resolve labor disputes collaboratively

Public enterprise reform

- Rationalize (transparency; merger)
- Deleverage
- Rule-based (arms length)

Safety net

- Adjust unemployment benefit
- Expanding coverage
- Employment insurance
- Matching fund savings scheme

Creative Economy

- Create an environment where creativity is encouraged
- Ensure financial support is available to start a venture capital
- Protect property right and ensure proper pricing of creativity

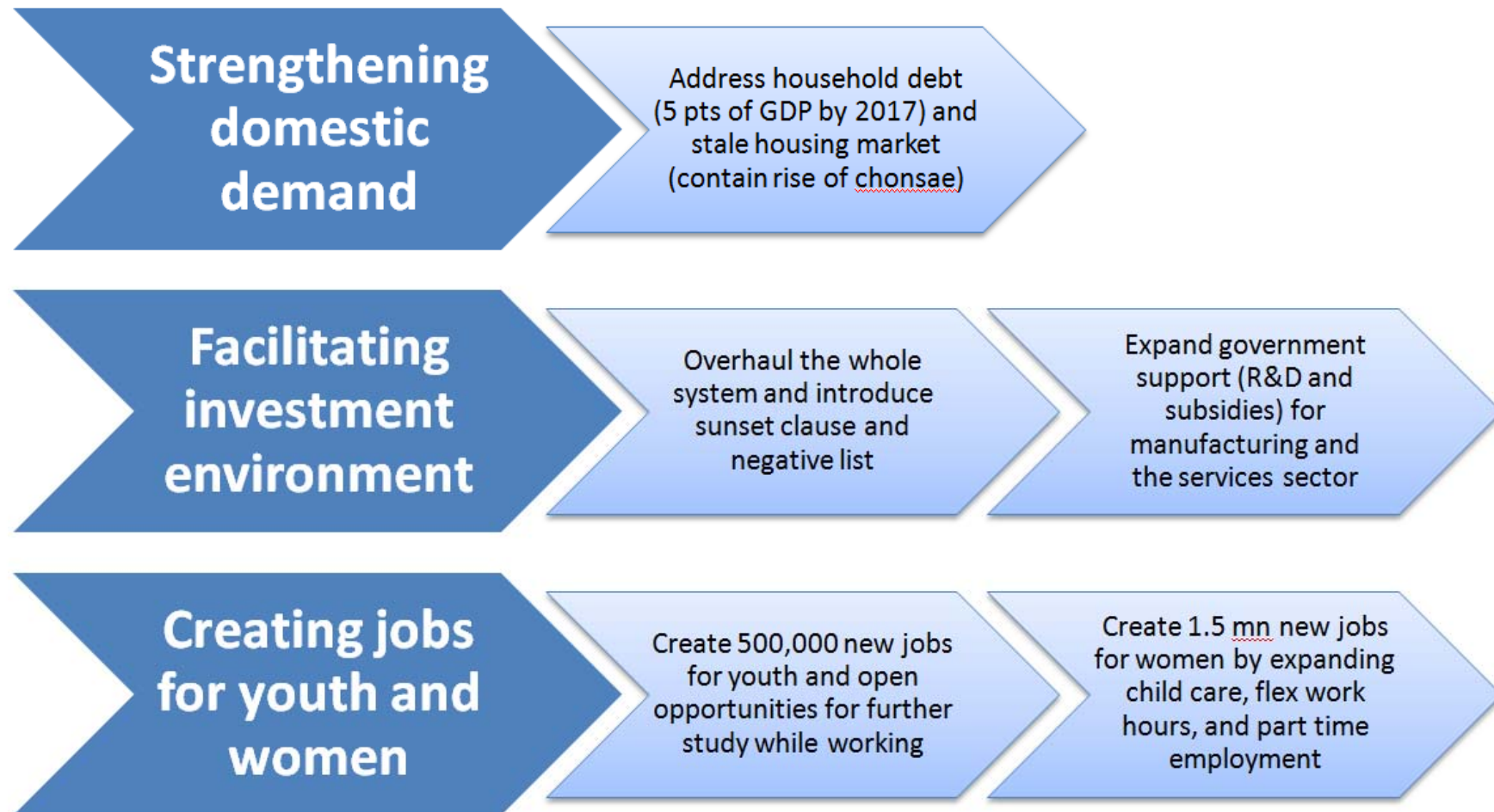
Conversion of imagination and ideas into value added



Value added

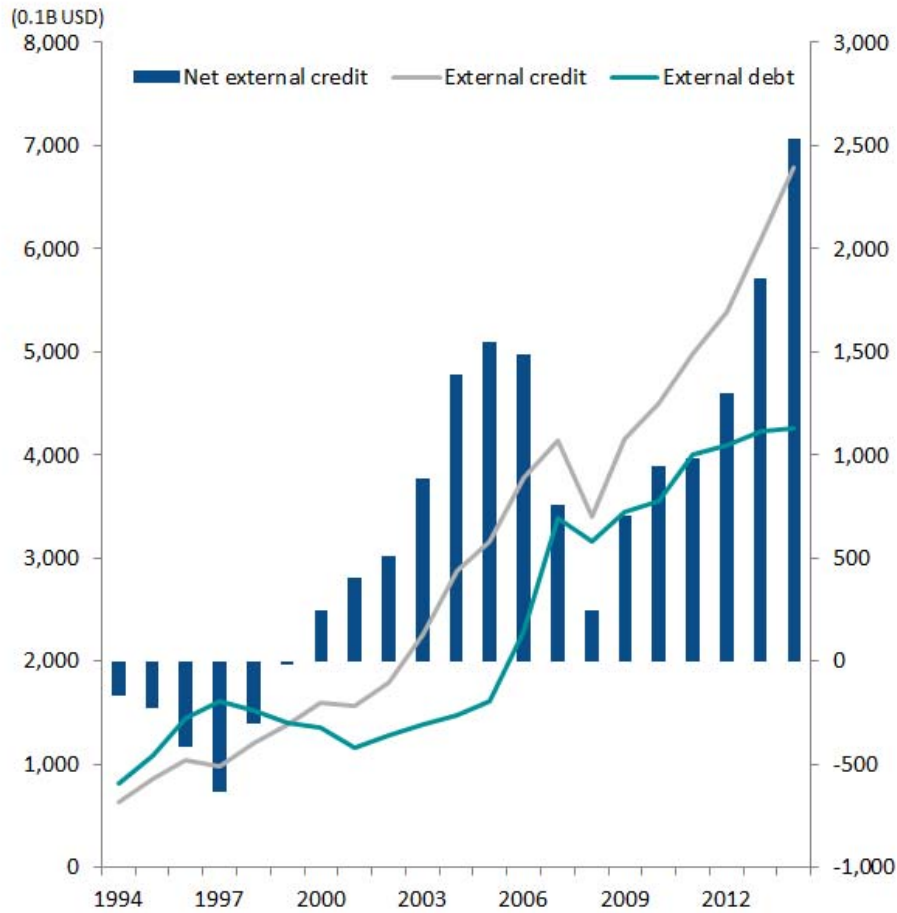
- Provide through creation of venture capital/new start ups
- Apply ideas to existing productive facilities and mode of production

Balance between Domestic Demand and Export

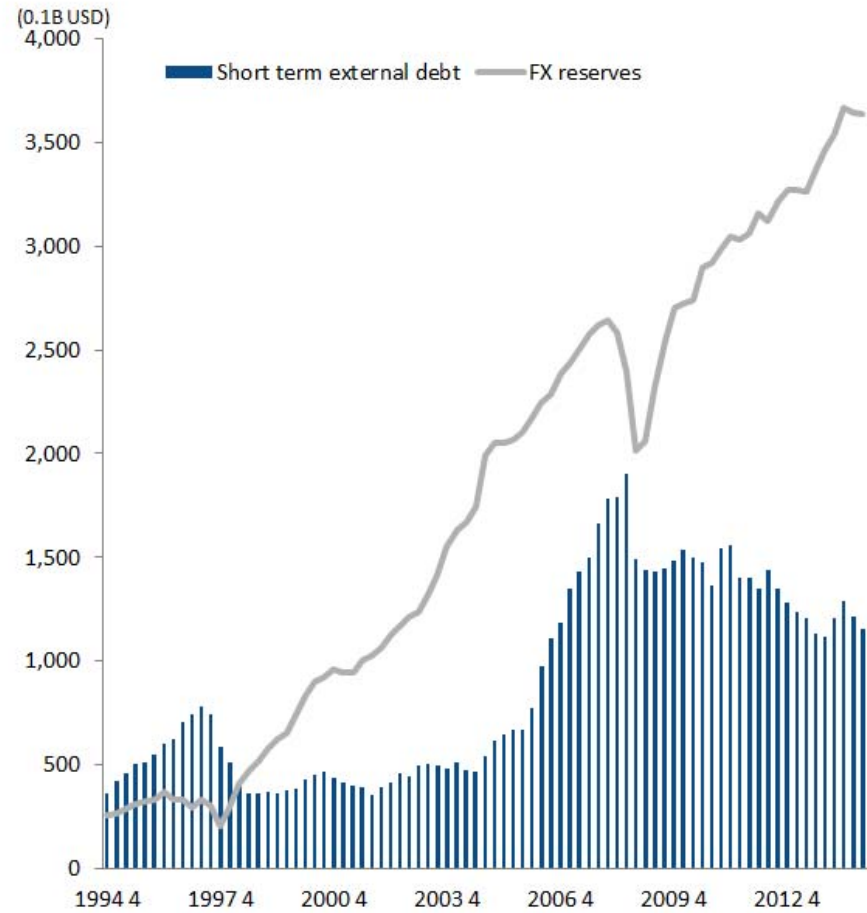


Strong External Position

External credit growth outpacing external debt

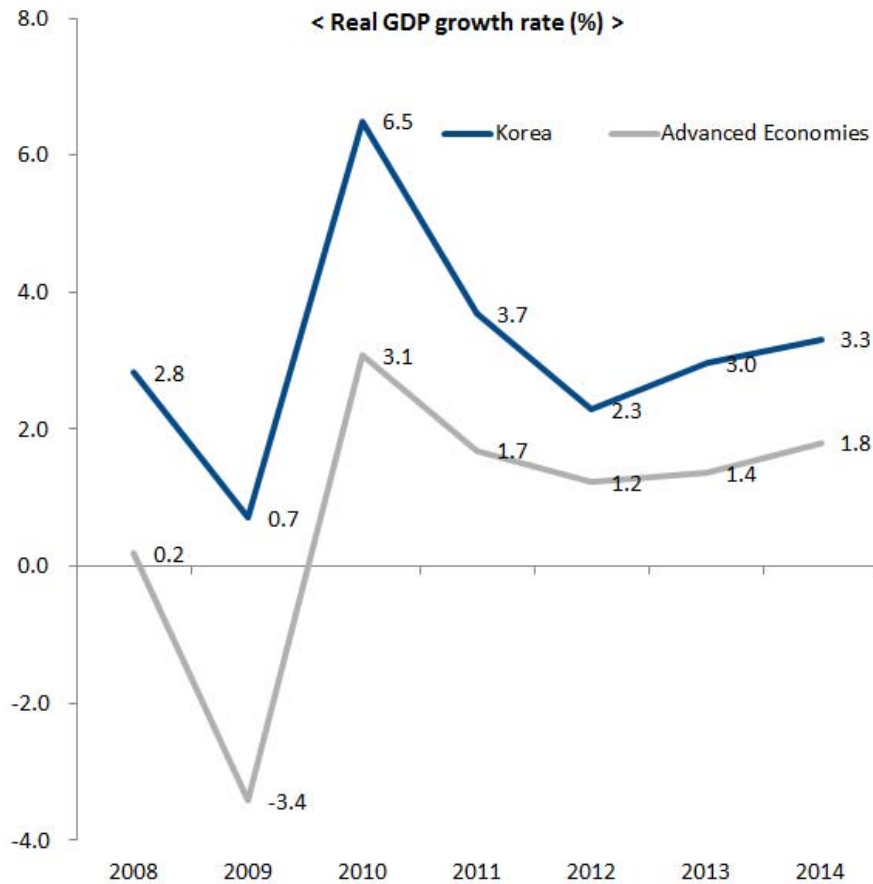


FX reserves far exceeding short-term debt

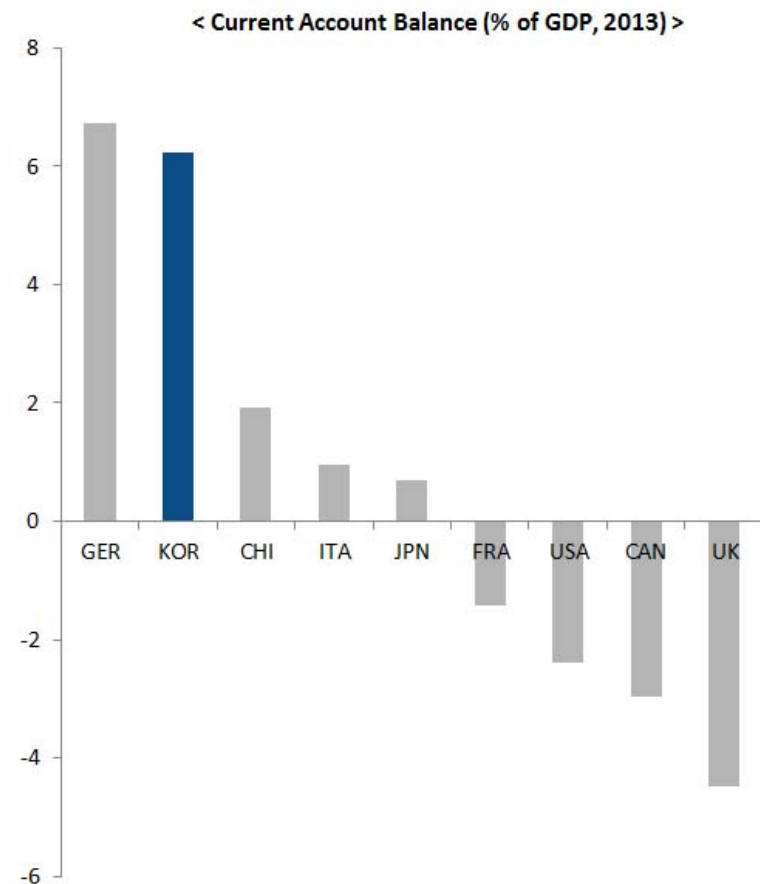


Solid Macroeconomic Performance

Maintaining above-average growth

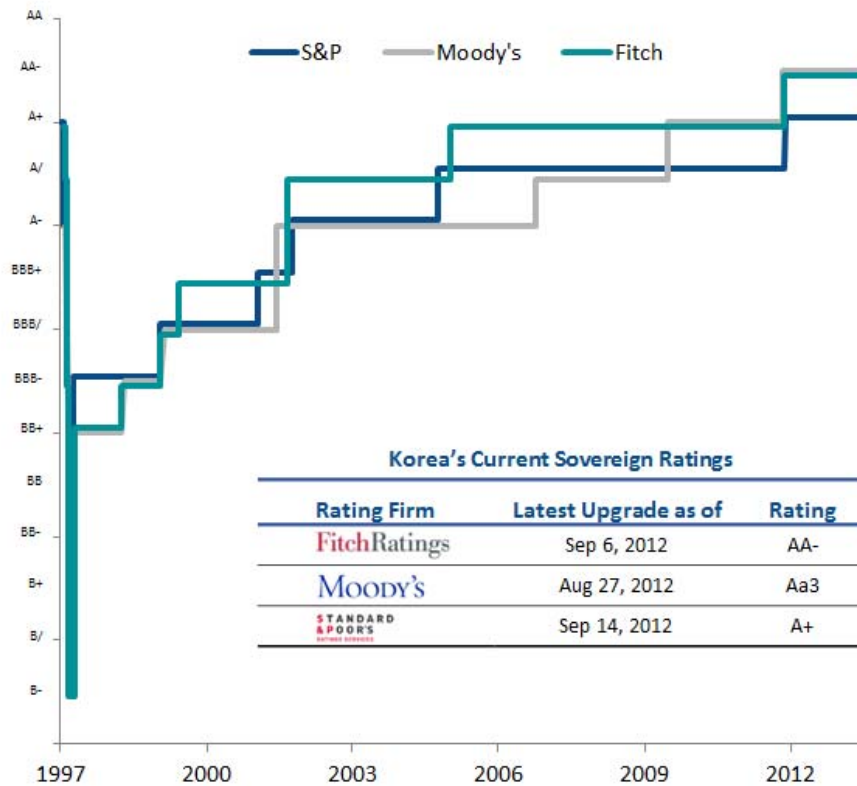


Current account surplus led by exports

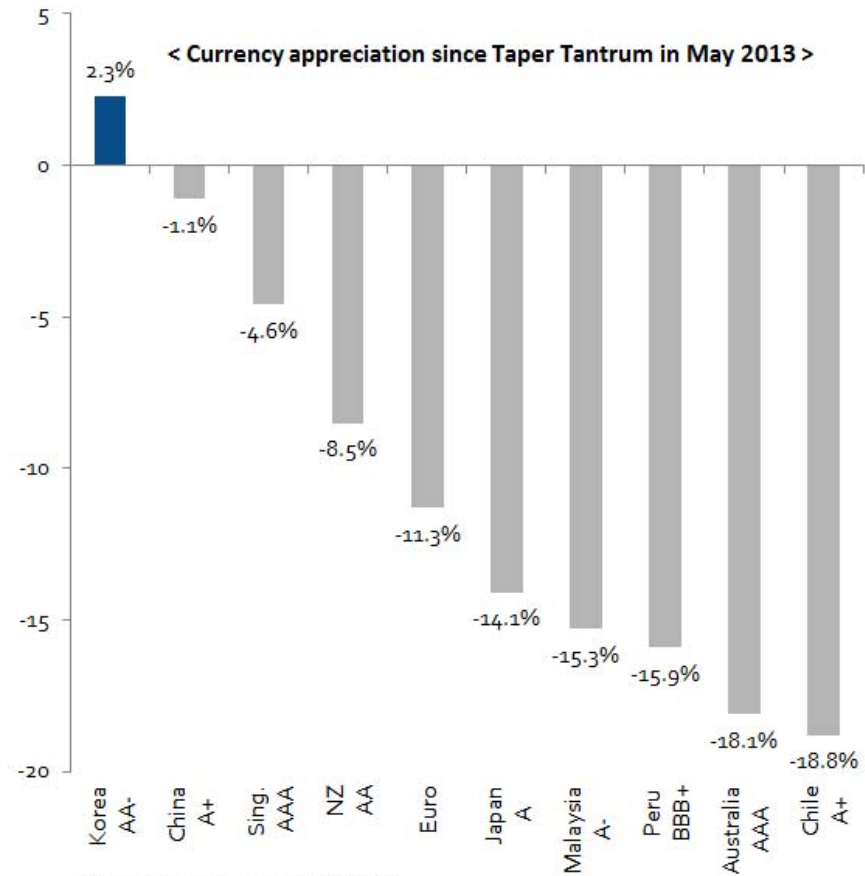


Market Resilience

20 consecutive rating upgrades without a single downgrade since 1997

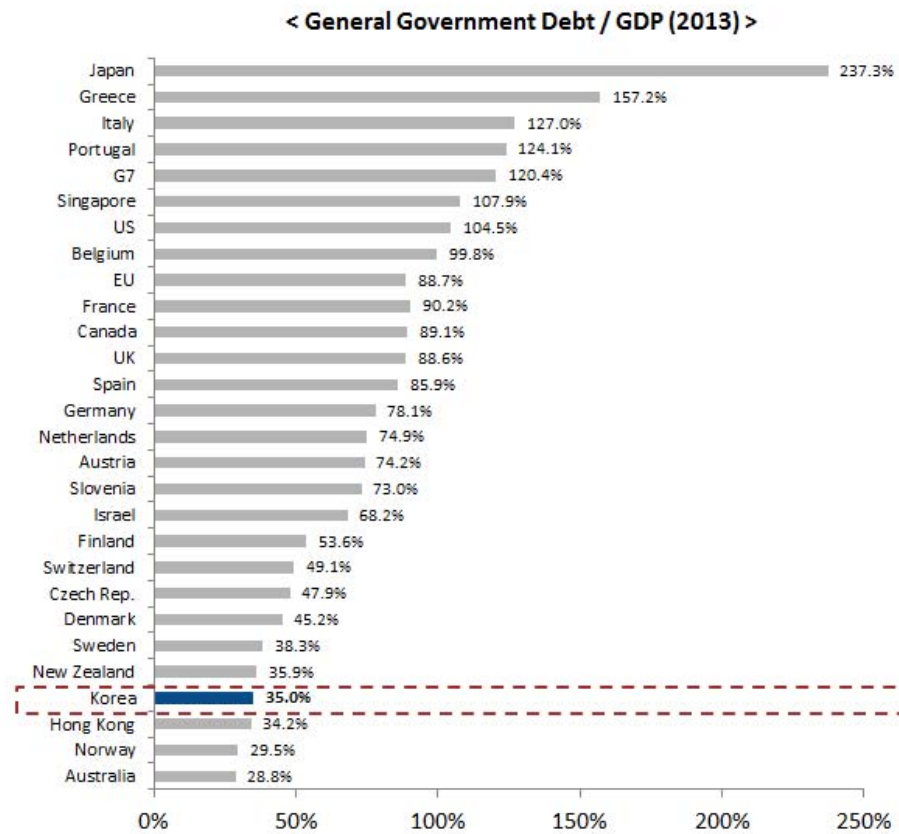


KRW has outperformed peers



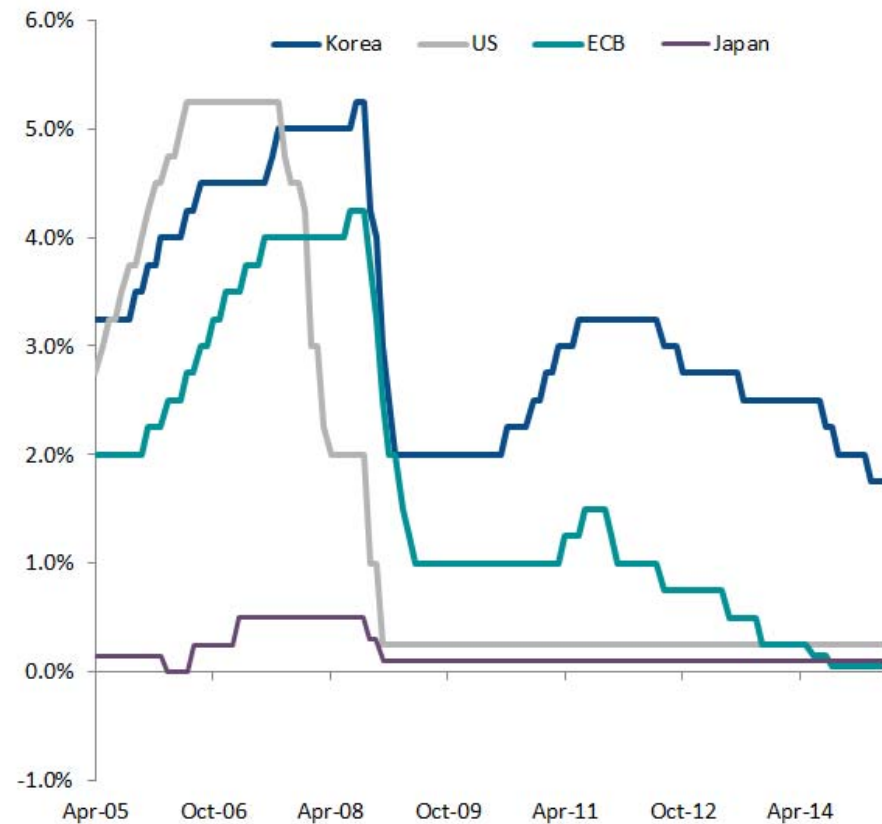
Ample Room for Fiscal and Monetary Policies

One of the Lowest Levels of Government Debt



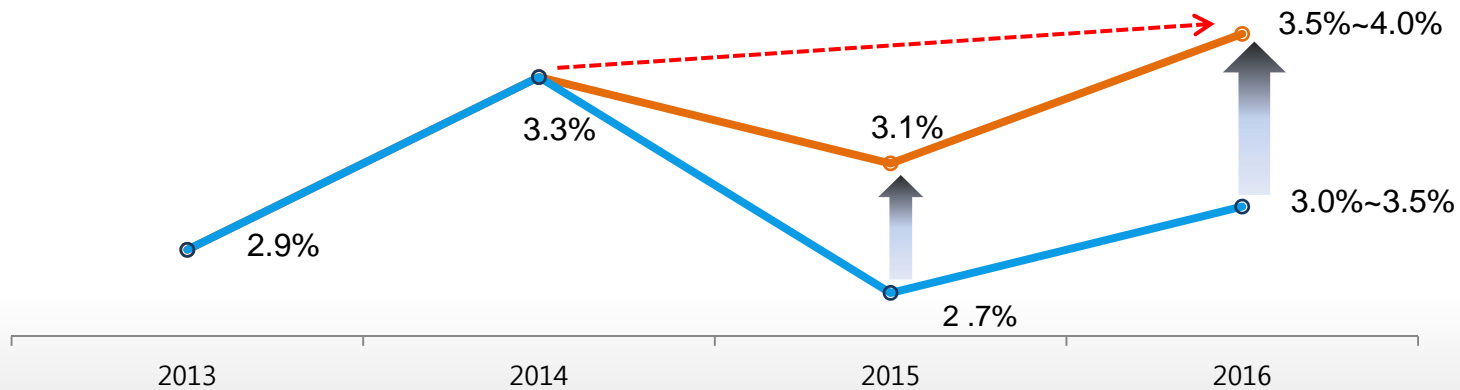
Note: General government gross debt, IMF World Economic Outlook Database, Apr 2014 (2013 figures, or latest available)

Further room for monetary policy, if necessary

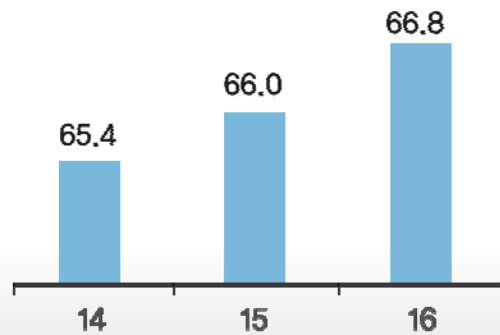


Macroeconomic Prospect in the Short-term

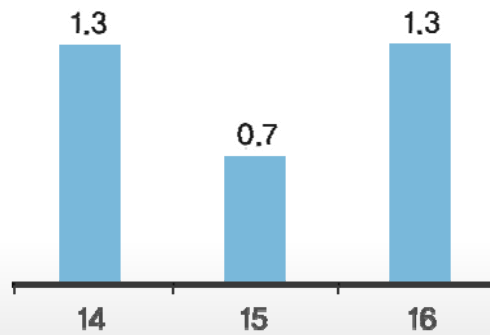
Growth Rate



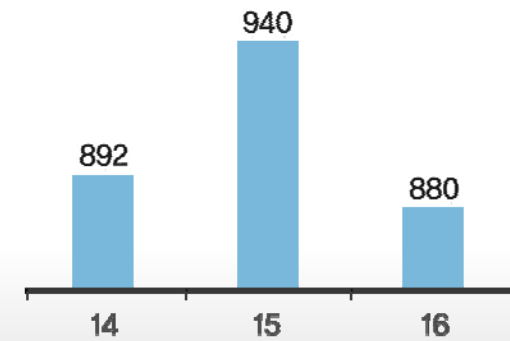
Employment Ratio (%)



CPI (%)



Current Account (\$100mil)





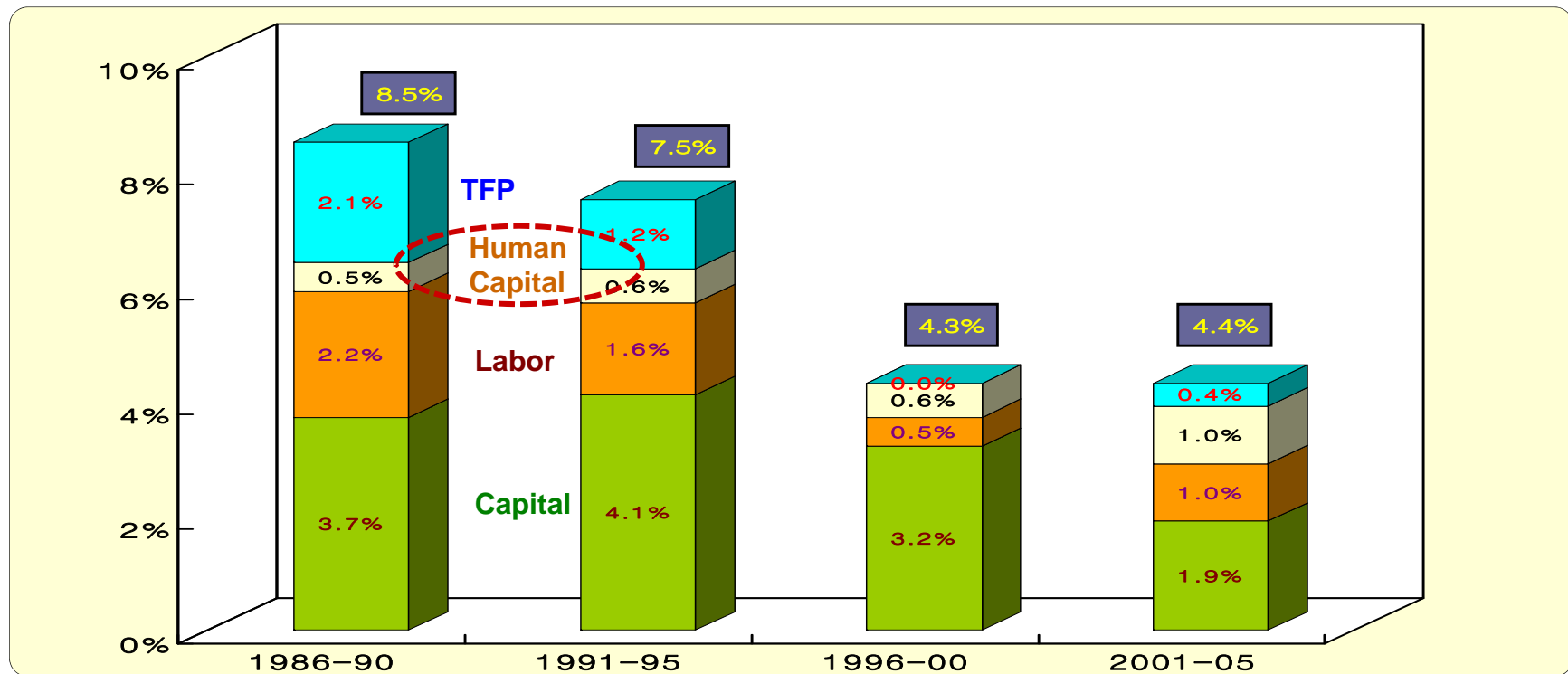
III. Korean Economy in the Long-run

Challenges Ahead

Need for a New Source of Growth

- Korean economy's potential growth is declining.

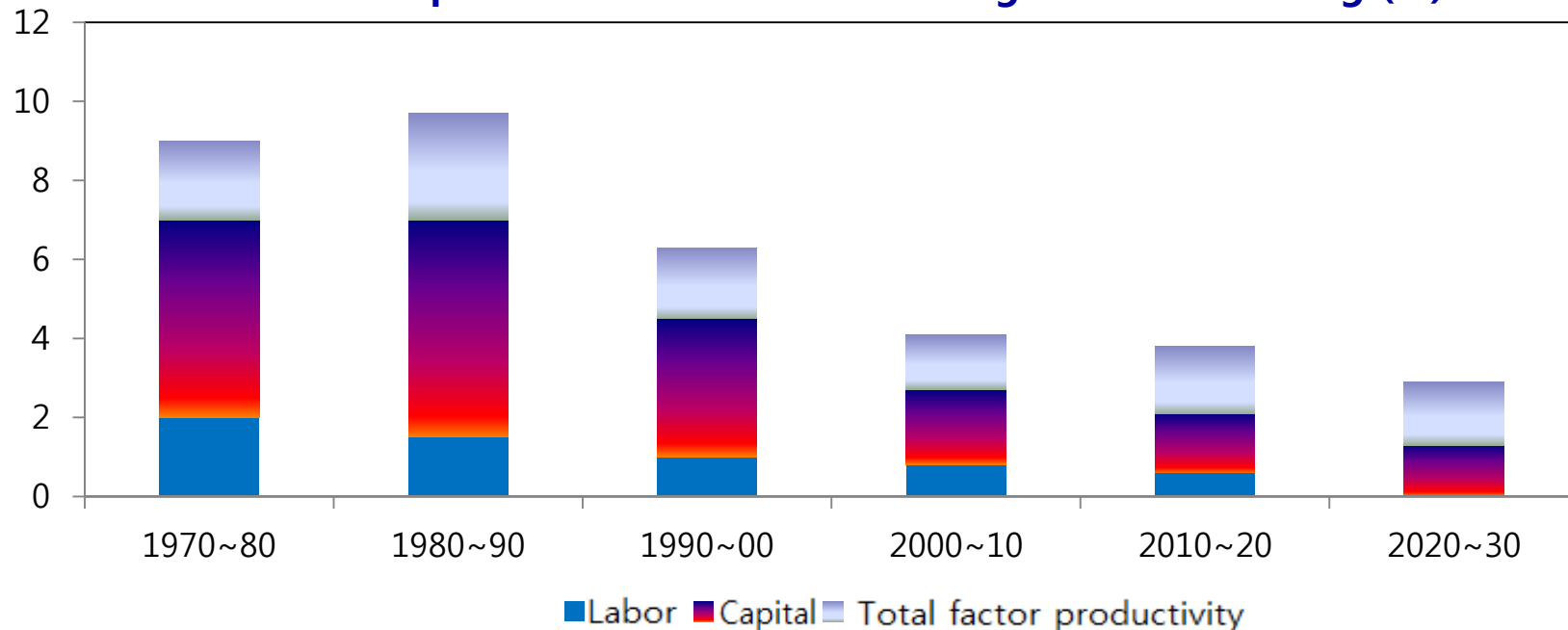
Annual Growth Rate and Contribution by Factors— Korea



Decline in Potential Growth Rate

- **Limitations of the Factor Inputs-Dependent Growth**
 - A slowdown of labor inputs due to the low birthrate and aging population & A slowdown in growing preserve of the capital
 - ⇒ Continuous decline of potential growth
 - To boost the potential growth, **total factor productivity should be improved** through science, technology, creativity and innovation.

< Growth potential of Korea based on growth accounting (%) >



Source: KDI.



Managing Long Term Risks

Demographic changes

- Developing mid-to-long term plans by the private-public joint Committee on Long-term Strategy
 - Currently in the process of developing the 3rd round basic plan for 2016~2020
- Key Highlights:
 - Providing more benefits for marriage
 - Promoting an inclusive family concept (e.g., adoption)
 - Pushing up the fertility rate by easing pressures related to childcare and childrearing
 - Reforming policies on retirement age and pension in line with an aging society

Unification

- Improve inter-Korean relations through the 'Korean Peninsula Trust Process'
- Prepare for future economic cooperation
 - Supporting infrastructure development in the North through Great Tumen Initiative(GTI)
 - Improve the business climate in Gaeseong Industrial Complex
- Identifying tasks that should be ready for unification by the Unification Preparation Committee
 - Collaborate with neighboring countries, international organizations and NGOs to gain information and update statistics on North Korea
- Support humanitarian aid in the private sector

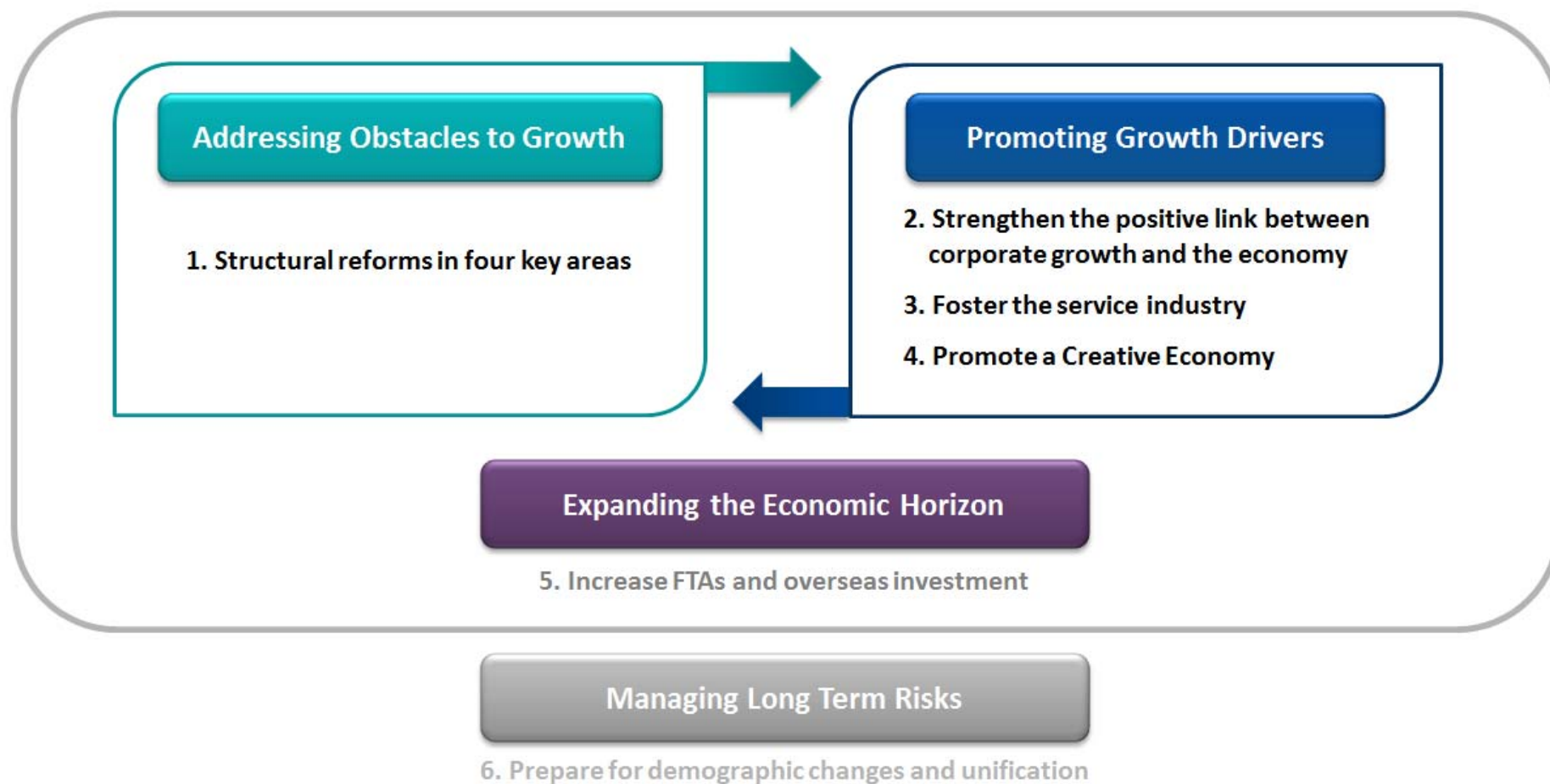


III. Korean Economy in the Long-run

Enhancing Potential Growth

Economic Policy Overview

Increasing the Korean economy's growth potential to prepare for the post-transition period





Structural Reform in Four Key Areas

Improving fundamentals by addressing structural problems

1. Labor

- Increase labor market flexibility and address labor market imbalances
- Improve visa system to attract talented foreign labors

2. Finance

- Increase competition by deregulation
- Promote IT and financial industry convergence
- Create a virtuous cycle for venture capitals

3. Public Sector

- Reform public employees' pension system
- Review and reform budget expenditures from zero base

4. Education

- Support vocational education and training
- Reform school system

Strengthen the Positive Link between Corporate Growth and the Economy

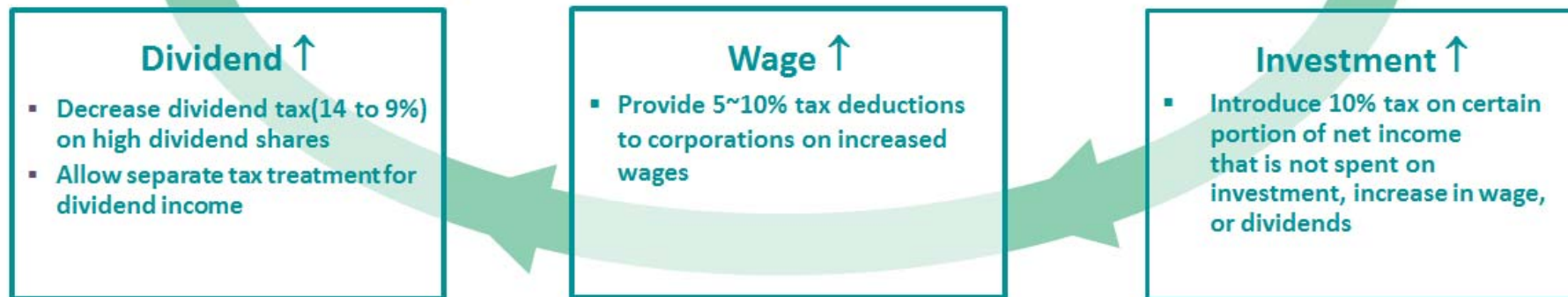
Boosting investment through regulatory reform:

Reduce 20% of existing regulations by 2017



Creating a virtuous cycle:

Increase income flow from corporate to households



Foster the Service Industry

Service Sectors



Healthcare



Tourism & Contents



Education



Logistics



Finance



Software

Selected Key Projects

- Support establishment of for-profit subsidiaries of hospitals and other healthcare providers
- Provide incentives for foreign hospitals to make investments

- Develop additional integrated resorts
- Establish world-class duty free shopping malls

- Attract foreign universities with expertise in various fields
- Revitalize technology holding companies under universities

- Expand establishment of logistics centers
- Reinforce Incheon International Airport's role as a logistics hub

- Support technology-based finance
- Establish new funds supporting promising service-related businesses

- Establish software clusters
- Create new business from software clusters

Promote Creative Economy

Support creative ideas that can become the next-generation growth engines

Promote Startups and Venture Capitals

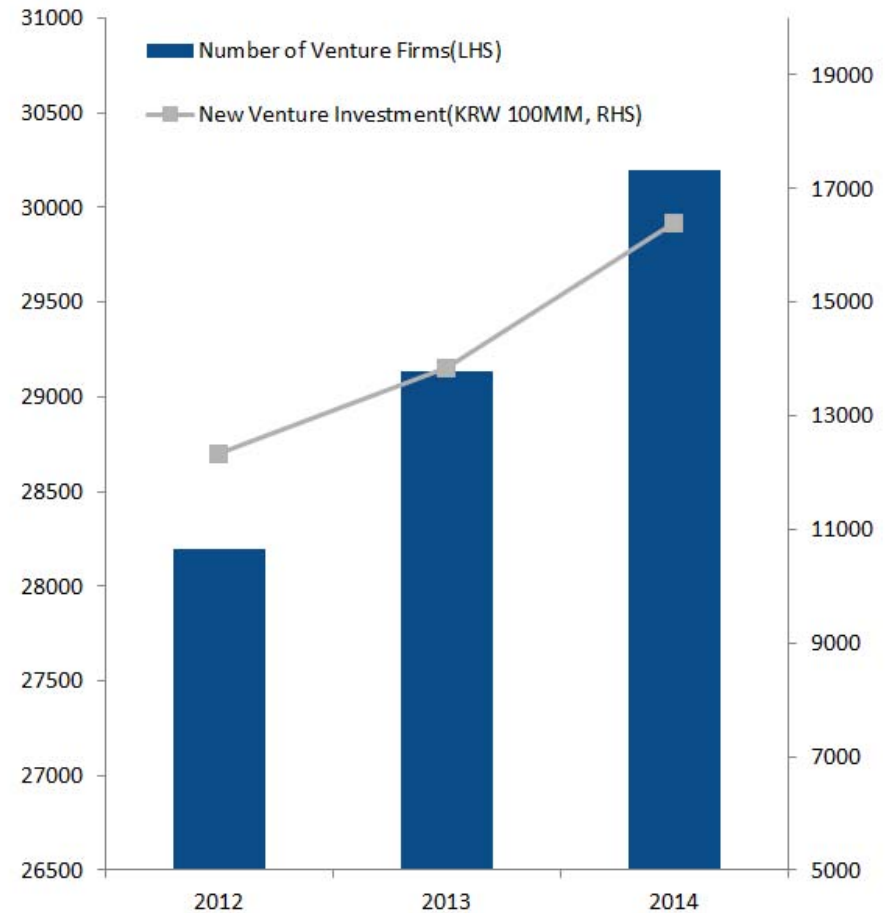
- Establish 17 Centers for Creative Economy & Innovation(CCEI)
- Develop Creative Economy Valley(CEV)
- Create a Korean version of the Yozma Fund(KRW200bn fund)

Foster Future Growth Engines

- Select 19 projects including big data, Internet of Things(IoT), smart cars, etc.
- Invest KRW 5.6tn until 2020 (including KRW 1.0tn in 2015)

Increase Government R&D Expenditures

- Increase R&D budget to 5.0% of GDP by 2017.
- Increase R&D budget to SMEs and mid-cap companies (18% of total R&D budget by 2016)



Note: Number of Venture Firms as of Jan.13, 2015.

Expanding the Economic Horizon

Support penetration into new markets through extensive trade agreements



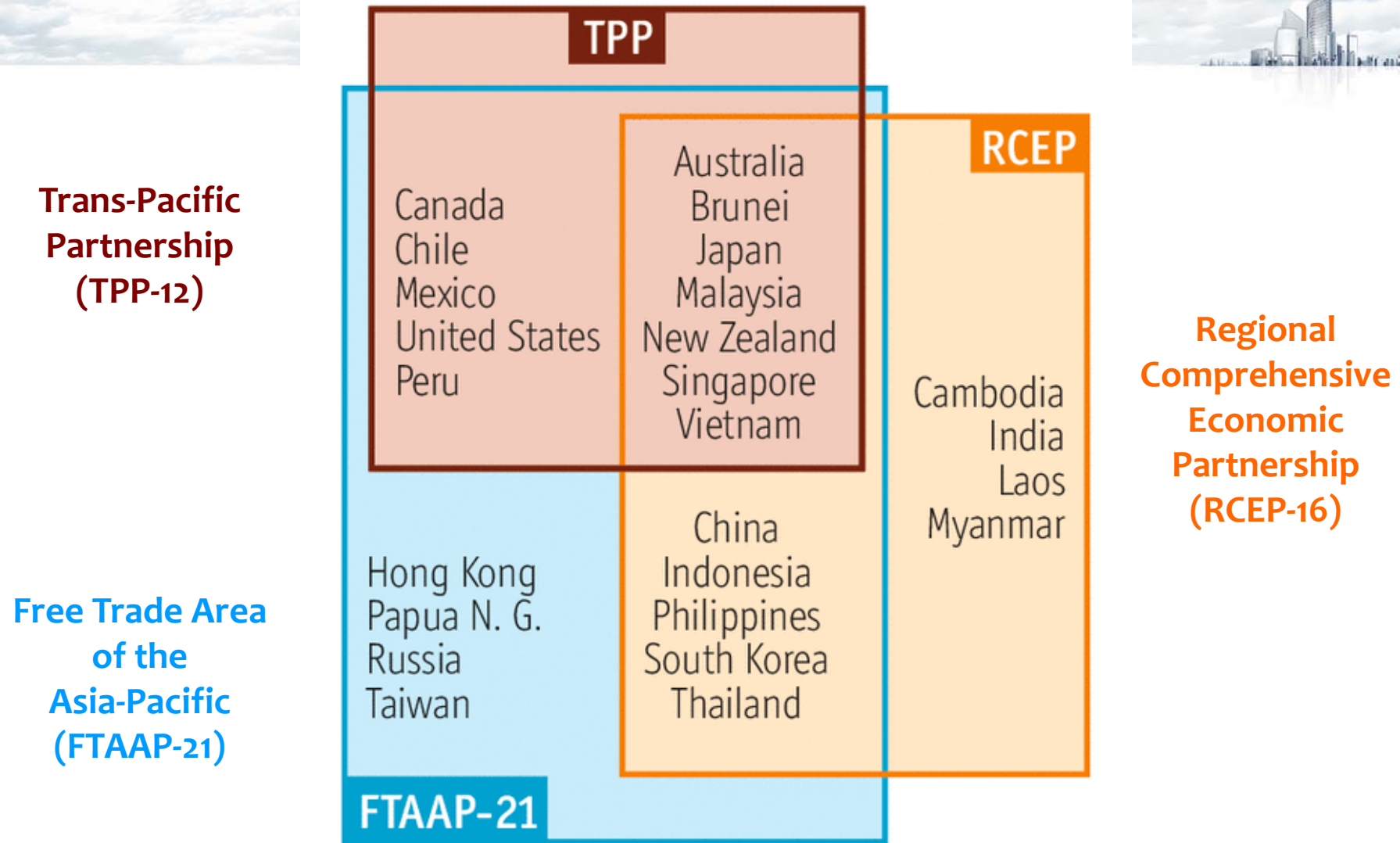
Promote Overseas Investment

Promote
outbound portfolio investment

Facilitate
foreign company M&As

Increase
public sector overseas investment

Regional Trade Agreements



Source: "The Trans-Pacific Partnership and Asia-Pacific Integration", by P.A. Petri, M.G. Plummer, F. Zhai



Korea and TPP

Why Korea is important for TPP

- **Geopolitics: Korea-us alliance**
- **Better access to Asia**
 - **Gateway to China (Korea-China FTA, One Belt One Road) and Asia (RCEP)**
 - **Korea's investment in US and other PTT members will prop up exports and jobs**

Why TPP is important for Korea

- **Geopolitics: Korea-us alliance**
- **New economic opportunities**
 - **Build on KORUS FTA and expand GVCs in TPP**
 - **External pressures for internal reform (esp. in services)**



Korea and TPP

Challenges within Korea

- **Need to convince domestic stakeholders of benefits of TPP**
- **Old KORUS FTA issues may resurface**
 - **Agricultural products (rice, beef)**
 - **Politically sensitive issues (ISDS, SOEs)**
 - **Currency issue (related to ongoing QEs in major economies)**

Challenges vis a vis the members

- **US: KORUS FTA outcome to date and currency issue**
- **Countries with no bilateral FTAs (remaining issues e.g., Mexico, Japan)**
- **Regulatory coherence within TPP members (e.g., ROO)**
- **WTO rice TRQ (US, China, Australia, Thailand and Vietnam)**



III. Korean Economy in the Long-run

Summary

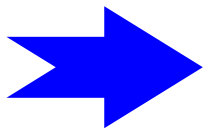
Lessons from Korea's Experiences

Korea did not pick up the winning industries until the 1970s.

- Since the early 1970s, HCIs were selected and national winners were born.

Major contributing factors for growth were:

- Growth with job-creation, initially led by **labor intensive export promotion** and moved to **HCIs**.
- Broad access to **education** and raising technical know-how
- **Leadership – vision sharing** between government and private sector, and **political stability**
- Promoting spirit of **self-help: Saemaul movement** and workfare
- **Pragmatic and flexible policy approach**



- ✓ Followed **comparative advantage**
- ✓ Actively integrated into **the global economy**

Summary

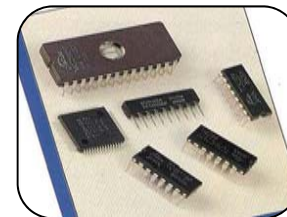
Koreans are overcoming the recent crises successfully.

- Automobiles, shipbuilding, electrics & electronics all ranked between 1st-6th in the world.
- Digital TV, display, next generation semiconductors, mobile communication, bio-tech will lead the Korean economy.
- And we have outstanding infra and human resources.



We are ready to make another miracle,

- Improving **market environment**,
- by ● Upgrading the quality of **human resources and R&D**,
- Enhancing **the rule of law**, and
- Actively participating in **globalization**.



The Road Not Taken...?





Thank you !