

The Strategy for Korea's Economic Success

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1. Korea's Economic Success

- An overview
- More quotes

2. Reasons behind Korea's Economic Success

- Similarities and differences with other Asian tigers
- The role of Korean government

3. Challenges in the Future

- Current government policies
- Main issues and possible solutions

4. Conclusion

Korea's Economic Success: An Overview

South Korea's economy: What do you do when you reach the top?

- *Economist, November 12, 2011*

- **Heroic economic success**
 - In 1960, one of the poorest countries in the world
 - In 2011, richer than the EU average income (\$31,750 vs \$31,550, PPP)
- **A model for growth of developing countries**
 - China: too vast to copy
 - Singapore/Hong Kong: city states, Taiwan: disputed sovereignty
- **Combined growth**
 - Economic growth with democracy
 - Economic growth with equity: Gini coefficient lower than Canada in 2010
- **Korea's potential shown in its history**
 - Developed movable metal type two centuries before Gutenberg
 - In the last imperial dynasty, benefited from checks and balances more than China

Korea's Economic Success: More Quotes

Quick Recovery

- Korea repaid the IMF drawings nine months ahead of schedule.
(IMF, June 2000)
- Hyundai learned quickly from its mistakes and did not waste a crisis.
(Washington Post, June 8, 2012)

Benchmarking and Beyond

- They think that anything the Japanese can do, they can do better, but now they're proving it.
(Foreign Policy, June 7, 2012)
- Samsung may lack in innovation, but no one can beat Samsung in playing catch-up.
(New York Times, September 2, 2012)

Multiple Achievements

- Korea has the world-class industries: electronics, shipbuilding, steel, automobile, and gasoline exporting.
(Forbes, September 9, 2015)
- The country is a rich, technologically advanced, mature democracy.
(Foreign Affairs, January/February 2014)

Never Satisfied

- The South Koreans have worked like crazy, saved like crazy, and invested like crazy.
(Foreign Policy, June 7, 2012)
- The only people unimpressed by South Korea's accomplishments may be South Koreans themselves.
(Economist, October 26, 2013)

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Comparing the Four Tigers

	Singapore	Hong Kong	Taiwan	Korea
History	British colony (Western)		Japanese colony (Eastern)	
Economy Size	City state		Middle-sized country	
Trade Policy	Open door		Selective open door	
Growth Strategy	State capitalism	Free capitalism	Balanced (SMEs)	Unbalanced (Chaebol)*

- The Singapore government played the most active role among the four tigers
- *Chaebol: (1) Speedy and bold decision (2) Thorough benchmarking of Japan, US and Europe (3) Diversified and specialized areas (4) Hard working and future investment (Owner-CEO)

**Despite these differences,
some common factors of their economic success can be found.**

Reasons behind East Asian Economic Growth

General Understanding

- Cheaper labor?
 - But, there are other countries where labor is cheaper.
- Export promotion?
 - But, import substitution policy may be more effective.
- Perspiration? (e.g., Paul Krugman)
 - But, all countries should be diligent in their early stage of development
- Hard work of Confucianism?
 - But, Confucianism is more about keeping the status quo than changing it.

More Fundamental Reasons

- Cheap and productive labor
 - Agility
(speed and precision)
- Global standard and economies of scale
 - Benchmarking
(learning and best practices)
- Perspiration, and then inspiration
 - Convergence
(mix and synergy-creation)
- Leadership and bureaucracy (elite vs crony)
 - Dedication
(diligence and goal-orientation)

Comparing Korea with other Asian Tigers

- **Agility (speed and precision)**
 - Korean War, US military technology and management, mandatory military service
- **Benchmarking (learning and best practice)**
 - Learning Zaibatsu, but only the best practices
- **Convergence (mix and synergy-creation)**
 - Japan, US, Europe, and something Korean
- **Dedication (diligence and goal-orientation)**
 - Military need, economic need, and political need

Korea shares similarities but is also different from other Asian Tigers.

Distinctive Features of Korean Chaebol

Comparing Conglomerates of Japan, Korea and Taiwan

	Japan		Korea	Taiwan
Conglomerates	Zaibatsu	Keiretsu	Chaebol	Guanxiqiye (bang)
Ownership	Family ownership	Cross-stock ownership	Family ownership Strong CEO leadership	Partnership Individual control
	Collective leadership			
Structure	Trading company Balanced growth More related, horizontal diversification		Trading company Unbalanced growth More unrelated, vertical integration	Trading company Balanced growth Smaller size
Finance	Corporate banks and financial institutions		National bank-based industrial financing (debt-based)	Fiscal rather than monetary financing (tax breaks, high-depreciation)
Example	Mitsubishi, Mitsui		Samsung, Hyundai	Cathay, Hon Hai

Source: Revised from Johnson, Chalmers. (1987). "Political Institutions and Economic Performance: The Government-Business Relationship in Japan, South Korea, and Taiwan," in Frederic Deyo, ed., The Political Economy of the New Asian Industrialism. Ithaca: Cornell University Press.

Selective Assimilation of the Japanese Conglomerates

Korea's Economic Growth: Academic Perspectives

Study	Main Points
1. Amsden (1989)	<ul style="list-style-type: none"> • Learning existing Western technologies rather than innovation • Efficient government intervention policy in the optimal allocation of resources
2. Song (1997)	<ul style="list-style-type: none"> • Outward, Industry, and Growth (OIG) strategy • Influence of Confucian and Christian ethics as an underlying basis for development • Land use, a family-planning program, savings, and consumption behaviors
3. World Bank (1993)	<ul style="list-style-type: none"> • Rapid physical and human capital accumulation • Government's market-friendly policy
4. Cho (1994)	<ul style="list-style-type: none"> • Entrepreneurship and abundance of workers of high standard of literacy, discipline, and desire to grow • Unbalanced strategy by supporting chaebol • Export-led growth strategy along with effective government development strategy
5. Toussaint (2006)	<ul style="list-style-type: none"> • Government intervention, US technical and financial support, land reform, transition from import substitution to export promotion, authoritarian planning, state control over banking sector, currency exchange, capital flows and product prices, US protection, education, scarcity of natural resources
6. Mason (1997)	<ul style="list-style-type: none"> • Slower rates of population growth favoring investment in education and incentives for saving, which accelerated economic development
7. Chang (2003)	<ul style="list-style-type: none"> • Chaebol as providers of efficient ways for allocating limited resources in Korea's early and high-risk stage of economic development
8. Eichengreen, Perkins, and Shin (2012)	<ul style="list-style-type: none"> • Korea's continued growth through the accompanying rise in the labor force, capital stock, and productivity • Export diversification - Rapid shift of export structure to focus on high-growth products

A common factor: The role of government

Korea's Economic Growth: The US Perspective

The Korean Economy in Congressional Perspective

1. The collective effort of the Korean people
2. Political leadership
3. Domestic market expansion
4. Export promotion policies



- **All four reasons are related to the role of government.**
- **Then, what is the essence of the Korean government's role in developing its economy?**

Understanding Korea's Economic Policy

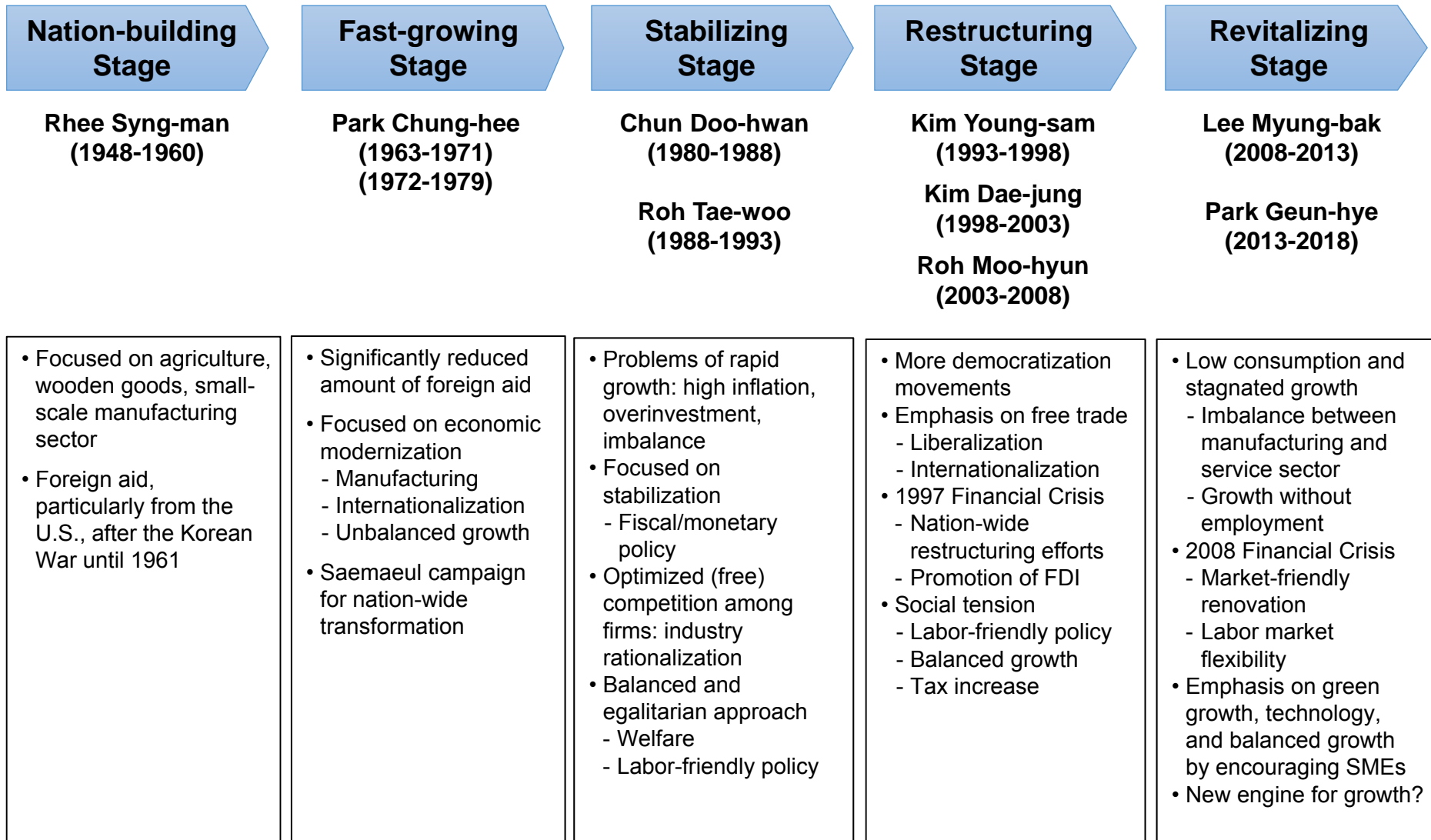
Negative Perspectives

- Chaebol-dominated economy?
 - Economic success but not sustainable
 - Cronyism
- Government intervention?
 - Market-distorting economic policies
 - Lack of innovation
- Unrelated diversification?
 - Economic inefficiency
 - Hidden costs
- Militaristic work ethics?
 - Sleeping just a few hours a day?
 - Human rights issue?

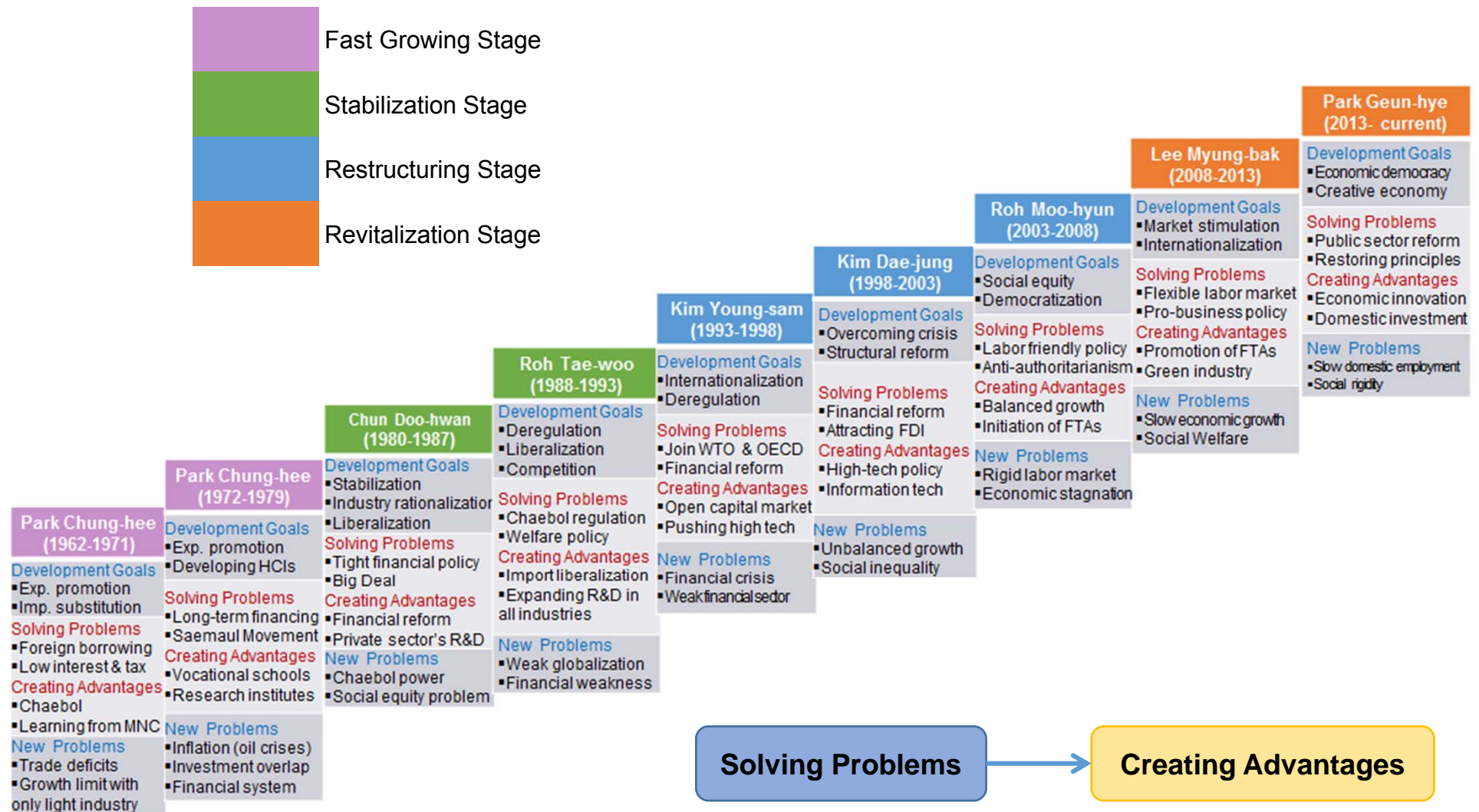
Positive Perspectives

- Fast growth
 - Unbalanced growth strategy for efficiency
 - Transparent criterion: export performance
- A series of five-year economic plans
 - Benchmarking other countries' policies
 - Reducing trial and errors
- Dominant diversification
 - A dominant sector
 - Synergistic mix with other sectors
- Economic culture
 - Incentives and sense of achievement
 - Zero-sum or positive-sum with happiness?

Stages of Korea's Economic Development



Korean Government Policies and Key Ideas



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Korea's 11th President: Park Geun-hye

Profile

- Received bachelor's degree in electronic engineering from Sogang University and studied in France
- Took on the role of First Lady between her mother and father's assassinations in 1974 and 1979, respectively
- Elected 4 times as the Grand National Party assemblywoman since 1998 in Daegu and became the Chair of the Party in 2012
- President (2013 – Present)

• Economic Problems

- Unbalanced growth
- Stagnated global market

• Economic Goals

- Economic democracy: To reduce income inequality
- Creative economy: To expand domestic market and employment

• Specific Strategies

- Supporting SMEs and raising wages
- Establishing 17 innovation centers for start-ups & entrepreneurs

President Park's Two Economic Goals: An Overview

President Park presented a two-pronged approach for dealing with Korea's economic problems and achieving a "second miracle of the Han River."

Economic Democracy

Background

- A response to unbalanced growth
- Mutually reinforcing the cycle of national advancement and the happiness of Koreans

Definition

- Enhancing fairness
 - LE and SMEs to prosper together
 - Eliminating various unfair practices that frustrate SMEs

Creative Economy

Background

- A response to stagnated global market
- Creating new growth engine for new markets and new jobs (2.5 million in five years)

Definition

- Increasing convergence
 - Convergence of technology and industry
 - Convergence of culture and industry

Creation of a new ministry

- Ministry of Future Creation and Science



Moving from market and business friendly policies by President Lee Myung-bak to "fair and creative economy"

Source: Inauguration Speech of President Park, February 25, 2013.

President Park's Two Economic Goals: Effectiveness?

Economic Democracy

- **Negative influences of government help**

The government policies aren't helping, an owner of SME said. The minimum wage will rise from \$4.85 this year to \$5.25 next year. However, if it costs \$1 for a Korean company to make something, it costs only 30 cents for a Chinese company to make it (Washington Post, Oct 13, 2015).

- **Small impact**

A \$39 billion fiscal stimulus package (3% of GDP) includes property-boosting measures such as a loosening of the loan-to-value and debt-to-income ratios for home buyers and increasing the loan amount eligible for borrowers. It looks impressive at first glance, but its actual impact is likely to be fairly small. (CNBC, Jul 31, 2014).

Creative Economy

- **Slow progress and limited scope of influence**

To try to lessen South Korea's reliance on exports, Park has been promoting a "creative economy" strategy - fostering start-ups and encouraging entrepreneurship. But these efforts are slow going and are not going to provide any relief to South Korea's 3 million SMEs (Washington Post, Oct 13, 2015).

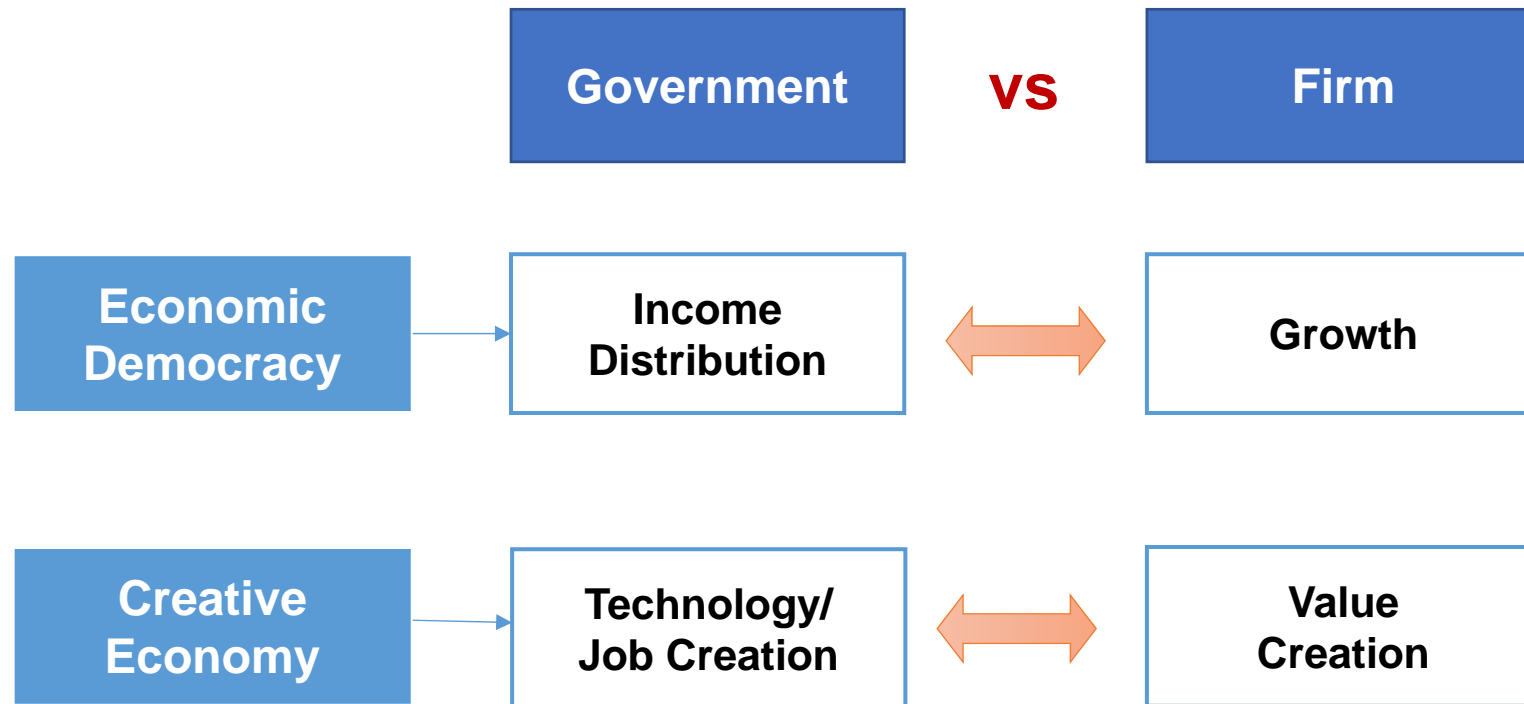
- **Negative social perception on start-ups**

The Korea New Exchange was established in July with the aim of further bridging the gap between venture entrepreneurs and investors... Young Koreans often avoid starting a company or working for SMEs due to high risks, instead seeking stable jobs at conglomerates, whether public or private (Koreaherald, Aug 15, 2013).

Fundamental Problems

- The vagueness of concepts and a long-term task that would make it almost impossible to achieve in her five-year term
- Different perspectives between the government and the companies

Korea's Current Dilemma



Differences between the government and the firm's perspectives for achieving the two economic goals

National vs Firm Competitiveness: Clashing or Compatible?

Dinner party in February, 2011 at Woodside California
- President Obama with 12 major IT company CEOs

- **President Obama**

What would it take to make iPhones in the U.S.?
Why can't that work come home?

- **Steve Jobs**

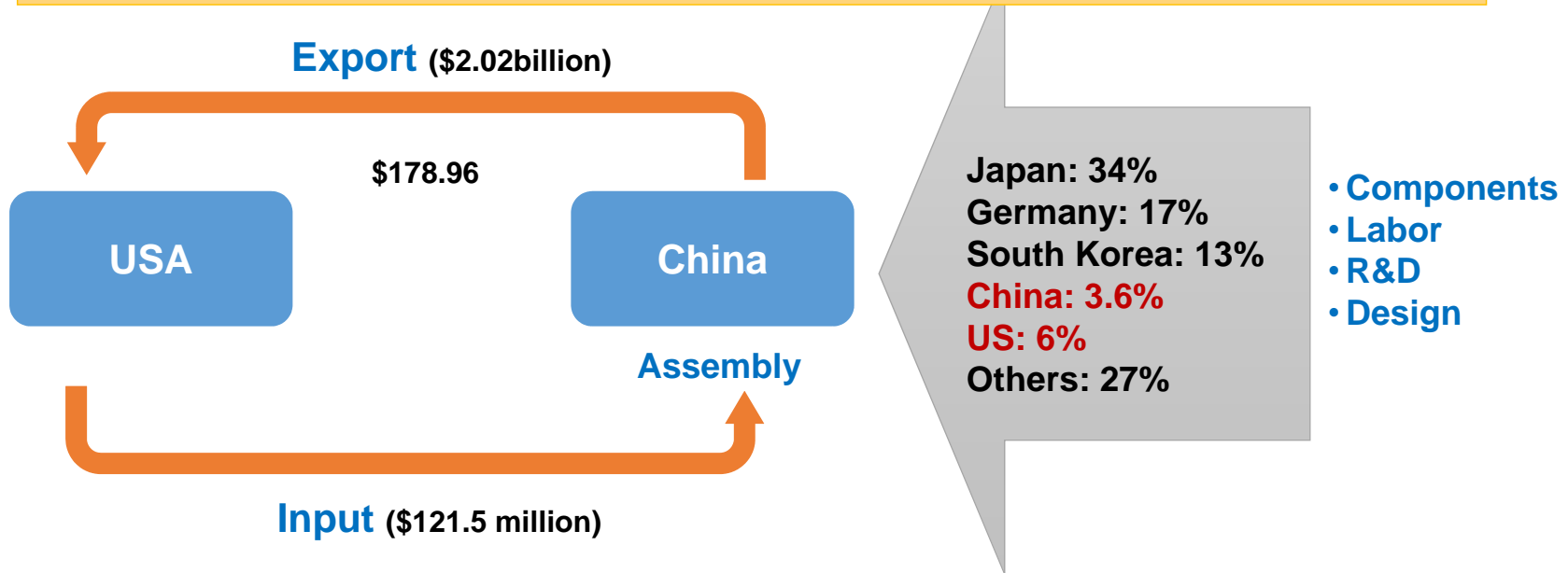
Those jobs aren't coming back.

Source: New York Times. How the US Lost Out on iPhone Work.
January 21, 2012.

	Politician	Businessman
Scope	Domestic	Domestic + Foreign
Interest	Voters	Stakeholders
Goal	Welfare: Employment	Profit Creation
Method	Protectionism	Efficiency
Strategy	Made in Home Country	Made in World
Global View	Competition	Competition + Cooperation
Outcome	Income Distribution	Survival and Growth

Solution? International Trade vs Global Value Chain (GVC)

iPhone: US trade/GVC balance with China
Trade balance: - \$1.9 billion [US import: \$2.02 billion, US export: \$121.5 million]
GVC balance: + \$48 million [US value: 6%, Chinese value: 3.6%]



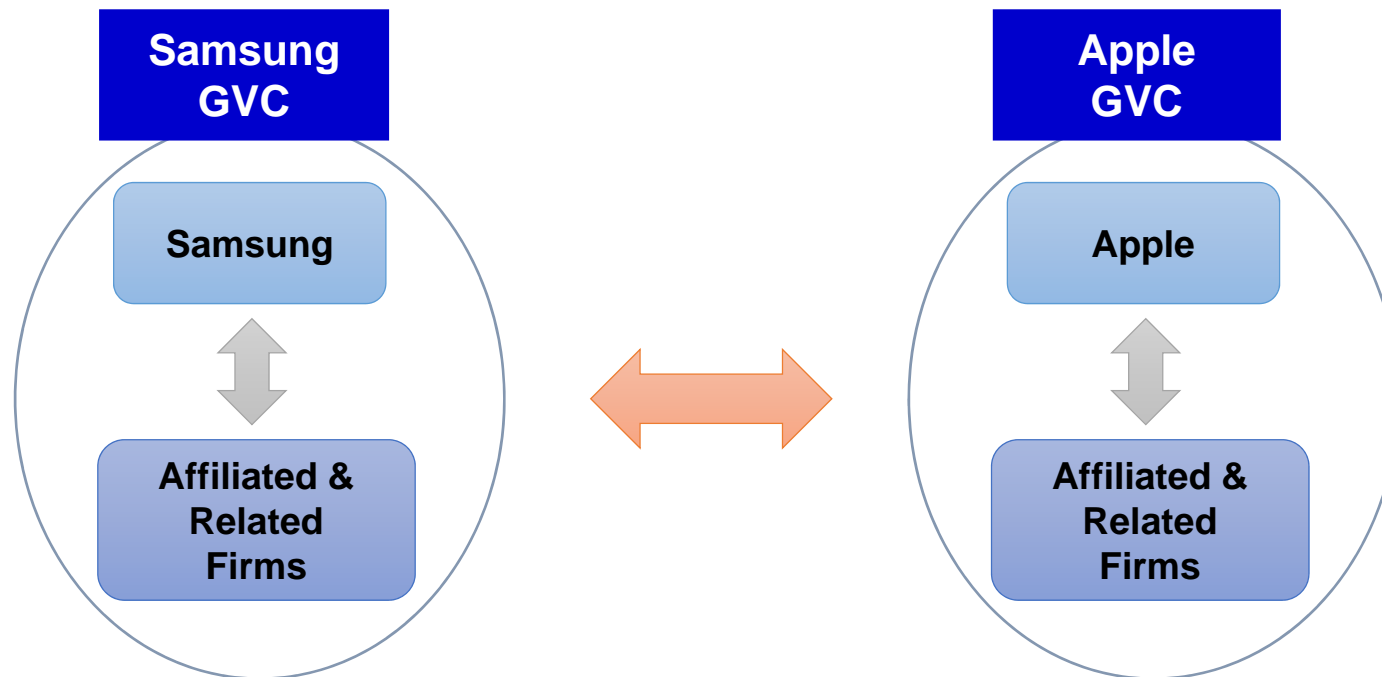
Source: Wall Street Journal, 2010/12/15, Not Really 'Made in China'; Xing and Detert (2010), How the iPhone Widens the United States Trade Deficit with the People's Republic of China, ADBI Working Paper

Note: In 2009, Chinese iPhone exports at \$2.02 billion to US. After deducting \$121.5 million in Chinese imports for parts produced by U.S. firms such as chip maker Broadcom Corp., they arrive at the figure of the \$1.9 billion Chinese trade surplus—and U.S. trade deficit—in iPhones. 48 million surplus with China comes from the calculation as follows: \$121.5 million - \$2.02 billion x 3.6% = \$48 million.

- Not Really 'Made in China': China only accounts for \$6.5 (3.6%) of the iPhone's \$178.96 production cost.
- Trade balance is no longer an accurate index of national competitiveness.

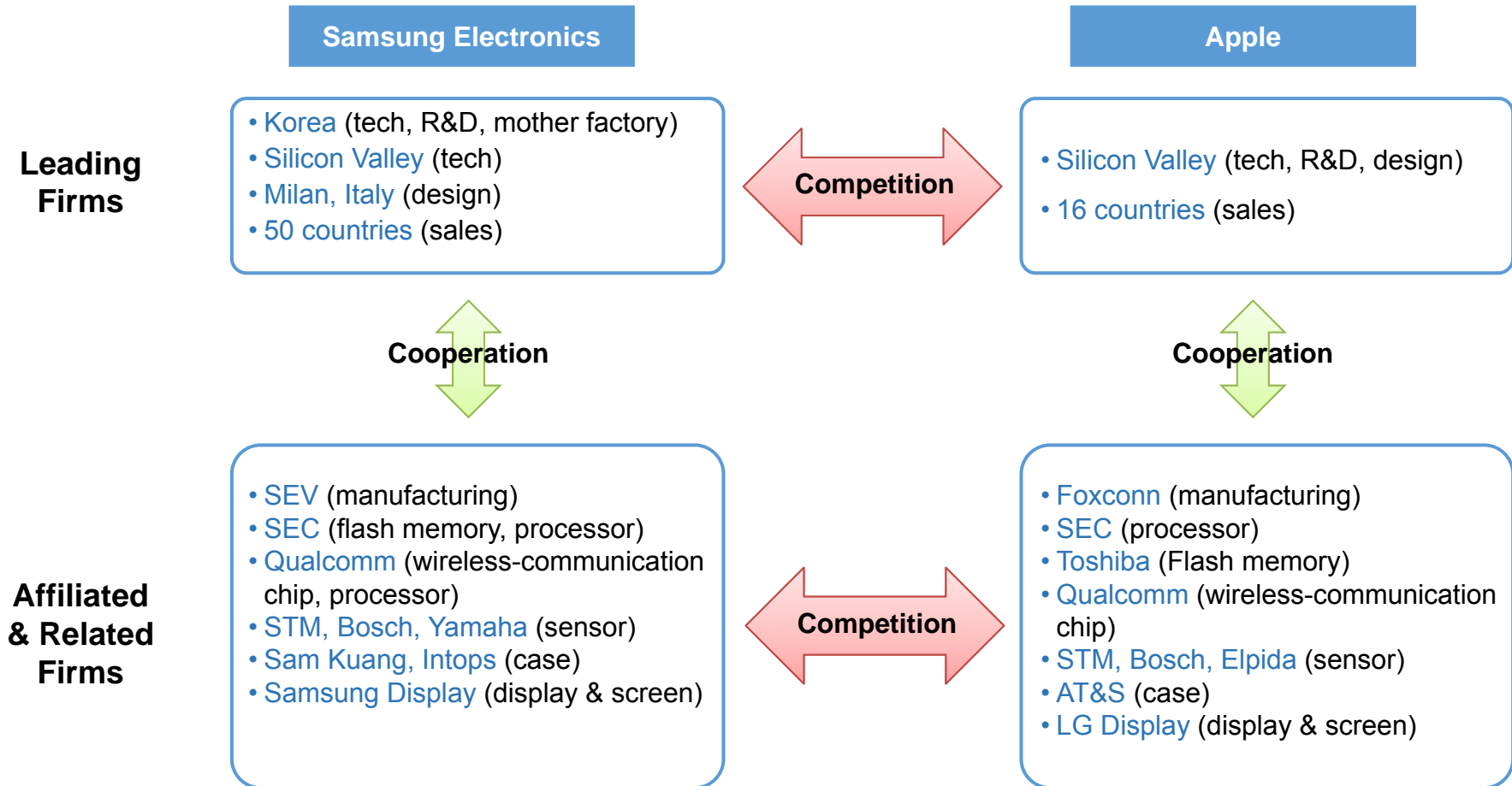
Global Value Chain (GVC): Implications

- The unit of competition: from a single firm to the entire GVC
- Competition between GVCs, but cooperation within the GVC



Global Value Chain (GVC): Samsung vs Apple

Competition and cooperation between and within the Global Value Chain



Comparison between Samsung vs Non-Samsung Suppliers

Samsung suppliers have higher competitiveness than non-Samsung suppliers (2012)

(unit) firms: number, employees: number, revenue: million won

	Samsung Suppliers		Non-Samsung Suppliers	Difference
	Total	Mobile Phone		
Firms	118	34	3,849	-
Average Employees	97	118	38	59
Average Revenue	53,443	85,405	9,599	43,844
Revenue per worker	553	720	250	303

Samsung suppliers grow faster than non-Samsung suppliers (2010 - 2012)

(unit) firms: number, revenue: million won

	Samsung Suppliers						Non-Samsung Suppliers		
	Total			Mobile Phone			2010	2012	Growth
	2010	2012	Growth	2010	2012	Growth			
Firms	118	118	-	34	34	-	3,688	3,849	-
Average Revenue	48,966	53,443	9.1%	73,593	85,405	16.3%	9,203	9,599	4.3%

Data Source: Samsung Electronics

Samsung suppliers: Among SMEs with employees of 10-299, the firm sales revenue gained from Samsung Electronics were more than 10%, based on 2012 statistics. The SMEs are manufacturing firms in the sector of electronics parts and components, PC, video, audio, and other communication equipment. Non-Samsung suppliers: firms other than Samsung suppliers in the same industry

Korea's Creative Economy: Policies and Issues

- **Immediate help**
 - Incentives: Cash, tax break
 - Hidden costs?
- **Building infrastructure**
 - Innovation centers in 17 locations
 - Economies of scale?
- **Supporting sectors**
 - A wide range of support: legal, financial, and other services
 - Other supporting sectors and living environment?
- **Narrow goals**
 - Innovation centers for regional innovation and entrepreneurship
 - Global competitiveness?

Silicon Valley: An Overview

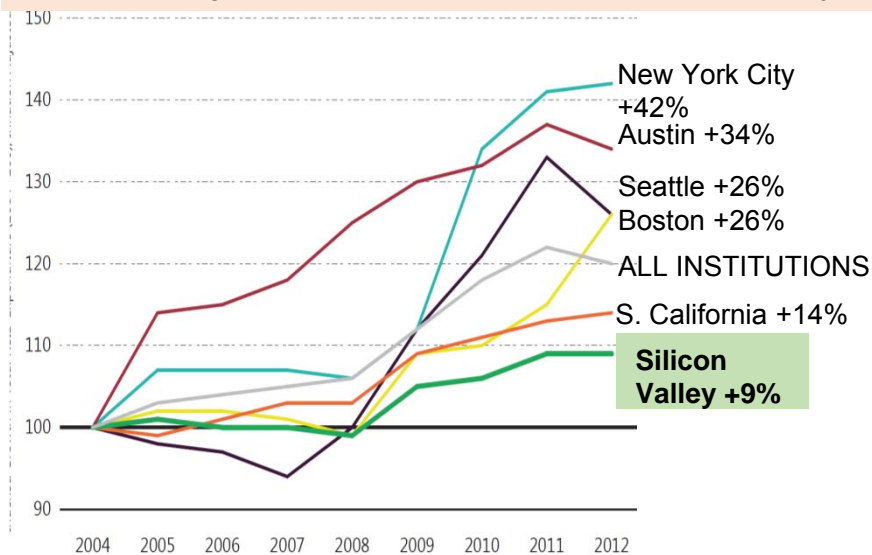
Silicon Valley: Interesting Facts

- R&D expenditures grow the most slowly among the innovation regions
- Jobs are created more from existing (65%) and moving in (12%) companies than new ones (23%)
- One high-tech job generates five jobs in the service sector
- But the worker productivity is the highest, 62% above the US average

Comparison with New York City, Boston, Southern California, Seattle and Austin

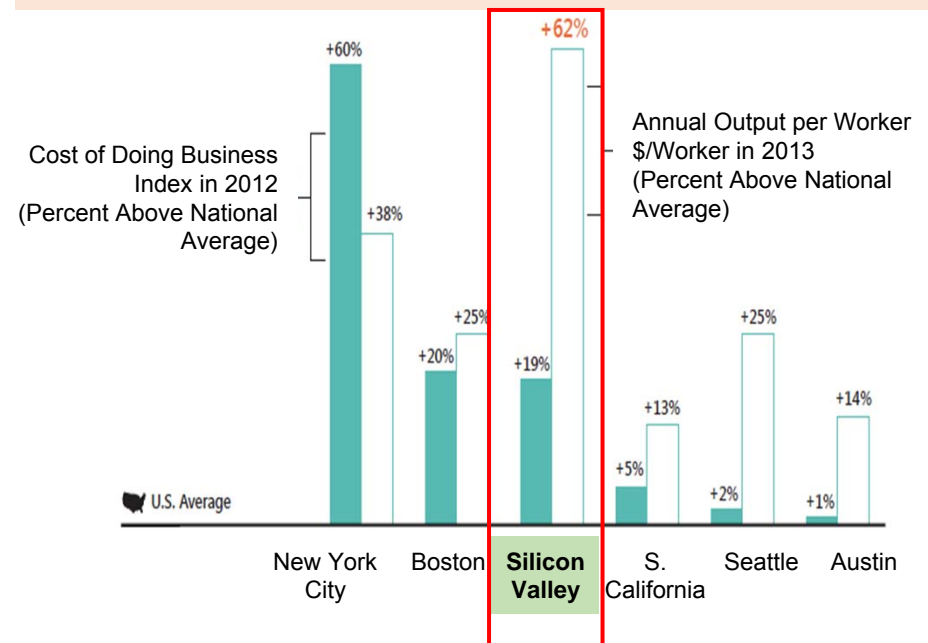
Growth in R&D Expenditures

Innovation Regions, 2004-2012 (Index 2004=100), inflation adjusted



Cost of Doing Business and Worker Productivity

Compared to the U.S. Average, Innovation Regions, 2012 and 2013



Source: Silicon Valley Competitiveness and Innovation Project 2015

The Relationship between R&D and Business Success

- Wide disparities persist in how well innovation investments actually pay off. R&D is often seen as a black box, where large sums of money go in and innovative products and services only sometimes come out. (*PWC Strategy & Inc. Global Innovation 1000, Winter 2014*)

The Ten Most Innovative Companies and Their R&D Spending (2014)

Rank	Company	R&D Spending		
		US\$ billion	Rank	As % of sales
1	Apple	4.5	32	2.6
2	Google	8.0	9	13.3
3	Amazon	6.6	14	8.8
4	Samsung	13.4	2	6.4
5	Tesla Motors	0.2	440	11.5
6	3M	1.7	79	5.6
7	GE	4.8	30	3.3
8	Microsoft	10.4	4	13.4
9	IBM	6.2	18	6.2
10	P&G	2.0	70	2.4

- The first computer was created at the University of Pennsylvania and the first semiconductor was invented at Bell Labs in New Jersey, yet neither one was commercialized there. All that happened in Silicon Valley. (*Forbes, April 2, 2013*)

Silicon Valley Competitiveness

- **Dynamics**

- Fast processes: Idea generation, commercialization, entrepreneurship and business innovation
- Market economy: Annually 3,000 opened or moved into; 2,500 closed or moved out; 500 net gain

- **Interaction**

- Continuous churning of companies and jobs: learning and benchmarking others' skills
- Sharing experiences of foreign expertise: 56% of technology-related workforce are foreign born

- **Ecosystem**

- Industry ecosystem: Computers, social media, bio-tech, energy, financial & legal services
 - Living ecosystem: Schools, markets, culture, leisure, climate, etc.
 - Business cost (housing, transportation*): 20% higher than the national average
- *1 in 6 commuters travels two hours or more each day

- **Motivation**

- Willingness to work harder: Wider income disparity
- Highest economic mobility: Improving economic status (from bottom 5th to top 5th: 12.5%)

Numerical data are adopted from Silicon Valley Competitiveness and Innovation Project – 2015 (svcip.com)

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Conclusion: Strategies for Korea's Sustainable Growth

What to be careful of and what to promote?

- **Policy Tools**

- Increasing incentives: Taxpayer's money
- Reducing regulations: Reducing red tapes (e.g., hidden costs, time)

- **Development Directions**

- The Korean way: Innovation centers in 17 locations
- Global best standards: Silicon Valley (*i.e.*, ecosystem of business & living)

- **Supporting Sectors**

- Specific firms/sectors: SMEs, services
- Overall industries: Multi-technology products & industries, synergies

- **Economic Goals**

- Fairness: Income redistribution
- Growth: Efficient resource allocation and increasing value creation

Appendix

Need for a New Perspective: Samsung Electronics vs Nokia

	Success Case (Samsung)	Failure Case (Nokia)
Speed	Samsung's success in the smartphone market should be attributed to <u>speed and rapid response</u> to market changes (Guardian, 2012).	Delayed entering into the smartphone business and slow response to the market change (Wall Street Journal, 2012)
Precision (quality control)	Samsung CEO Lee said, " <u>Good (quality) products</u> come from the fingertips of our employees and partners." (Financial Post, 2014).	
Learning	Samsung may lack in innovation, but no one can beat Samsung in playing <u>catch-up</u> (New York Times, 2012).	Less responsive (learning) and more self-contented (CNBC, 2013)
Best practice	Samsung's success story has been largely based on <u>improving products already on the market</u> (Korea Times, 2013).	Sticking to its own outdated and cumbersome Symbian standard (compared to iOS and Android) (Wall Street Journal, 2011)
Mixing	Samsung's <u>vertical integration</u> is a key factor behind the success of its smartphone business, which has relied on <u>components sourced internally</u> (Financial Times, 2014).	
Synergy-creation	Samsung's success in electronics/smartphone is due to the <u>synergistic integration</u> of its different business divisions: consumer electronics, mobile phone, components sectors.	Fragmented research efforts due to the internal rivals and disconnected operations (Wall Street Journal, 2012)
Diligence (extra engagement)	Employees are <u>highly disciplined</u> and work long hours: it is common for R&D employees to work on Sundays (Guardian, 2012).	
Goal-orientation (no complacency)	Samsung <u>creates crisis</u> when things are going well (e.g., operate in a state of perpetual crisis) (Economist, 2011). Samsung continuously changes its target rivals from Motorola to Nokia and to Apple.	First developed the smartphone, but did not bring it into the market and just refocused on the basic phones (Wall Street Journal, 2012)

The ABCD Model: An Integration of Established and Emerging Theories

	Established Theories	Theories and Concepts for Further Development	Cases
Agility			
• Speed	Early entry advantage	Fast process advantage (Economies of speed)	Automobile Industry (Ford, Toyota, Hyundai)
• Precision	Automation	Process techniques (自動化) e.g., JIT, TQM, 6 sigma	
Benchmarking			
• Learning	Resource-based view of the firm	Absorptive capacity (Economies of learning)	Steel Industry (US steel, Nippon steel, POSCO)
• Best practice	Destructive innovation	Incremental innovation e.g., Kaizan, creative imitation	
Convergence			
• Mixing	Specialization capability (Economies of scale)	Combinative capability (Economies of diversity)	Electronics Industry (GE, Sony, Samsung)
• Synergy-creation	Related diversification (Economies of scope)	Related & Unrelated diversification e.g., Chaebol, smartphone	
Dedication			
• Diligence	Inspiration	Perspiration (Economies of hard-working)	Work Ethics (US, Japan, Korea)
• Goal-orientation	Unique positioning	Continued growth after catch-up e.g., constructed crisis, extra commitment	

“What” vs “How” Approach

Existing Studies

“What” Approach

- Superior resources
 - *Cheaper labor*
 - *Higher technology*
- Focus on “input” factors
- Static view

New Study

“How” Approach

- Similar resources
 - *Similar labor cost, but HOW?*
 - *Similar technology, but HOW?*
- Focus on “process” factors
- Dynamic view

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots$$

- “What” Approach: $X_1, X_2, X_3, X_4 \dots$
- “How” Approach: $\beta_1, \beta_2, \beta_3, \beta_4 \dots$

**As the gap in “What” factors has been narrowing,
the “How” approach becomes more important.**