

# Secrets of Korea's Economic Development



**Jin PARK, Ph.D.**

**KDI School of Public Policy and Management**

# Presenter

## Jin PARK

1987 : B.A. in economics, Seoul National University

1991 : Ph.D. in economics, Univ. of Pennsylvania

1992~1998 : Research fellow, KDI

1998~2001 : Director, Administrative Reform Team,  
Ministry of Planning and Budget

2012~2013: Director, Research Center for State-Owned Enterprises

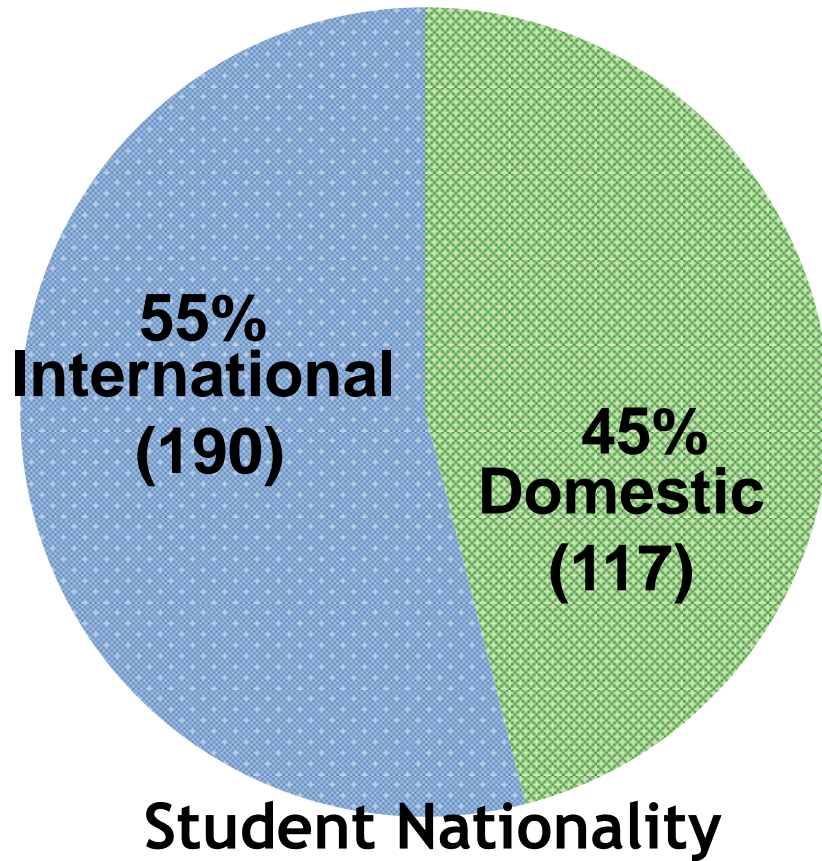
2001~ : Professor, KDI School  
Chair of MDP (Master in Development Program)

Experience in international consulting:

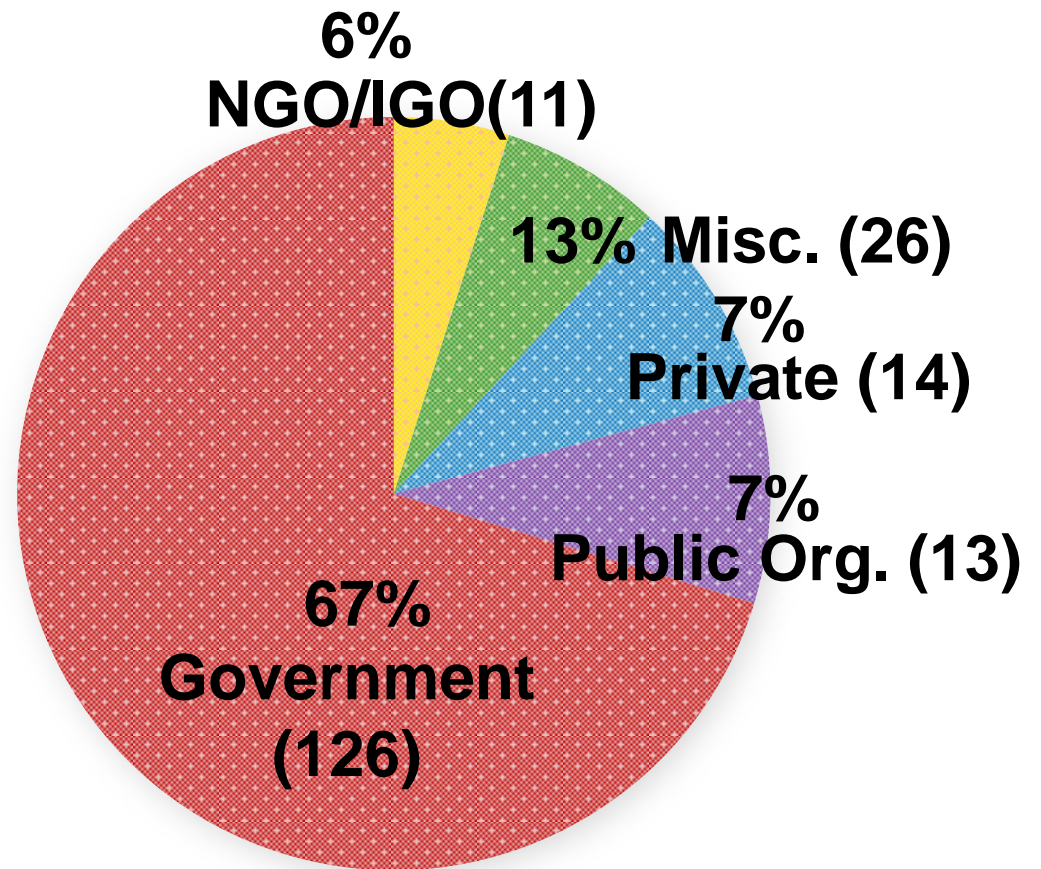
Guatemala (2010), Namibia (2009), Indonesia (2008~2010),  
Turkey (2007), Georgia (2004), Far East Russia (2005)



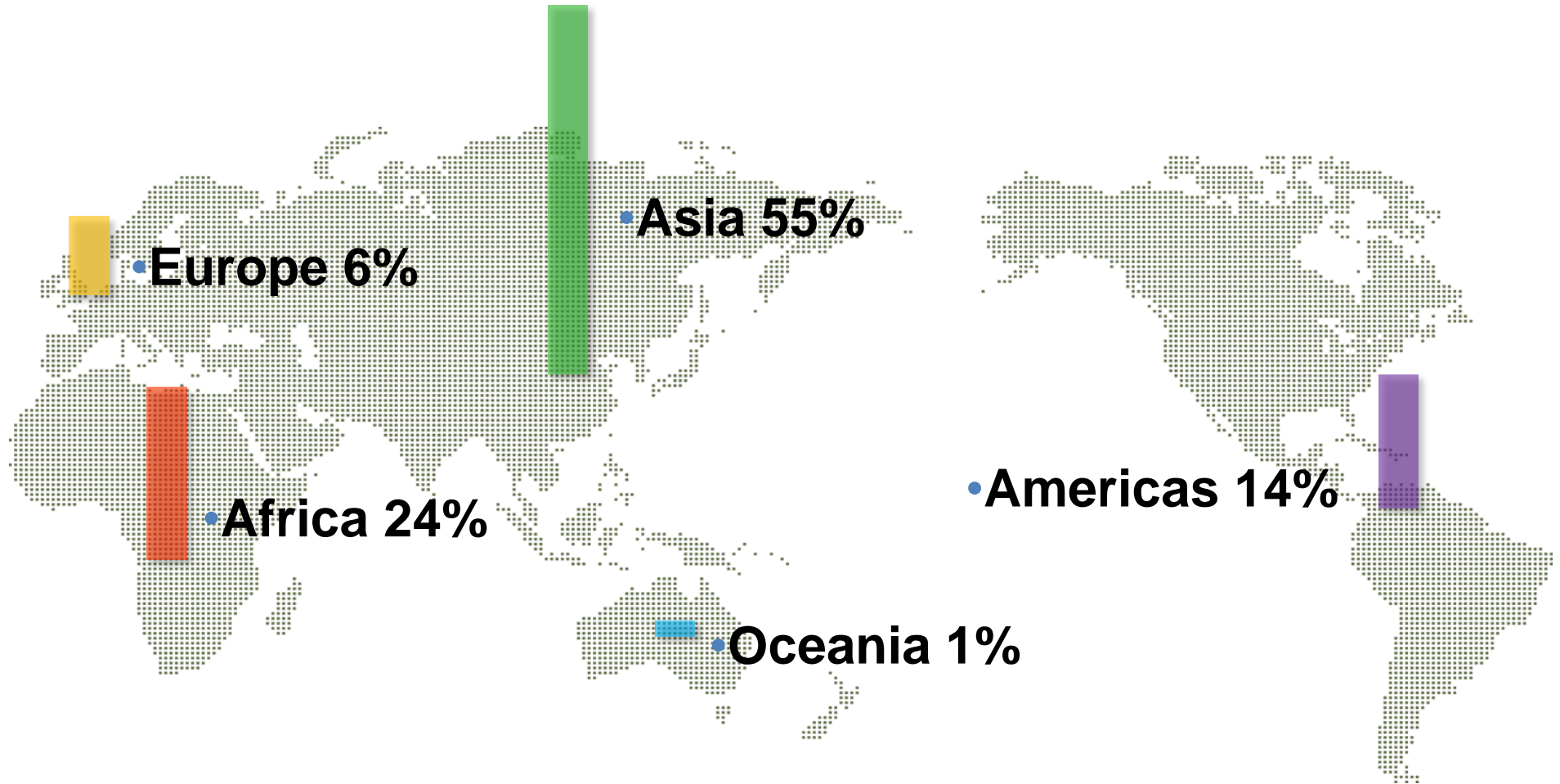
# Student Body of KDI School ([www.kdischool.ac.kr](http://www.kdischool.ac.kr))



## International Student Background



# • International Alumni Demographics<sub>(last 3 years)</sub>



# Academic and Scholarship Programs

- ◆ • **Masters in Public Policy / Development Policy**
- ◆ • **Ph.D. in Public Policy / Development Policy**

• **Seoul G20 Global Leaders Fellowship**

• **Global Ambassadors Scholarship**

• **KOICA Scholarship**

• **KOGAS Global Fellowship**

• **POSCO Fellowship**

- ◆ • **All international students receive scholarship**
- ◆ • **Most scholarships include full tuition waiver and monthly stipends (app. 1000 USD/month)**







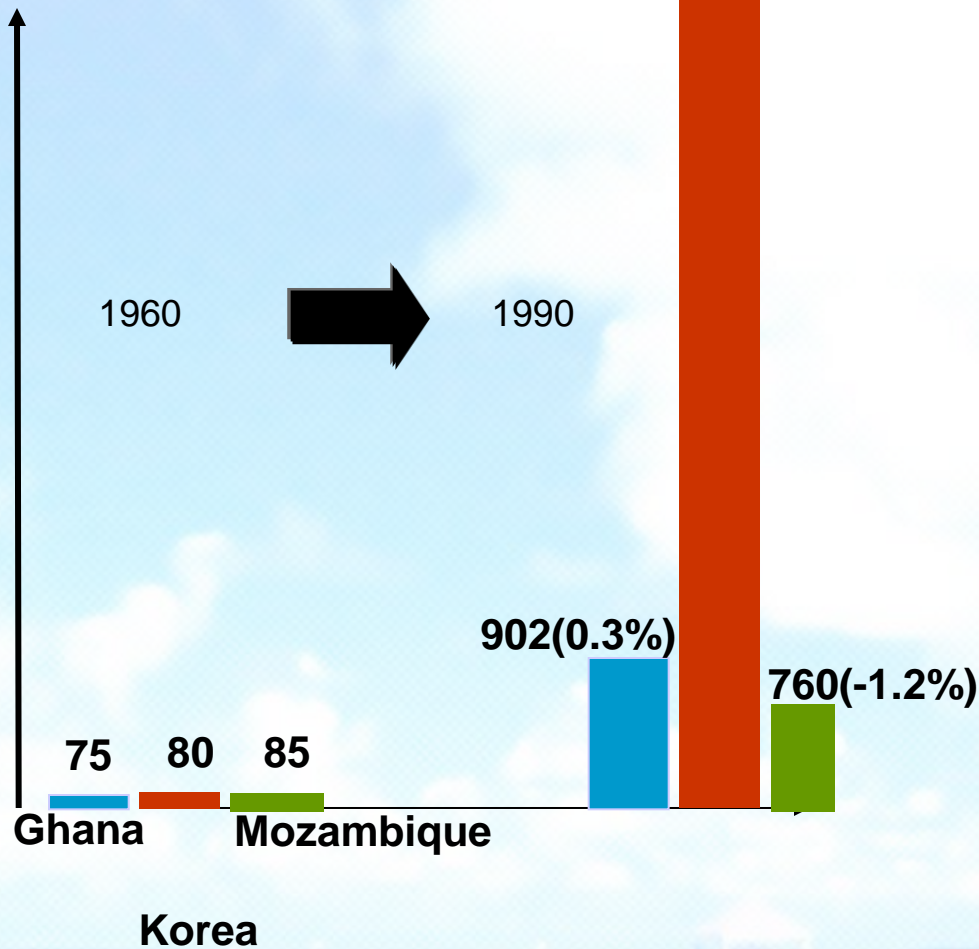






# Stagnant or Progress ?

GDP/cap



6,673 (annual average 7.0%)

Now more than 20,000 USD

**What made  
that difference?**

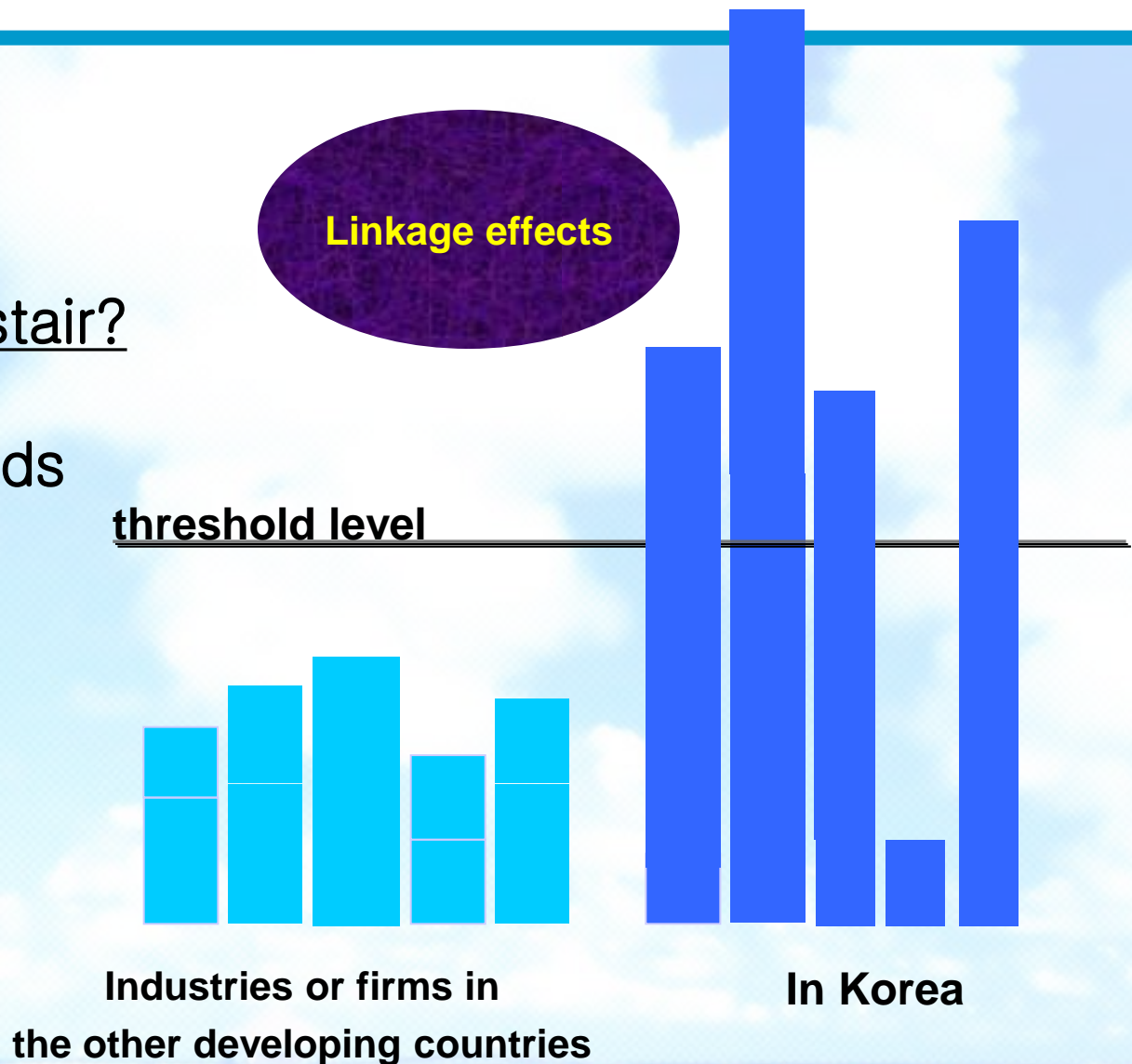
**The Purpose of  
this presentation**

# Secret #1: Focus

How can 10 people  
Jump on to the upper stair?

- 1) Jump hands-in-hands
- 2) One first on the top and help others

You can take 1)  
but it is slower.





## Father's Choice

**Option 1: All 5 kids up to high school**

**Option 2: One goes to college, and the rest up to primary school.**

**Q: Will this kid be successful? / Will he support his sisters?**

**Many fathers in Korea chose option 2: focus strategy**

In a Family

=

In a Country

Criteria 1: Who is a Promising kid? = Which is a Promising industry?

Criteria 2: Will he support the family? = Are there big linkage effects?

: chemical (refined oil) >> steel >> automobile, ship-building << electronics

**President Park, “We will win nothing when we try to win everything.”**

Choice of 5 Industries during 1970s are feeding Korean people now taking 70% of Korea's export

**5 industries: ship-building, electronics, automobile, steel, chemicals**

**Global standing (market share):**

**Ship-building(2), LCD(1), cellular phone (1),  
automobile (5), steel (5), ethylene (5)**

**Top 10 Korean companies 2011 are all from those 5 industries**

**Electronics:** Samsung electronics (1), LG Display (9), Hynix (10)

**Automobile:** Hyundai Motors (2), Kia Motors (6), Mobis (7)

**Ship-building:** Hyundai Heavy Industries (4)

**Steel:** POSCO (3)

**Chemicals:** SK Innovation (5), LG Chemicals (8)

**Which industries will feed your kid 30 years later?**

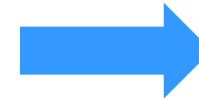


# ■ Why Gov selects focus industry?

- (1) It needs a coordination with the other industries.
- (2) It needs a coordination for infrastructure: electricity, transportation
- (3) If the industry has a high uncertainty and risk, it may need an initial protection and support by the government.
- (4) The market tends to select industries with current comparative advantage, in which case the industry mix will never change.
- (5) It's takes a time and costs for the market to select the winner industry and firms.
- (6) The market may be dominated by already strong industries, so it is hard to have a new focus industry. (Agriculture in a Latin country)

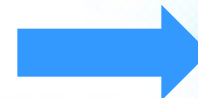
# Conventional Industry with Comparative Advantage or New Challenge for Leap-frogging

**Conventional Industries should go on**



But if you have only conventional industries,  
you will never be advanced country

**New challenge should be made  
for leap-frogging**



**Two Track  
Strategy**

The role of government is not to support the conventional industries,  
but to support the future industry without comparative advantage.



# Industry focus: three criteria

## 1) Can we do it well?: Will this kid successful?

- Domestic Initial endowment : resources, human resources, languages
- International geo-economical conditions
- Lack of skill, technology, capital, work ethics? – the role of government

## 2) Will this focus industry also benefit other industries? : Will he support his sisters after his success?

- Backward and Forward linkage effect  
: iron – steel – automobile – tire
- In developing country, **backward linkage** is more important than the forward

## 3) Is it a big employer and sustainable?

- Domestic and international demand, short and long-run
- **Possibility of job creation**

*Discussion: What are those focus industries of Kazakhstan?*

# **Secret #2: Coordination and Concentration**

## **Coordination between Industries and the following:**

### **❑ Infrastructure**

- link b/w industries and harbors, electricity**
- link b/w infrastructures, expressways**

### **❑ R&D: Gov-funded Research Inst ('76)**

- chemicals, electronics and telecommunication,  
Machinery,**

### **❑ training and education**

- vocational high schools and public licenses**



# Regional Coordination and Concentration



The factories of the 5 industries were all Ulsan~Pohang near Busan.

>> A lot of criticism for regionally unbalanced growth, but inevitable choice.

## and higher Spillover Effect

Transaction Costs: less transportation costs + more benefits

Chemical (Oil) >> Steel >> Automobile, Ship-building << Electronics

### Spillover Effect

(1) MAR Spillovers (A. Marshall, K. Arrow, P. Romer)

When firms in the **same** industry are concentrated in the area  
: Silicon Valley (good for knowledge exchange and innovation)

>>> Generally more important spillover in the development

(2) Jacobs Spillovers (J. Jacobs)

When firms in the **diverse** industries concentrated in the area  
: University (good for interdisciplinary interactions)



# Prioritize Infrastructure

## Necessary Infrastructure from Industries' Point of View

- Supply of human resources – (vocational training)
- Supply of Energy (crude oil, coals) – Harbor, Power Plants
- Supply of capital like Machinery (imports from Japan) – Harbor
- Inputs for the other industries (linkage effect) – Industrial Complex
- Domestic consumption of final goods – Highways
- Exports (Japan, USA) – Harbor

## Necessary Infrastructure from Consumers' Point of View

- Imports of final goods – Harbor
  - Domestic supply of light industries – Highways
- ⇒ 4 Emphasis: Two Ports, Connecting Highways b/w major cities  
Industrial Complex, Power Generation

# ■ From Regional Focus to Balanced Growth

	Benefits	Costs
Regional Focus Strategy	Low <b>transaction</b> cost High <b>spillover</b> effect Higher return for infrastructure	Mega city problems Regional disparity
Regionally Balanced Growth	Regional co-development No mega city problems	High transaction costs No spillover effect

In general, at the early stage of development, Benefits of regional focus are bigger than the costs.

*Compromise: Multiple **hubs and spokes** strategy*

Concentrate Industries with linkage effects at a complex, and locate those complexes to different regions



# Secret #3: Motivation

❑ **Will to Develop will develop the country.**

- 1) **Individual:** I can do (or my kids can do) spirit : hardworking, education
- 2) **Firms:** entrepreneurship, learning by imitation (catching up Japan)
- 3) **Government and Political Leaders:**  
Provide motivation to people and firms with right vision

❑ **Korea until 1950s**

- **Individual was lazy:** Farmers drink and gamble after harvest in the fall until the next spring.
- **Firms simply enjoyed domestic market through import license.**

**What changed Korean people and firms?**

# How to Motivate people?

## Semaul (New Village) Movement

- Start: March 22<sup>nd</sup> , 1970

Free Cement rationing to 35 thousand villages across country under one condition: “use them for the good of the village”

- At the end of 1971, **evaluation** by the Ministry of Interior  
: 17 thousand good performing villages, 18 thousand poor performing villages
- 1972: **Critical decision**  
: More rationing to those good performers, no support for those 18 thousand poor performer.
- Disagreement ; Ministry of Interior, Political party



- But the President Park said, “the government will support only those who help themselves. This is the only way to eradicate the sense of the dependence and encourage the work ethics. I am willing to risk my presidency with this **politically unpopular policy**” (benefit of dictatorship)
- Villages are categorized into three by their **development will** (elementary, self-help, self-reliant) – who should be given more gov. support? – President Park said, **“The government will support those who make improvement not those who need improvement.”**
- During 1960s, the farmer’s income / urban laborer’s income was only **60%**, but becomes **100%** after 1974.

# How to Motivate Firms?

## Export Promotion Policy

- Every year, the government gave a award to exporting companies  
: The more export, the higher award
- For the banks, the award works as a reference of guarantee  
: The higher award, the lower interest rate  
>>> **The more export, the lower interest rate**
- Other policies  
: no customs tax for raw material intended for exports,  
Corporate tax cut for exporters,  
Government-funded KOTRA for collecting foreign market info

Bottom line: Encourage competition, and Support the Winner

# How to select the Firms?

	Pro	Con
1. Those who are <b>Disadvantaged</b>	Equal footing	Not all disadvantageous has potential. They may abuse the help. <b>(Industrial policy is not social policy.)</b>
2. Those who has a <b>Potential</b>	Ideal	Hard to evaluate It opens a door to <b>corruption</b> .
3. Those who made a high <b>achievement</b> (Korea during 60~70s)	<b>incentive to grow</b>	- maybe already advantageous - Economic concentration (Korea)
4. Those who made a bigger <b>improvement</b>	<b>Incentive to grow</b>	- Respect <b>currently small, but fast-grower</b>

**(3) (4) Yes: Let them run 100m dash,  
and reward the winner or the most improved.**



# Motivation by Political Commitment

The President showed his **commitment** by actively participating in the **checking the implementation**.

\* Monthly Trade and Export Promotion Meeting (1966~) by President

- Format: Ministry of Commerce and Industry reports to the President
- Participants: President, MOCI and other Ministries, Private Firms and Banks
- Role: Check the export performance and discuss export promotion

\* The first meeting in January 1966 at President's Office



# Secret #4: Capacity-Building

## (1) Education Reform for **Individual**

### ☐ Reforming the Education System: universal + elite

- Strict application of obligatory 6 year primary education (now 9 years)
- Supply of primary school teachers: Teachers' College (1962)
- Learn from foreign technical assistance: Minnesota project (health care)...
- Government scholarship for Ph.D. in the advanced countries (11 people starting from 1977, now accumulated # is 2,000 Ph.D.s)

### ☐ Vocational Training and public license

- Vocational High schools: **Easiest way to get a job** (national campaign to overcome the tradition favoring more study)
- Reform the public license certificate: **the license certificate should prove the bearers' skill (manufacturing and service)**  
**>>> performance index of vocational high schools**

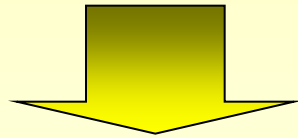
## (2) Capacity of a Firm: Learning from Imitation From manufacturer to Contractor

**OEM**

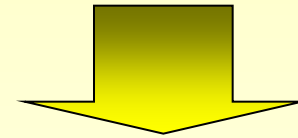
(Original Equipment Manufacturing)

**ODM**

(Original Development/Design Manuf.)



**Why are subcontractors necessary?**



**Contractor** : brand, market  
distribution network, design

**Subcontractor** : capital, skill  
: manufacturing skill in OEM  
design skill in ODM

**Manufacturer** : cheap inputs  
<Korea>

(60s~70s) manufacturer

(80s~early 90s) both subcont. & manuf.

(late 90s~ now) both contractor & sub.

– **US, EU:**

Don't know much about manufacturer  
Uncertain supply of intermediate goods

– **Subcontractors:** no brand name,  
weak distribution network,  
expensive labor costs

– **manufacturer:** no capital, no skill



### **(3) Capacity of the Government**

#### **Precondition for such Active Gov Intervention**

- ☐ **(reasonably) Clean and Competent government.**
  - If you do not have such government,  
government intervention can mislead the country.**

**Best: Active intervention by clean and competent gov**

**Second best: No intervention (respect market principle)**

**Worst: Active intervention by corrupted and incompetent gov**

**e.g. aircraft industry in Indonesia**

This is why government reform is important for development.

## Korea's Bureaucracy

Grade	Title	Notes
Political appointee	Minister	Too short terms in office (1~2 yr) About 30% comes from civil service
"	Vice-Minister	About 80% comes from civil service
1	Assistant Minister	Retirement age (60) is not respected
2	Director-General	20% (grade 2+ 3) is for open competition
3	Associate Director-General	Senior Executive Service
4	Director	The lowest unit head with authorization power
<b>5</b>	<b>Associate Director</b>	<b>entrance exam</b> <b>Director in a lower-level local gov</b>
6	Chief Clerk	
<b>7</b>	<b>Associate chief clerk</b>	<b>entrance exam</b>
8	Clerk	
<b>9</b>	<b>Assistant Clerk</b>	<b>entrance exam (Mostly in local gov.)</b>

# (1) Clean Government: Anti-Corruption in Korea

- **Separation between political and economic power**
  - Big conglomerates vs. President : 1960s in Korea
  - The role of news media and the scholars
- **Incentives for civil servants**
  - High hope, higher cleanness:  
Civil servants had chances to become (vice) Ministers if they stay clean.
  - Better guarantee, higher cleanness:  
Pension for Civil Servants,  
Job after retirement (but conflict of interest issue)
- **No everlasting collusion**

Since corruption was open to everyone not just to few companies, there was always check and balance between them.
- **Recent emphasis: Transparency is the best medicine for corruption.**



## (2) Competent Government: The Role of the competent Bureaucrats

- **Recruiting System**

- Since 1963, the entrance exam for civil servants became an appointment exam, which had been just a qualifying test before.  
(Absolutely no possibility for nepotism or corruption)

- \* Different entrance exam for 5<sup>th</sup> degree, 7<sup>th</sup> degree, 9<sup>th</sup> degree

- (No schooling background, No age limit >> “Dragon comes from a creek”)

- Central Officials Training Institute (1961~)

- **Civil Servants were appointed to (vice) Ministers**

- Civil servants were appointed to the political appointee positions  
: 80% of vice Ministers, 30% of Ministers
- To become Minister, young and smart civil servants who passed the exam for 5<sup>th</sup> degree worked really hard staying relatively clean.

>>> They are the ones who helped the president make a right decision.

# Competent Government needs Experts' Support

Government establishing government-funded research institutes.

## **Korea Institute for Science and Technology (KIST, 1966)**

U.S.A offered 10 million \$ in return for Korea's military dispatch to Vietnam, President Park did not buy flour but established KIST with it.

## **Korea Development Institute (KDI, 1971)**

- Attracted many scientists in the advanced countries with higher salary and other benefits (minimize brain-drain)

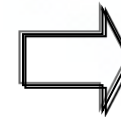
- \* KIST and KDI research fellow in the early 1970s was offered a salary **three times higher** than the university professors plus: an office, an apartment, a car with a chauffeur, two RAs and one secretary.

## **Why government-led R&D** at the early development stage?

- : A private company cannot offer such good conditions, and cannot invest much in R&D. Government created much positive externality through R&D.

# Three Reforms necessary

**Economic Policy Reform**



**Focusing & motivation**

**Economic Development**

**Education Reform**



**Capacity** to go to the right direction

**Government Reform**



Right decision, **coordination**

If any one reform is missing, nothing will happen.



# Two Types of Reform Strategy

	Reform from outside	Voluntary Reform
Strength	Enables more <b>fundamental</b> reform	Higher feasibility
Weakness	May create resistance	No Fundamental Reform

There is a Korean saying that

“A budist monk cannot have his hair cut with his own hands.”

If you need a fundamental reform of your government,  
you need an outside reformer.

Do you have a Ministry (or unit in your organization) whose job is to reform other ministries (branches in the organization)?

# What are the conditions for a good reform-driver?

1) It should be strongly empowered by the political leader.

That is, it needs a power to penalize the uncooperative ministries.

>>> In many cases, no such power or not exercise the power.

2) There should be no pre-assigned responsibilities.

It's responsibility should focus on no other than the reform.

An **imminent** job always gets priority over **important** job.

Daily management work is imminent, but reform is not.

(since status quo prevails)

Therefore, if a reformer has other responsibility, reform is forgotten.

This is why Ministry in charge of public administration cannot be a reformer.

>>> A reform driver should be a **hunter**, not a **farmer**.

e.g. Planning and Budget Commission(1998~1999): budget planning & government reform

MPB (Ministry of Planning and budget) = PBC + budget formulation

3) It's responsibility should cover very wide range of reform.

Reform agenda are inter-related, and should be well-coordinated.

>>> More transparent procurement through IT (G2B in Korea)  
: Is it e-gov, fiscal reform or anti-corruption measure?

4) It's members should be reform-minded and creative.

It should have both career civil servants and contract-based officials recruited from the private sector.

e.g. PBC of 1998 (mix with civil servants and experts from private sector)

>>> In an organization level, recruit a contract-based specialist, and let him/her lead a reform team directly under an organization.

5) It's should be free from the vested interest

If it's role is to manage bureaucracy, bureaucracy reform will be slow.  
No one wants to reform what he/she is doing.

e.g. Budget reform (top-down) under MPB (Ministry of Planning and Budget)  
Personnel reform under MOSPA (Ministry of Security and Public Admin)



“The innovator makes enemies of all those who prospered under the old order, and only lukewarm support is forthcoming from those who would prosper under the new.”

--- Machiavelli





# Thank you

