'Miracle on the Han River' refers to the miraculous economic growth that has transformed South Korea from the ashes of the Korean War
### Korean Economic Growth From 1953 To 2012

#### Per Capita Income ($)

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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income ($)</td>
<td>67</td>
<td>87</td>
<td>142</td>
<td>322</td>
<td>1,043</td>
<td>1,927</td>
<td>...</td>
<td>24,044</td>
</tr>
</tbody>
</table>

#### GDP (Billion $)

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</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.3</td>
<td>2.3</td>
<td>4.2</td>
<td>10.8</td>
<td>38.2</td>
<td>77.5</td>
<td>...</td>
<td>1,197</td>
</tr>
</tbody>
</table>

**Financial Crisis**

**IMF Crisis**
Korean Economic Growth From 1953 To 1979

Korean Economic Growth
After a Five-Year Plan for Economic Development (5yPfED)

Economic Growth during 1950s~1970s

per capita income($)
Korean Economic Growth From 1952 To 2010

**Key Policy**
- **1950s**
  - Import-Substitutive Industrialization
  - Farmland Reform Act
- **1960s**
  - Five-Year Economic Development Plan
  - Export-Led Growth
  - Light Industry
- **1970s**
  - Export-Led Growth
  - Heavy Chemical Industry
  - Saemaul Undong
- **1980s**
  - Growth with Social Stability and Autonomy
  - Liberalization of Import
- **1990s**
  - Strengthen Corporate Competitiveness
  - Real Name Financial Transaction System
- **2000s**
  - Privatization
  - Market Opening
  - Growth with Venture and IT

**Characteristics of Society and Economy**
- **1950s**
  - Korean War
  - UNKRA
- **1960s**
  - Corruption Eradication
  - Urbanization
  - GATT
- **1970s**
  - Triple Lows
  - Democratization
- **1980s**
  - Internet
  - Glocalization
  - Welfare
- **1990s**
  - Revitalizing Reform
  - Spirit Modernization
  - GSP
- **2000s**
  - Globalization
  - Social Reformation
  - IMF Crisis
Map of Presentation

<table>
<thead>
<tr>
<th>Era</th>
<th>Policy &amp; Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>• Five-Year Economic Development Plan&lt;br&gt;• Export-Led Growth/Light Industry</td>
</tr>
<tr>
<td>1970</td>
<td>• Saemaul Undong&lt;br&gt;• Export-Led Growth/Heavy Chemical Industry</td>
</tr>
<tr>
<td>1980</td>
<td>• Liberalization of Import&lt;br&gt;• Growth with Social Stability and Autonomy</td>
</tr>
<tr>
<td>1990</td>
<td>• Real Name Financial Transaction System&lt;br&gt;• Strengthen Corporate Competiveness</td>
</tr>
<tr>
<td>2000</td>
<td>• Privatization Market Opening&lt;br&gt;• Growth with Venture And IT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting Up</td>
</tr>
<tr>
<td>Balancing with Innovation</td>
</tr>
<tr>
<td>Sacrifices and Actions</td>
</tr>
<tr>
<td>Science and Technology</td>
</tr>
<tr>
<td>Turning</td>
</tr>
</tbody>
</table>
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II. Starting Up

III. Balancing with Innovation

IV. Sacrifices and Actions

V. Science and Technology

VI. Turning

VII. Small and Medium Industry

VIII. Closing
# General Facts of Korea

<table>
<thead>
<tr>
<th>Location</th>
<th>Far eastern edge of Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official Name / Capital City</strong></td>
<td>Republic of Korea (South Korea) / Seoul</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>Approximately 51 million</td>
</tr>
<tr>
<td><strong>Official Language</strong></td>
<td>Korean (Hangeul)</td>
</tr>
<tr>
<td><strong>GDP / Income per Capita</strong></td>
<td>1,197 Billion$ / 24,044$</td>
</tr>
<tr>
<td><strong>Trade Volume / Export</strong></td>
<td>1,078 Billion $ / 560 Billion$</td>
</tr>
</tbody>
</table>
19th Century was an era of Imperialism
Korea was also annexed for 35 years in the early 20th Century

Source: http://www.authentichistory.com/1914-1920/1-overview/1-origins/index.html
August 15th, 1945, Korea is **liberated** after the end of Second World War
- There were almost nothing in Korean peninsula
June 25, 1950 the Korean War broke out
In July of 1953 the Korean war ended, the country destroyed into ashes
South Korea heavily relied on foreign aids in 1950s. The 50% of budget came from AID.

Per capita income was $86 which was one of the lowest, 87th of the 103 countries part of the economic statistics.
Wall by Foreign Aids

I. Introduction

- Korean government heavily relied on the aids but had **little power** to use them
- Korean new government **insisted on building factories** but the aid country did not agree because of inflation
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Chapter Title

Starting Up

Balancing with Innovation

Sacrifices and Actions

Science and Technology

Turning

Policy & Feature

Five-Year Economic Development Plan
Export-Led Growth/Light Industry

Export-Led Growth/Heavy Chemical Industry

Liberalization of Import
Growth with Social Stability and Autonomy

Real Name Financial Transaction System
Strengthen Corporate Competitiveness

Privatization Market Opening
Growth with Venture And IT

Era

1960
1970
1980
1990
2000
## 1. Summary

### 1960s
- **US Aids reduced**
- **Few Resources, Fund, Facilities and Human Resources**
- **Five-Year Economic Development Plan**
- **Export-Led Growth/ Import-Substitutive Industrialization**
- **Consistency and Continuity**
- **President’s Initiatives**

<table>
<thead>
<tr>
<th>Performance</th>
<th>GDP (Billion$)</th>
<th>1961</th>
<th>1970</th>
<th>Increase</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21</td>
<td>78</td>
<td></td>
<td>18</td>
<td>371%</td>
</tr>
</tbody>
</table>

| per capita income($) | 82 | 255 | 173 | 311% |

### 1970s
- **World economy recession**
- **North Korea threat**
- **US army evacuation**
- **Continuity in 1960s’ policy**
- **Turning focus to heavy chemical industry**
- **Entrepreneurs**
- **Training Workers**

<table>
<thead>
<tr>
<th>Performance</th>
<th>GDP (Billion$)</th>
<th>1971</th>
<th>1980</th>
<th>Increase</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95</td>
<td>643</td>
<td></td>
<td>548</td>
<td>677%</td>
</tr>
</tbody>
</table>

| per capita income($) | 291 | 1,660 | 1,369 | 570% |

1980
2.1. 60's Economic Background

The only hope, AID was decreased

- US Aid reduced to 1.9%(1960) from 8.7% (1958)
- Agriculture was major industry with extremely low productivity
- Vicious circle of poverty
2.1. 60's Economic Background

UNCTAD & GATT

- Korea took part in UNCTAD and GATT.
- It was a steppingstone for development by focusing on external trade
2.2. Way to destination

**Goal**
- Put an end to the vicious cycle
- Creating fundamentals

**Focus**
- Increase in agricultural productivity
- Expansion of key industries
- Secure source of energy
- Increase employment
- Increase in exports
- Promotion of technology

**Performance (Target)**
- **1st 5yEDP (1962-1966)**
  - Real Growth Rate: 8.5%(7.1%)  
  - National Savings Rate: 6.1%(9.2%)

- **2nd 5yEDP (1967-1971)**
  - Export driven industrialization
  - Establishment of independent economic system

- **Food self-sufficiency**
- Building foundations for heavy industry
- Increase in farm earnings
- Increase in employment
- Increase exports
- Increase technology and productivity

**Goal**
- Real Growth Rate: 9.7%(7.0%)
- National Savings Rate: 13.1%(11.6%)
2.3. 60's Policy

Export-Oriented / Induction of Foreign Capital

- Unbalanced growth is selected
- 5 year Economic Development Plan

- Trade maximizes the induction of foreign capital
- GATT, favorable situation was a contributing factor

Finding Way and Making Plan

Variables considered
- Resources
- Capital
- Products
- Facilities
- Human Resources

Lack in

Export-Oriented
2.3. 60's Policy

Policies for Export-Oriented

- National reward
- Reduced corporate tax
- Reduced raw material import duties
- Special low interest
- Information on foreign markets
- KOTRA establishment
- Cultivation of export manufacturer
2.3. 60's Policy

Induction of Foreign Capital

- Infrastructure Investment
- Economic development
- Structure between infrastructure and economic development
- Increase in tax
- Release Burden of Government Guarantee
- Domestic Capital Stacking
2.3. 60's Policy

Consistency and Continuity

- For executing the consistent long term policy for economic development, term of economic bureaucrat was guaranteed for long time.
- The understanding between president and bureaucrat each other created synergy with their devotion and integrity.

<table>
<thead>
<tr>
<th>Role</th>
<th>Bureaucrat</th>
<th>Term</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister of Finance</td>
<td>Mr. Nam</td>
<td>1969.10-1974.9</td>
<td>5yr.</td>
</tr>
<tr>
<td>Minister of Economic Planning Board</td>
<td>Mr. Nam</td>
<td>1974.9-1978.12</td>
<td>4yr.</td>
</tr>
<tr>
<td>Chief Presidential Secretary</td>
<td>Mr. Kim</td>
<td>1969.10-1978.12</td>
<td>9yr</td>
</tr>
<tr>
<td>Secretary of President</td>
<td>Mr. Oh</td>
<td>1971-1979</td>
<td>8yr.</td>
</tr>
<tr>
<td>Head of Heavy Chemical Industry</td>
<td>Mr. Oh</td>
<td>1974</td>
<td>1yr.</td>
</tr>
</tbody>
</table>
The president actively led the plan, accompanied the people at the development site, and chaired in the evaluation meetings.
3.1. 70's Economic Background

Variables Considered

1st Oil Shock: Petroleum import increase

Global economy depression

Korea’s Export decreased

Frequent Provocation from North Korea

Withdrawal of the US forces

Light industry centered export’s limitations

Turning to Heavy Chemical Industry
3.2. 70's Policy

Turning to Heavy Chemical Industry

- As a result of US President Nixon policy, the pulling out of US army began.
- Then the South Korean government reconfirmed the importance of **promoting heavy industry**
3.2. 70's Policy

Turning to Heavy Chemical Industry

- For getting direct profit of location, the government selected appropriate region and supported its optimal industry.
- With this in action, the industry production of the entire export for the above industry jumped from 13% in 1970 to 38% in 1979, finally 72% in 2010.

Export / (Industry Production)

Source: http://www.kicox.or.kr/home/duty/structure01.jsp
3.2. 70's Policy

Making bases for turning to heavy chemical industry

Steel & Shipbuilding

Technician Nurturing

Industrial Complex

Capital Support
Entrepreneurs

- Chairman of Pohang Iron and Steel Co. (Taejoon Park), “Steel is the grain of industry.”

- Chairman of Hyundai Group (Juyung Chung), “Suffering may exist but failure does not.”
3.3. 70's Policy Base

Training technicians

- **Technicians** and facilities were needed for heavy industrialization.
- There were approximately 5,000 technicians in Korea, which was too few to complete the 5yEDP.
- So the government provided unprecedented support.

### Technical High School Graduates & Certified Technicians (1979)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Machinery</th>
<th>Tech. High School</th>
<th>Specialized Tech School</th>
<th>Regular High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Graduates/Yr.</td>
<td>10,000</td>
<td>9,000</td>
<td>6,000</td>
<td>25,000</td>
</tr>
<tr>
<td>2nd level Certified Technician</td>
<td>10,000</td>
<td>9,000</td>
<td>6,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Total # of Graduates</td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
</tr>
</tbody>
</table>
3.4. 70's Behind Story

‘Even one drop, keep it in the drum

“Your urine can produce foreign money”

- It was very common in public toilet in the 1970s
- Due to lack of products to export, people sold everything from urine to ladies’ long hair
- Success was impossible without the support of the people
3.5 Implications of 'Starting Up'

**President** takes the initiatives and set examples

**Consistency** and continuity in policy and bureaucrat

**Entrepreneurship** encouragement and adequate administrative support and laws

**Training** workers especially technicians

**Stacking** up the national funds and infrastructure such as roads, rails, power plants etc.

**Bond** of sympathy and support of the people & nation
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Map of Presentation

<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Policy &amp; Feature</th>
<th>Era</th>
</tr>
</thead>
</table>
| Starting Up             | • Five-Year Economic Development Plan  
                          |       • Export-Led Growth/Light Industry                                     | 1960  |
| Balancing with Innovation | • Saemaul Undong                                                               | 1970  |
| Sacrifices and Actions  | • Liberalization of Import  
                          |       • Growth with Social Stability and Autonomy                           | 1980  |
| Science and Technology  | • Real Name Financial Transaction System  
                          |       • Strengthen Corporate Competiveness                                    | 1990  |
| Turning                 | • Privatization Market Opening  
                          |       • Growth with Venture And IT                                          | 2000  |
1. Summary of 'Balancing with Innovation'

<table>
<thead>
<tr>
<th>Back ground</th>
<th>Policy</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Success on 1st and 2nd 5yEDP &amp; Export-Led Growth policy</td>
<td>• Saemaul Undong as a new village development movement started in 1970 and turned to national innovation</td>
<td>• Balanced development in rural communities contributed to national economic development</td>
</tr>
</tbody>
</table>

5yEDP: 5-Year Economic Development Plan
2. Background of 70's Economic Development

Also, acceleration of village impoverishment

- Rural people rushed to the urban for jobs. **Income in rural decreased to 78.8% in 1971**
2. Background of 70's Economic Development

One More Thing, Reform of Awareness

- The general circumstance of the rural area was no different from a century ago.
- Considerable change including establishment of modernized awareness was essential.

![Thatched House(1893)](image1)
![Thatched House(1969)](image2)

**No Difference during one hundred year**
3. Policy for Balanced Development

Saemaul Undong

• April of 1970, Saemaul Undong was announced for a movement of wealth
• This movement was a philosophy of behavior with fundamental confidence of “We can do it”.

Three Doctrines of Saemaul Undong

<table>
<thead>
<tr>
<th>“Diligence”</th>
<th>“Self-help”</th>
<th>“Cooperation”</th>
</tr>
</thead>
<tbody>
<tr>
<td>is the spirit of putting eyes afar, getting thoughts broadly, and doing action firmly.</td>
<td>is the spirit of doing my work by myself; realizing that my fate and future depends on myself, and doing the best in my efforts.</td>
<td>is the spirit of believing in the power of unity. It is the spirit that cares for others first and encourages each other, and that shares with and help each other and &quot;work and get over together hardness.&quot;</td>
</tr>
</tbody>
</table>
4. Saemaul Undong

Nationwide movement with active participation

- Saemaul Undong was a **national campaign**
- The government provided education and **award** to leaders in each village
- **Active participation** of females was the success factor of this campaign
4. Saemaul Undong

From setup via expanded to intensified

(Unit: USD)

- Household Income
- Agricultural Income
- Non-Agricultural Income

1st stages (1970~1973): set up infrastructure
3rd stages (1977~1979): intensified

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Income</td>
<td>255.8</td>
<td>480.7</td>
<td>1,156.3</td>
<td>2,227.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Income</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Agricultural Income</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Saemaul Undong

Contributed to the economic development

- Economic Development
- Collective intelligence
- Increased income
- Reduced the inequality
- Savings by increased grain production
- Contributed to the economic development
5'. Implications of 'Balancing with Innovation'

Balancing, “Spiritual Change”, “Women’s Devotion”

- “Balancing” is necessary for long lasting economic development. Economic development could be successful in short term with government initiatives and efforts.
- Physical development cannot last for a long time without spiritual change and innovation.
- Acknowledgement of women and their devotions is also important.
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Starting Up

- Considerable sacrifices for stacking foreign exchange

Balancing with Innovation

- Trade promotion by KOTRA and GTC with special actions

Sacrifices and Actions

- Liberalization of Import
- Growth with Social Stability and Autonomy

Science and Technology

- Real Name Financial Transaction System
- Strengthen Corporate Competitiveness

Turning

- Privatization Market Opening
- Growth with Venture And IT
## 1. Summary of 'Sacrifices and Actions'

| Environments          | • Many abnormal and special actions were taken, dictatorship in the age of cold war was generally accepted  
|                       | • Oil Shocks  

| Sacrifice             | • For stacking foreign exchange  
|                       | • Individual compensation of $500 million from Japan was used to build Pohang Iron & Steel Co.  
|                       | • Export of labor force - Mine workers and Nurses: 115.3 million $  
|                       | • Deep-Sea Fishery: 36 million$/yr.  

| Action                | • Lowering interest rates from 30% to 16.2% for private loan  
|                       | • Government’s intervention on exchanges rates and tariffs  

| Policy                | • KOTRA and GTC  
|                       | • Building Up Industrial Park  
|                       | • Self-sufficiency of Food  
|                       | • Entering Middle-East Construction Market  

| Result                | • Exceeding 10B$ Export in 1977
Dictatorship prevalent

- **Dictatorship** was prevalent in multiple independent countries.
- Many actions taken in the past are impossible to replicate in today’s globalized economic system.
2. Environments

Oil Shock twice

- **Inflation** accelerated, severely **damaging** Korean economy

Source: SLI,BP

Unit: $/Barrel

OPEC Founded

$1.90

1st Oil Shock

$11.58

2nd Oil Shock

$36.83

3. Sacrifice

Indemnity Compensation, Export of Labor Force, Deep-Sea Fishery

- Considerable sacrifices **for stacking foreign exchange**

**1965** ‘Indemnity Compensation’ from the Japanese Colonial Rule
Individual compensation of $500 million was used to build Pohang Iron & Steel Co.

**1963** Export of labor force - Mine workers and Nurses
1965 – 1975 Total of **115.3 million $**

**1969** Deep-Sea Fishery
37 million $ every year in 1970s
4. Actions

Special political Decisions

- ‘Emergency Order of August 1972’ **wrote off private loans** for enterprises
- Special actions(1974) for **exchange rates and tariffs**
5. Key Policies

- Self-Sufficiency of Food
- Middle East Construction

- Industrial Park
- GTC
- KOTRA
KOTRA(Korea Trade Promotion Agency)

- Korea selected policies that focused on external trade for economic development
- KOTRA was established to provide support in facilitating export at a national level
GTC had privileges such as priority in international bidding, requirement relaxation in importing raw materials, permission to local L/C and specialty in export financing.
5.3. Key Policies -3

Building Up Industrial Park

- The major export items were wigs, sewing, and toys
- **To concentrate on production**, the government constructed industrial complex, Cluster (1965)
5.4. Key Policies - 4

Self-sufficiency of Food

- To reduce food imports, various breeds were developed to produce large amount of harvest
- As a result in 1971, new rice of 17% yield more was developed
Oil Shock gave big cash to the middle east countries

To get a golden chance, Korean construction company took part in expanding the infrastructure

Korean workers made a miracle under an inadequate and unfamiliar desert condition
6. Key Policies

Exceeding 10B$ Export

- The plan of 1970 was to export $5.4 billion by 1980
- In 1972, the government changes the plan to $10 billion. This was a goal possible with 25% annual growth rates
- Crazy as it sounds, in February of 1977, exports exceeded $10 billion
Some **special actions** are needed with nation’s sacrifice

**External Trade** can maximize the profit of national economy with division of work or specialization principle

**Nation-wide agreement and wisdom** is needed to overcome the environmental changes and threat, which are always in existence.
## 8. Summary of 5yEDP and Relevant Factors

<table>
<thead>
<tr>
<th>Period</th>
<th>Key Business</th>
<th>Resource/Environmental Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st (1962-1966)</td>
<td>- Expansion of Energy (Electricity, coal)</td>
<td>- Highway Construction</td>
</tr>
<tr>
<td></td>
<td>- Key Industry Enlargement</td>
<td>- Power Plant Construction</td>
</tr>
<tr>
<td>2nd (1967-1971)</td>
<td>- Food Self-Sufficiency and Forest Tree Planting</td>
<td>- Industrial Complex Construction</td>
</tr>
<tr>
<td></td>
<td>- Industrialization Propulsion</td>
<td></td>
</tr>
<tr>
<td>3rd (1972-1976)</td>
<td>- Economic Independence</td>
<td>- First Oil Shock in 1973</td>
</tr>
<tr>
<td></td>
<td>- Heavy Chemical Factory Construction</td>
<td>- Middle East Construction</td>
</tr>
<tr>
<td>5th (1982-1986)</td>
<td>- Price Stabilization</td>
<td>- Three Lows (Low Dollar, Oil Price, and Interest rate)</td>
</tr>
<tr>
<td></td>
<td>- Vitalization of Market Competition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Improvements in Income Distribution</td>
<td>- Host Seoul Olympic Game in 1988</td>
</tr>
<tr>
<td></td>
<td>- Social Equilibrium Enhancement</td>
<td>- Consolidation of Economy Planning Board and Ministry of Finance</td>
</tr>
</tbody>
</table>
Introduction

Starting Up

Balancing with Innovation

Sacrifices and Actions

Science and Technology

Turning

Small and Medium Industry

Closing
Map of Presentation

**Chapter Title**

- **Starting Up**
- **Balancing with Innovation**
- **Sacrifices and Actions**
- **Science and Technology**
- **Turning**

**Policy & Feature**

- **1960**
  - Improvements/amendments in legislations
  - Propelling research project for development

- **1970**
  - Development of industrial technology
  - Expansion of R&D investments

- **1980**
  - Acceleration of industry-academic cooperation study

- **1990**
  - Building up technological innovation system by private sector

- **2000**
  - Efficiency Promotion of R&D investments

**Era**

- 1960
- 1970
- 1980
- 1990
- 2000
### 1. Summary of 'Science and Technology'

<table>
<thead>
<tr>
<th>Science and Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
</tr>
<tr>
<td>• Policy for promoting science and technology started in early 1950s</td>
</tr>
<tr>
<td>• In preparing the economic development plan in 1960s, science and technology strategy was also included</td>
</tr>
<tr>
<td><strong>Policy</strong></td>
</tr>
<tr>
<td>• Administrative support, establishment of structured system such as institute and laboratory are executed in schedule</td>
</tr>
<tr>
<td>• KIST (Korea Institute of Science and Technology) has considerably contributed to Korean economic development</td>
</tr>
<tr>
<td>• Reckless technician training plan and program were forced</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
</tr>
<tr>
<td>• Amount of R/D in Korea ranks second in the world after 2000s</td>
</tr>
</tbody>
</table>
2. Background

Aid turned to loan

Science and Technology Investment

Economic Development

Internal Competitiveness

AID

Waste
2. Background

Law of diminishing returns

- According to the law of diminishing returns, investments in labor and asset are effective in the early stages, but as inputs accumulate, outputs diminish gradually.
- To overcome such symptoms, knowledge must be added.
2. Background

Nurturing Technicians

- The majority of the skills heavily relied on foreign nations.
- **Structure for science and technology** promotion was settled
- Technicians were on the **top of training list**

Winners at the International Vocational Training Competition (1977)

Asia Car Manufacturing Factory (1970s)
In January 1966, KIST was built with aid from USA, taking a central role as the first comprehensive research agency for the promotion of the nation’s economic growth and the modernization of engineering fields.
With persistent Promotion of Science and Technology

- **Investment on science and technology** does not give a direct effect, therefore it becomes a pending problem for many countries.
- **With persistence of the leader**, it became the very reason of transitioning from agricultural society to industrial society.
### 5. Results of Promotion Policy for Science/Technology

<table>
<thead>
<tr>
<th>Order (Yr.)</th>
<th>Direction</th>
<th>Policy / Task</th>
</tr>
</thead>
</table>
| 1<sup>st</sup> (1962-1966) | Efforts to Construct Fundaments | • Improvements/amendments in legislations for promotion of science and technology  
• Expansion & alignment of research activities |
| 2<sup>nd</sup> (1967-1971) | Enforcing Construction of Fundaments | • Propelling research project for development  
• Budget for science and technology, policy, organizations, associations  
• Promotion of science and technology investment business |
| 3<sup>rd</sup> (1972-1976) | Increasing Demand/ Transfer to private sector | • Development of industrial technology  
• Investment Expansion |
| 4<sup>th</sup> (1977-1981) | System Improvements, Long Term Vision, Cutting Edge Research | • Enforcing for management of R&D system  
• Rehabilitation of R&D promotion system  
• Expansion of R&D investments |
Science and technology is fundamental of economic growth

- **To escape from aid economy**, internalization of knowledge must be accomplished
- For under- and/or developing country, **technicians** training must be come into action
- **With persistence** in promoting the investment on science and technology are needed

**Diagram: Investment in Science and Technology → Internalization of Knowledge → Consistency in Policy → Technicians Training → End to Poverty**
Map of Presentation

<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Policy &amp; Feature</th>
<th>Era</th>
</tr>
</thead>
</table>
| Starting Up             | • Five-Year Economic Development Plan  
                          • Export-Led Growth/Light Industry                                           | 1960 |
| Balancing with Innovation| • Saemaul Undong                                                                 | 1970 |
|                         | • Export-Led Growth/Heavy Chemical Industry                                      |      |
| Sacrifices and Actions  | • Liberalization of Import  
                          • Growth with Social Stability and Autonomy                                    | 1980 |
| Science and Technology  | • Real Name Financial Transaction System  
                          • Strengthen Corporate Competitiveness                                         | 1990 |
| Turning                 | • Privatization Market Opening  
                          • Growth with Venture And IT                                                   | 2000 |
1. Summary of 'Turning'

- **Background**: From development to Stability and furthering to Welfare

- **Environments**: Boom in virtue of Triple Lows

- **Relevant Activity**: Introduction of the real-name financial system

- **Activity Purpose**: Constructing of Advanced and Transparent Economic System

- **Purpose**: Financial Crisis by early popping champagne

- **Restructuring and Advancement**: Overcoming National Economic Crisis

**Economic Restructuring while overcoming crisis**

- **Government**: Policy for Welfare after set stability

- **Enterprise**: Securing Cash and Foreign Exchange
1. Summary of 'Turning'

From Development to Stability

- In **1980**, Korean economy turned to **minus growth** because of political instability, high oil price, high interest rate and strong dollar.

- Government changed the focus on **stabilization**.
3.1 Environment

Booming by Triple-Lows in oil price, exchange rate and interest rate

- Due to the **triple-lows**, Korean economy advanced one step further. By efforts of rearrangement, **inflation dropped** from 23% in 1979~1981 to 2.8% in 1983~1987.
- **In 1989**, per capita income finally exceeded **$5,000**

<table>
<thead>
<tr>
<th>Class</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Price</td>
<td>WTI: 39.5$/B → 11.5$/B</td>
</tr>
<tr>
<td>Costumer Price</td>
<td>32.5% → 1.0%</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>Won-Dollar: 484 → 885</td>
</tr>
<tr>
<td></td>
<td>Won-Yen: 202 → 534</td>
</tr>
<tr>
<td>Interest Rate(%)</td>
<td>National Bond: 27.7 → 11.6</td>
</tr>
<tr>
<td></td>
<td>Corporate Bond: 32.3 → 12.4</td>
</tr>
</tbody>
</table>
3.2 Activity

Implementing Economic Transparency

- During the 30 years of compressed growth, there were many **inequalities** which are **obstacles** in social bonds and economic sustainability.
- The government tried actions to **recover the faith** for example, the Real Name Financial Transaction System (RNFTS).
Although implementing economic transparency, corruption and negations were prevalent.

When foreign exchange holdings showed its bottom, the government borrowed money from IMF. Big restructuring began.
The entire nation joined to rebuild the collapsed economic pillar
People took gold from their vaults and deployed “Anabada” movement, which is Korean abbreviation of Save, Share, Exchange ad Re-use
With such endeavor and sincerity, Korea recovered
5. Result

Radical improvement through overcoming crisis

- Korea defended well to the 2008 global financial crisis because of saving cashes, building internalized capability
- Finally, budget for people’s welfare increased to 30.4% of nation budgets which was only 7.9% in 1970s
6. Implications of 'Turning'

Preparation makes crisis to chance

- Crisis
- Preparation
- Chance for Great Leap

Risk & Decline

- Human Capital
- Gathering Strength
- ...

- Crisis is always lurking in the dark even in developed countries.
- Therefore, a nation should always be prepared and gather strength when a crisis hits the nation.
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II. Starting Up
III. Balancing with Innovation
IV. Sacrifices and Actions
V. Science and Technology
VI. Turning
VII. Small and Medium Industry
VIII. Closing
1. Summary and implication of 'Small and Medium Industry'

Background
- The role of conglomerates (chaebol) was massive
- Small and Medium industry is small outside but firm at the core

Policy
- Amendments in fundamental law of SME (Small and Medium Enterprise)
- Policies to protect SME business
- Opening SME Administration
- Strategic accompanied growth with SME
2. Background

Small outside but Firm at the core

- The role of big biz. was massive in the economic growth of S. Korea
- Armed with entrepreneurship spirit, the small to mid size business filled the vacancy of large businesses.
- Small to mid size industries influence many aspects of economic activities by creating jobs in the local community.

Change of the Employee for each company type

SME accounts for 86.8% of workers
And 99.9% of number of business firm

Large Company
3. Policy for SME

“Minor Enterprise Act”

- Early SME policies focused more on the protection from big company

- General and structural policies of SME
- Strategic accompanied growth with SME

- Bail-out program as a result of financial crisis
- Promotion of innovated SME

- Policies to protect SME business
- Opening SME Administration
- Drastically increased budget support

- Legislation on modernization of SME
- Amendments in fundamental law of SME
4. Result

SME, Doing Important Role in Economic Development

- Since 1990s the importance of small-medium sized business started increasing.
- Below statistics show that **SME business is the future growth engine**

![Chart showing number of corporate SME and large company from 1979 to 2010](chart.png)
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Ⅵ. Turning

Ⅶ. Small and Medium Industry

Ⅷ. Closing
There were times when children begged American soldiers for chocolates, homeless and thieves were overflowing on the streets, and some were not shamed of selfish and despicable behaviors

Some just gave up and conformed to the passing on of poverty from one generation to another
In modern history, abundant resources was not always blessing. Although Korea went through difficulties, such hardships became an opportunity to becoming one of the world’s best. Japan with frequent threats from earthquakes possess one of the world’s most advanced seismic technologies.
Environment Change makes always crisis

Is it Crisis or Risk? No It's a Chance

- Environment always changes up and down
- In the East, crisis embeds the meaning of both risk and opportunity
- In order to change risk to opportunity, resource is needed. Creation and application of human capital and physical capital is the ‘Final Punch’ of success

Percentage Change of World Gross Domestic Product

+ Human and Resources

危機
(Risk) (Opportunity)
The **3 key success factor** of Korea’s economic development in 1970s can be summed up as the 5-year Economic Development Plan (5yEDP), industry policy centered around on exports and big business (Chaebol) and Saemaul Undong that rooted modernized mindset.
Key Success Factors

Focus

Subjects & Planning

‘CAN DO’ SPIRIT
Key Success Factors

- The historic and current economic situation of your nation will vary greatly from that of the past S. Korea
- Korea’s economic experiences cannot be applied to all situations
- Resources to support economic growth + understanding leadership and environmental factors + willpower = overcome hardships
- Regardless of any era, place or race, one thing is for sure – if the nation work together as one, nothing is impossible

IF YOU WANT TO GO FAR GO TOGETHER....
Thank you for your attention
• **Taejoon Park**: Korea’s ‘King of Steel’
  - Korean businessman and politician. Graduate of the Military Academy. Founded as the chief secretary of the chairperson for the National Reconstruction Assembly during President Park regime, who seized power through 5.16 coup d’état in 1961. With President Park’s order to build steel and iron company, he was inaugurated as the president of Pohang Iron & Steel (now POSCO). With slogan “Return to the nation by making steel’, he completed the construction of the company in June of 1973. Of the 40 years of POSCO, he spent 26 years as the CEO of POSCO and became the honorary president in 1992. He made the company number 3 in world with 2100 ton of production capability. He left behind remarkable achievements where world’s most prominent people called him ‘the next King of Steel to exceed Carnegie’.

• **Ju-yung Chung**: President of Hyundai Group, successful businessman in construction, automobiles, and shipbuilding industry
  - April 1946, he established Hyundai Automobile Company and started construction company with Hyundai Civil Engineering and Construction company in May of 1947. In January of 1950, he merged the two companies and created Hyundai Engineering and Construction Corporation which became the mother company of Hyundai Group. He became the President of Hyundai Group in 1971. He successfully pioneered international construction market, constructed Ulsan Shipbuilding company, pushed ahead reclamation project of Susan off. In June 16, 1998, he visited North Korea with 500 ‘Unification Cow’ attracting international attention. He received Royal Badge from Norway in 1998 and was chosen as the 6 Proud Asian Economists in 1996.
Conglomerates vs. Chaebol

- **Conglomerates**
  Companies that sell products or services that are technically not related, or carry out business activities in multiple local markets that are not in mutual competition because of the different market conditions. The top USA conglomerates are Litton Industries, Textron, LTV (Ling-Temco-Vought, Inc.) and Gulf & Western Industries.

- **Chaebol**
  Monopolistic group of entrepreneurs or families possessing massive economic and political power. The difference between conglomerate is that actual management structure is within the family with a form of monopoly. Unique form of business that originated from intensive fostering of specific industry in Korean economy. i.e) Samsung, Hyundai and LG.