Building a Competitive Taiwan

Professor Michael E. Porter
Harvard Business School

Global Leaders Forum
Taipei, Taiwan
October 24th, 2014
The State of the Taiwanese Economy

- High and rising standard of living
- Highly educated workforce and strong technology base
- Progress on infrastructure, corruption, and other areas

BUT

- Slower economic growth
- Concerns about income inequality
- Low birth rate and aging population
- Concerns about future economic direction
Agenda

• Taiwan’s Prosperity Performance

• Taiwan’s Competitiveness Fundamentals

• Taiwan’s Role in the Regional and Global Economy

• An Economic Strategy for Taiwan
Prosperity Performance
Selected Countries

Note: Luxembourg omitted from OECD average.
Source: EIU (2014), authors calculations

OECD Average Prosperity Growth: +1.3%
OECD Average Real GDP per Capita: $29,380

Growth in Real GDP per Capita (PPP $US at 2005 prices), CAGR, 2003-2013
## What is Competitiveness?

A nation or region is competitive to the extent that firms operating there are able to **compete successfully** in the national and global economy while maintaining or improving **wages and living standards** for the average citizen.

### Competitiveness depends on the long-run productivity and efficiency of a location as a place to do business

- The productivity of **existing** firms and workers
- The ability to achieve **high participation** of citizens in the workforce

### Competitiveness is **not**:

- Low wages
- A weak currency
- Jobs per se
Strong Labor Productivity Performance
Selected Countries

Real GDP per Labor Force Participant (1990 GK$), 2013

$70,000

$60,000

$50,000

$40,000

$30,000

$20,000

$10,000

$0

OECD Average: $40,232

OECD Average: +.93%

Growth in Real GDP per Labor Force Participant, CAGR, 2003-2013

Note: Luxembourg omitted from OECD average. Growth calculated as compound annual growth rate.

Source: The Conference Board Total Economy Database, EIU (2014)
Strong Innovative Output
Selected Countries

Average U.S. patents per 1 million population, 2011-2013


CAGR of US-registered patents, 2003-2013

Selected Countries

United States
Japan
Taiwan
South Korea
Israel
Sweden
Switzerland
Germany
Canada
Singapore
Denmark
Luxembourg
France
Ireland
United Kingdom
Iceland
Norway
Canada
New Zealand
Hong Kong
China (+34.3%, 3.4)
United Arab Emirates
Poland
India
Australia
Finland
Belgium
Austria
Netherlands
Singapore
Spain
Hong Kong
Thailand
Bulgaria
Malaysia
Czech Republic
United Arab Emirates
Egypt
China
Portugal
Poland
Mexico
Brazil
Russia
Turkey
Ukraine
Ukraine
Greece
Slovenia
Slovakia
Brazil
Spain

CAGR of US-registered patents, 2003-2013

3,000 patents =

Low Workforce Participation
Selected Countries

Labor Force Participation (2013)

Change in Labor Force Participation Rate, 2003-2013

Note: Luxembourg omitted from OECD average.
Source: EIU (2014), World Bank, authors calculations

Workforce Participation Rate
= Labor Force Size / Population Age 15-64

OECD Average: +2.8%
OECD Average: 74.0%

Copyright 2014 © Professor Michael E. Porter
Declining Share of World Exports
Selected Countries

Share of World Exports of Goods and Services

Source: UNCTADstat (2014)
Lagging Wages
Manufacturing Wages, Selected Countries

Source: BLS, EIU (2014)
What Determines Competitiveness?

• Endowments, including **natural resources**, **geographical location**, **population**, and **land area**, create a foundation for prosperity, but true prosperity arises from **productivity in the use of endowments**.
What Determines Competitiveness?

- Macroeconomic competitiveness sets the economy-wide context for productivity to emerge, but is not sufficient to ensure productivity.
- Endowments, including natural resources, geographical location, population, and land area, create a foundation for prosperity, but true prosperity arises from productivity in the use of endowments.
What Determines Competitiveness?

Microeconomic Competitiveness

- Quality of the Business Environment
- State of Cluster Development
- Sophistication of Company Operations and Strategy

Macroeconomic Competitiveness

- Sound Monetary and Fiscal Policies
- Human Development and Effective Political Institutions

Endowments

- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition** revealed at the level of firms, clusters, and regions
- Macroeconomic competitiveness sets the **economy-wide** context for productivity to emerge, but is **not sufficient** to ensure productivity
- Endowments, including **natural resources**, **geographical location**, **population**, and **land area**, create a foundation for prosperity, but true prosperity arises from **productivity in the use of endowments**
Assessing the Quality of the Business Environment

**Context for Firm Strategy and Rivalry**

- Local **rules and incentives** that encourage investment and productivity
  - e.g., incentives for capital investments, IP protection
- Sound **corporate governance**
- Open and vigorous **local competition**
  - Openness to competition
  - Strict competition laws

**Factor (Input) Conditions**

- Improving access to high quality **business inputs**
  - Qualified human resources
  - Capital availability
  - Physical infrastructure
  - Scientific and technological infrastructure
  - Administrative and regulatory infrastructure

- **Sophisticated and demanding** local needs
  - e.g., Strict quality, safety, and environmental standards
  - Sophisticated demand in the private sector or government

**Demand Conditions**

- Availability and quality of **suppliers** and **supporting industries**

**Related and Supporting Industries**

- **Many things matter** for competitiveness
- Successful economic development is a process of **successive upgrading**, in which the business environment improves to enable increasingly sophisticated ways of competing
Taiwan’s Competitiveness Profile, 2013

**Macroeconomic Competitiveness**
- Political Institutions: 27
- Rule of Law: 29

**Microeconomic Competitiveness**
- National Business Environment: 12
- Company Operations and Strategy: 17
- Demand Conditions: 12
- Context for Strategy and Rivalry: 16
- Related and Supporting Industries: 7
- Factor Conditions: 9

Taiwan’s GDP per capita rank is 16th vs. 144 countries

Note: Rank versus 144 countries. *Color coding based on comparison relative to income.*

Taiwan’s Strengths and Weaknesses

**Strengths**

- Some strong clusters
- Availability of scientists and engineers
- Math and science education
- University-industry research collaboration
- Intense local competition
- Solid IP protection
- Transportation and physical infrastructure

**Weaknesses**

- Inefficient legal framework
- Brain drain
- Ability to attract and retain talent
- Doing business costs
- Distortive tax system
- Weak environmental regulations
- High tariffs
- Low prevalence of inward FDI

**Companies**

- R&D spending

**Companies**

- Professionalism of management
- Extent of staff training
### Doing Business
#### Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Ease of Doing Business Rank</th>
<th>Starting a Business</th>
<th>Dealing with Construction Permits</th>
<th>Getting Electricity</th>
<th>Registering Property</th>
<th>Getting Credit</th>
<th>Protecting Investors</th>
<th>Paying Taxes</th>
<th>Trading Across Borders</th>
<th>Enforcing Contracts</th>
<th>Resolving Insolvency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>28</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>89</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>20</td>
<td>34</td>
<td>13</td>
<td>25</td>
<td>3</td>
<td>6</td>
<td>64</td>
<td>22</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6</td>
<td>16</td>
<td>43</td>
<td>21</td>
<td>35</td>
<td>1</td>
<td>4</td>
<td>36</td>
<td>5</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>Korea</td>
<td>7</td>
<td>34</td>
<td>18</td>
<td>2</td>
<td>75</td>
<td>13</td>
<td>52</td>
<td>25</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Taiwan</td>
<td>16</td>
<td>17</td>
<td>7</td>
<td>7</td>
<td>31</td>
<td>73</td>
<td>34</td>
<td>58</td>
<td>18</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Thailand</td>
<td>18</td>
<td>91</td>
<td>14</td>
<td>12</td>
<td>29</td>
<td>73</td>
<td>12</td>
<td>70</td>
<td>24</td>
<td>22</td>
<td>58</td>
</tr>
<tr>
<td>Japan</td>
<td>27</td>
<td>120</td>
<td>91</td>
<td>26</td>
<td>66</td>
<td>28</td>
<td>16</td>
<td>140</td>
<td>23</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>96</td>
<td>158</td>
<td>185</td>
<td>119</td>
<td>48</td>
<td>73</td>
<td>98</td>
<td>120</td>
<td>74</td>
<td>19</td>
<td>78</td>
</tr>
</tbody>
</table>

Rank out of 189 countries.

Copyright 2014 © Professor Michael E. Porter
Taiwan’s National Cluster Export Portfolio
2002-2012

Share of World Exports, 2012

Average Change in Taiwan’s Overall World Export Share: -0.47%

Taiwan’s Average World Export Share: 1.96%

-3% -2% -1% 0% 1% 2% 3% 4% 5% 6% 7%

Textiles
Metal Mining and Manufacturing
Power and Power Generation Equipment
Motor Driven Products
Fishing and Fishing Products
Apparel
Furniture
Building Fixtures and Equipment
Financial Services
Agricultural Products
Heavy Machinery
Biopharmaceuticals
Jewelry, Precious Metals and Collectibles
Oil and Gas Products
Transportation and Logistics
Automotive
Hospitality and Tourism
Agricultural Products

= $6 billion

Information Technology
(+3.4%, 14.7%)

Analytical Instruments
(+1.7%, 6.1%)

Communications Equipment

Chemical Products

Medical Devices

Forest Products

Building Products

Biopharmaceuticals

Agricultural Products

Financial Services

Power and Power Generation Equipment

Motor Driven Products

Fishing and Fishing Products

Apparel

Furniture

Building Fixtures and Equipment

Financial Services

Agricultural Products

Heavy Machinery

Biopharmaceuticals

Jewelry, Precious Metals and Collectibles

Oil and Gas Products

Transportation and Logistics

Automotive

Hospitality and Tourism

Agricultural Products

Dealing in Clusters: The New Opportunity for Global Growth

Copyright 2014 © Professor Michael E. Porter

20141024–Taiwan Competitiveness Presentation–FINAL

19
Opportunities for Economic Diversification
Taiwan’s Share of World Exports by Cluster, 2012

Taiwan overall world market share in 2012: 1.96%
Note: Clusters with overlapping borders have at least 20% overlap (by number of industries) in both directions.

World Market Share
- Green: > 6.0%
- Light Green: > 3.0%
- Yellow: > 1.5%
# Opportunities for Economic Diversification

## Taiwan Export Share Growth Successes

<table>
<thead>
<tr>
<th>Industry</th>
<th>Cluster</th>
<th>World Export Share</th>
<th>Change in Share (2002-2012)</th>
<th>Export Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Drawn, float, cast glass, worked</td>
<td>Lighting and Electrical Equipment</td>
<td>30.26%</td>
<td>26.02%</td>
<td>$1,133,371,687</td>
</tr>
<tr>
<td>2 Parts of primary cells, batteries</td>
<td>Motor Driven Products</td>
<td>22.19%</td>
<td>16.34%</td>
<td>$126,892,748</td>
</tr>
<tr>
<td>3 Vessels and other floating structures</td>
<td>Marine Equipment</td>
<td>20.33%</td>
<td>15.01%</td>
<td>$73,828,746</td>
</tr>
<tr>
<td>4 Electronic microcircuits</td>
<td>Information Technology</td>
<td>26.51%</td>
<td>13.79%</td>
<td>$108,458,422,289</td>
</tr>
<tr>
<td>5 Cast, rolled glass in sheets</td>
<td>Building Fixtures and Equipment</td>
<td>11.02%</td>
<td>10.47%</td>
<td>$89,788,214</td>
</tr>
<tr>
<td>6 Synthetic or reconstituted precious stones</td>
<td>Jewelry, Precious Metals and Collectibles</td>
<td>11.66%</td>
<td>8.23%</td>
<td>$125,568,869</td>
</tr>
<tr>
<td>7 Calendaring or other rolling machines</td>
<td>Production Technology</td>
<td>13.64%</td>
<td>7.76%</td>
<td>$85,643,159</td>
</tr>
<tr>
<td>8 Phenols, phenol-alcohols, and derivatives</td>
<td>Chemical Products</td>
<td>11.65%</td>
<td>7.69%</td>
<td>$906,954,360</td>
</tr>
<tr>
<td>9 Optical fibers, lenses and other elements, unmounted</td>
<td>Medical Devices</td>
<td>8.38%</td>
<td>6.31%</td>
<td>$2,415,172,064</td>
</tr>
<tr>
<td>10 Crystals and parts of electronic components</td>
<td>Information Technology</td>
<td>22.10%</td>
<td>5.90%</td>
<td>$7,020,359,651</td>
</tr>
<tr>
<td>11 Transfers, decalcomanias</td>
<td>Publishing and Printing</td>
<td>9.21%</td>
<td>5.72%</td>
<td>$110,018,229</td>
</tr>
<tr>
<td>12 Chemical elements for electronics</td>
<td>Information Technology</td>
<td>17.79%</td>
<td>5.02%</td>
<td>$2,081,104,729</td>
</tr>
<tr>
<td>13 Other acyclic alcohols and derivatives</td>
<td>Chemical Products</td>
<td>8.24%</td>
<td>4.96%</td>
<td>$1,450,496,652</td>
</tr>
<tr>
<td>14 Radar apparatus, radio navigational aid and remote control apparatus</td>
<td>Analytical Instruments</td>
<td>13.52%</td>
<td>4.30%</td>
<td>$2,335,437,479</td>
</tr>
<tr>
<td>15 Miscellaneous ash, residues containing metals</td>
<td>Metal Mining and Manufacturing</td>
<td>5.17%</td>
<td>4.14%</td>
<td>$186,625,087</td>
</tr>
<tr>
<td>16 Float, ground, polished glass</td>
<td>Building Fixtures and Equipment</td>
<td>5.10%</td>
<td>4.14%</td>
<td>$2,919,960,085</td>
</tr>
<tr>
<td>17 Video recording or reproducing apparatus</td>
<td>Entertainment and Reproduction Equipment</td>
<td>5.25%</td>
<td>4.08%</td>
<td>$2,700,629,565</td>
</tr>
<tr>
<td>18 Lenses, prisms, and other optical elements, mounted</td>
<td>Analytical Instruments</td>
<td>7.20%</td>
<td>4.06%</td>
<td>$915,601,865</td>
</tr>
<tr>
<td>19 Miscellaneous parts for machine-tools with metal</td>
<td>Production Technology</td>
<td>6.22%</td>
<td>4.03%</td>
<td>$690,507,938</td>
</tr>
<tr>
<td>20 Miscellaneous glass articles</td>
<td>Medical Devices</td>
<td>7.34%</td>
<td>3.96%</td>
<td>$545,633,440</td>
</tr>
<tr>
<td>21 Aldehyde-, ketone-, and quinone- function compounds</td>
<td>Chemical Products</td>
<td>6.74%</td>
<td>3.46%</td>
<td>$549,187,760</td>
</tr>
<tr>
<td>22 Snow vehicles, golf cars and similar vehicles</td>
<td>Automotive</td>
<td>4.31%</td>
<td>3.41%</td>
<td>$92,675,289</td>
</tr>
<tr>
<td>23 Acyclic hydrocarbons</td>
<td>Chemical Products</td>
<td>3.76%</td>
<td>3.36%</td>
<td>$1,076,449,905</td>
</tr>
<tr>
<td>24 Copper foil, powder and flakes</td>
<td>Metal Mining and Manufacturing</td>
<td>22.71%</td>
<td>3.32%</td>
<td>$1,750,702,646</td>
</tr>
<tr>
<td>25 Drawn, blown glass in sheets</td>
<td>Building Fixtures and Equipment</td>
<td>5.12%</td>
<td>3.08%</td>
<td>$157,068,923</td>
</tr>
<tr>
<td>26 Toughened safety glass</td>
<td>Automotive</td>
<td>3.71%</td>
<td>2.99%</td>
<td>$154,662,960</td>
</tr>
<tr>
<td>27 Silver, platinum and other metals of the platinum group</td>
<td>Jewelry, Precious Metals and Collectibles</td>
<td>3.05%</td>
<td>2.92%</td>
<td>$1,762,468,962</td>
</tr>
<tr>
<td>28 TV, radio transmitters</td>
<td>Communications Equipment</td>
<td>5.56%</td>
<td>2.92%</td>
<td>$9,143,353,757</td>
</tr>
<tr>
<td>29 Polycarboxylic acids, and their derivatives</td>
<td>Chemical Products</td>
<td>13.15%</td>
<td>2.90%</td>
<td>$2,532,433,702</td>
</tr>
<tr>
<td>30 Work-holders, tool holders</td>
<td>Production Technology</td>
<td>5.71%</td>
<td>2.88%</td>
<td>$305,819,796</td>
</tr>
<tr>
<td>31 Lathes, metal-working</td>
<td>Production Technology</td>
<td>11.93%</td>
<td>2.74%</td>
<td>$966,873,447</td>
</tr>
<tr>
<td>32 Miscellaneous mixed alkylbenzenes and alkylnapththalenes</td>
<td>Chemical Products</td>
<td>6.37%</td>
<td>2.63%</td>
<td>$150,184,605</td>
</tr>
<tr>
<td>33 Parts for telecommunication equipment</td>
<td>Communications Equipment</td>
<td>5.35%</td>
<td>2.57%</td>
<td>$7,257,442,452</td>
</tr>
<tr>
<td>34 Cyclic hydrocarbons</td>
<td>Oil and Gas Products</td>
<td>3.39%</td>
<td>2.42%</td>
<td>$1,918,306,852</td>
</tr>
<tr>
<td>35 Machining-centers, unit construction machines, not lathes</td>
<td>Production Technology</td>
<td>11.49%</td>
<td>2.14%</td>
<td>$1,525,270,652</td>
</tr>
<tr>
<td>36 Carboxylic acids and their derivatives</td>
<td>Chemical Products</td>
<td>3.12%</td>
<td>2.11%</td>
<td>$196,960,541</td>
</tr>
<tr>
<td>37 Polymers, polyacetals in primary forms</td>
<td>Plastics</td>
<td>8.19%</td>
<td>2.04%</td>
<td>$4,237,721,802</td>
</tr>
<tr>
<td>38 Esters, inorganic acid and their derivatives</td>
<td>Chemical Products</td>
<td>3.19%</td>
<td>2.03%</td>
<td>$73,926,950</td>
</tr>
<tr>
<td>39 Other pulp, paper, making machinery</td>
<td>Forest Products</td>
<td>7.16%</td>
<td>2.01%</td>
<td>$304,210,052</td>
</tr>
<tr>
<td>40 Miscellaneous machinery parts, non-electrical</td>
<td>Production Technology</td>
<td>3.20%</td>
<td>1.96%</td>
<td>$302,271,569</td>
</tr>
</tbody>
</table>

Note: Includes Taiwan’s 405 largest export industries, with export values of greater than $50 million in 2012.
Geographic Influences on Competitiveness

- Economic coordination and integration with neighboring countries is a major force of productivity and competitiveness
### Taiwan’s Major Impact on China’s Economy

#### Top 10 Exporters in China, 2012

- Among top 10 biggest exporters in China, 7 exporters are Taiwanese enterprises

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Subsidiary Company</th>
<th>Country</th>
<th>Amount of Exports (Unit: US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hon Hai Precision Industry Co., Ltd.</td>
<td>Foxconn (Shenzhen) Technology Group</td>
<td>Taiwan</td>
<td>35,543</td>
</tr>
<tr>
<td>2</td>
<td>Quanta Computers</td>
<td>Tech-Front (Shanghai) Computer Co., Ltd.</td>
<td>Taiwan</td>
<td>26,974</td>
</tr>
<tr>
<td>3</td>
<td>Hon Hai Precision Industry Co., Ltd.</td>
<td>Hongfujin (Zhengzhou) Precision Industry Co., Ltd.</td>
<td>Taiwan</td>
<td>15,735</td>
</tr>
<tr>
<td>4</td>
<td>Pegatron Corp.</td>
<td>GNDC (Shanghai) Co., Ltd.</td>
<td>Taiwan</td>
<td>15,143</td>
</tr>
<tr>
<td>5</td>
<td>Huawei Technologies Co., Ltd.</td>
<td>Huawei (Shenzhen) Technologies Co., Ltd.</td>
<td>China</td>
<td>12,259</td>
</tr>
<tr>
<td>6</td>
<td>Hon Hai Precision Industry Co., Ltd.</td>
<td>Hongfujin (Chengdu) Precision Industry Co., Ltd.</td>
<td>Taiwan</td>
<td>11,994</td>
</tr>
<tr>
<td>7</td>
<td>Samsung Group</td>
<td>Samsung (Huizhou) Group</td>
<td>Korea</td>
<td>9,422</td>
</tr>
<tr>
<td>8</td>
<td>China Petrochemical Development Corp.</td>
<td>China Petrochemical Development Corp.</td>
<td>China</td>
<td>7,681</td>
</tr>
<tr>
<td>9</td>
<td>Hon Hai Precision Industry Co., Ltd.</td>
<td>Hongfujin (Yantai) Precision Industry Co., Ltd.</td>
<td>Taiwan</td>
<td>6,999</td>
</tr>
<tr>
<td>10</td>
<td>Pegatron Corp.</td>
<td>Pegatron (Suzhou) Corp.</td>
<td>Taiwan</td>
<td>6,664</td>
</tr>
</tbody>
</table>

Source: Ministry of Commerce People’s Republic of China
Taiwan in the Region
Exports

Exports (US$M)

- China: 40%
- ASEAN: 19%
- All Other
- Canada
- Australia
- United Kingdom
- Germany
- South Korea
- Japan
- ASEAN
- United States
- Hong Kong
- China

Source: Taiwan Directorate-General of Budget, Accounting and Statistics and Ministry of Economic Affairs
Taiwan, China, and the Region

• Taiwan’s traditional model has been delivering high-tech inputs for final assembly in China to be sold on the U.S. market, often under other firms’ brands

Challenges

• China is getting more expensive as a production site versus other locations in Asia
• Much of the value is captured by those in control of the brand and the overall value chain
• Taiwanese firms are under pressure from rivals like Korean firms, that often have stronger brands
• China’s growth is increasingly domestic demand, with local Chinese firms putting pressure on Taiwanese firms ‘from below’
Taiwan and the Region
Fortune Global 500 Companies

Number of Companies in Top 500

<table>
<thead>
<tr>
<th>Country</th>
<th>2000</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>5</td>
<td>10</td>
<td>+5</td>
</tr>
<tr>
<td>South Korea</td>
<td>2</td>
<td>4</td>
<td>+2</td>
</tr>
<tr>
<td>China</td>
<td>0</td>
<td>80</td>
<td>+79</td>
</tr>
</tbody>
</table>
Current Economic Policies in Taiwan

- The current economic development strategy emphasizes **knowledge-intensive innovation**
  - Promote and encourage the development of **diverse industries** and **export markets**
  - Promote **innovation**, high-tech industries and investment in R&D centers
  - Support the **growth of entrepreneurship** through incubators and accelerators
  - Create an environment conducive to the introduction of **high quality human resources** (in particular R&D and global management talents and skills)
  - Encourage **private investments** and **public infrastructure investments**
  - **Improve government service** functions
  - **Level the playing field** for Taiwan’s businesses by concluding FTAs with key trading partners (e.g. China)

- Taiwan has recently identified **10 key industries** for investment

<table>
<thead>
<tr>
<th>Emerging Industries</th>
<th>Intelligent Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Biotechnology</td>
<td>• Cloud computing</td>
</tr>
<tr>
<td>• Medicine and healthcare</td>
<td>• Smart electric vehicles</td>
</tr>
<tr>
<td>• Culture and creativity</td>
<td>• Green architecture</td>
</tr>
<tr>
<td>• Tourism</td>
<td>• Patent commercialization</td>
</tr>
<tr>
<td>• Green energy</td>
<td></td>
</tr>
<tr>
<td>• High end agriculture</td>
<td></td>
</tr>
</tbody>
</table>
The Need for an Economic Strategy

- Implementing best practices in each policy area
- There are a huge number of policy areas that matter
- No region or country can (or should try to) make progress in all areas simultaneously

An overall agenda for creating a more competitive and distinctive position for a country or region, based on its particular circumstances
Creating an Economic Strategy

National Value Proposition

- What is the **distinctive competitive position** of the nation given its location, legacy, existing strengths, and potential strengths?
  - What unique advantages as a business location?
  - For what types of activities and clusters?
  - What roles with the surrounding countries and the broader global economy?

Developing Unique Strengths

- What **elements of the business environment** can be unique strengths relative to peers/neighbors?
- What **existing and emerging clusters** can be built upon?

Achieving and Maintaining Parity with Peers

- What **weaknesses** must be addressed to remove key constraints and achieve parity with peer locations?

- **Priorities** and **sequencing** are a necessity in economic development
Toward a Taiwanese Economic Strategy
What is Unique about Taiwan?

- **Gateway to China**: Strongest democracy, freedom of speech of any Chinese-speaking country
- Strategic location in the **Asia-Pacific region**
- **Entrepreneurial, flexible** business culture
- **SME** economy
- World class **technology**
- Strong **intellectual property protection**
- Large pool of **researchers**
- Strong **science and technology education**, as well as **research** institutions
- Some deep **technology clusters** in related industries
- **Logistics** strengthened in past 10 years
- Strong **outbound FDI**, so far mostly to China
Renewing Taiwan’s Competitiveness

Address Urgent Competitive Weaknesses

- Reduce the cost of doing business in Taiwan
- Improve the supply of VC and increase incentives for investment in SMEs
- Realign training and higher education around Taiwan’s business needs
- Create a world class strategy to attract inward FDI
- Pragmatically pursue FTAs or similar agreements with as many countries as possible
- Shift immigration policy towards skilled immigration
- Create institutions to raise the participation of women in the workforce
- Improve the efficiency and sophistication of local industries

Build on Strengths

- Continue to improve Taiwan’s innovation system
- Raise the sophistication of management training
- Mount a plan to raise the quality of life, including cultural life, environmental quality, housing, and health care
Renewing Taiwan’s Competitiveness – continued

Evolve and Widen Taiwan’s Cluster Portfolio

• Mount an aggressive cluster development program
• Build on existing and emerging strengths, especially in areas where China is not a leader and there are needs in ASEAN
  – e.g., Chemicals
  – Plastics
  – Advanced production machinery
  – Specialty agriculture
• Focus on high value-added segments and niches
• Pursue advanced services connected to Taiwan’s strengths (e.g., software, IoT)

Reposition Taiwan in the Region and the World

• Gateway to China and Asia
  – Greater China regional headquarters
  – R & D and advanced manufacturing hub
• Technology provider and advanced manufacturer for ASEAN markets