Continuity and Transformation
Continuous challenges for world-class status among universities in Taiwan and Japan as ageing societies

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Ageing in East Asia

Population over 60 (2012)
Source: Global Age Watch

Total fertility rate (2013)
Source: CIA World Fact Book
Population Pyramid

Source: Index Mundi / CIA World Fact book

GERs of Tertiary Education (2010)

Source: UNESCO Institute for Statistics
Enrollment ratio of Tertiary Education against 18 year old population in Japan
Source: MEXT School Basic Survey

Impact of Population Decline

• Reduced study incentives among youngsters: Easier to be admitted to universities and colleges under continuously high graduation rate
• Uncertain prospects in the domestic labor market, facing with increased competition among HE graduates at global level
• “Demographic Onus”: economic decline through decrease of the share of working age population
• Change of demographic structure among university faculties
• Slow internationalization
University faculties in Japan
Source: MEXT School Basic Survey

QS Rankings 2012-2013
Number of Graduate Students

Taiwan

Japan

Number of PhD Applicants and Enrollment of Four Taiwan Research Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>National Taiwan University</th>
<th>National Tsing Hua University</th>
<th>National Cheng Kung University</th>
<th>National Chiao Tung University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of applicants</td>
<td>Enrollment</td>
<td>No. of applicants</td>
<td>Enrollment</td>
</tr>
<tr>
<td>2009</td>
<td>2361</td>
<td>1023</td>
<td>954</td>
<td>504</td>
</tr>
<tr>
<td>2010</td>
<td>2316</td>
<td>1004</td>
<td>699</td>
<td>492</td>
</tr>
<tr>
<td>2011</td>
<td>1948</td>
<td>1009</td>
<td>556</td>
<td>450</td>
</tr>
<tr>
<td>2012</td>
<td>1630</td>
<td>1009</td>
<td>461</td>
<td>430</td>
</tr>
<tr>
<td>2013</td>
<td>1269</td>
<td>1009</td>
<td>331</td>
<td>409</td>
</tr>
<tr>
<td>Decrease rate / Acceptance rate</td>
<td>-46%</td>
<td>79.5%</td>
<td>-65%</td>
<td>80.9%</td>
</tr>
</tbody>
</table>
Policies for HE finance

Traditional patterns in Japan
- **Incrementalism**: gradual increase of the budget without changing share among items

New patterns in emerging economies and countries that stress knowledge/innovation policies
- **Excellence initiatives**: concentration of budgetary increase to a limited number of universities or research units

Patterns to be introduced in the stagnated economies
- **Selection and concentration**: actual reallocation of budget for strategic investment
## Comparison of Excellence Programs and Challenges in Taiwan and Japan

<table>
<thead>
<tr>
<th>Items</th>
<th>Taiwan</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of excellence programs</strong></td>
<td>Development plan for world-class universities and research centers of excellence</td>
<td>Centers of excellence, World Premier Initiatives</td>
</tr>
<tr>
<td></td>
<td>Teaching excellence initiative</td>
<td>Good practices in education and other support for students</td>
</tr>
<tr>
<td></td>
<td>Technological university paradigms</td>
<td>Super Global Universities (planned)</td>
</tr>
<tr>
<td><strong>Purpose of excellence project</strong></td>
<td>Develop several top universities</td>
<td>Clarify the mission of prospective universities (including those aiming to be world-class)</td>
</tr>
<tr>
<td></td>
<td>To be a center of HE in Asia Pacific regions</td>
<td>Make the Japanese higher education system globally competitive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goals to be achieved</th>
<th>1 university in top 100, 7 universities in top 500</th>
<th>10 universities in top 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrinking student-aged population</td>
<td>50% drop in the number of high school graduates in 2016</td>
<td>Continuous decline of the 18-year-old population since the beginning of the 1990s</td>
</tr>
<tr>
<td>Governance / Personnel Policies</td>
<td>Introduction of Flexible Salary Scheme</td>
<td>Strengthen decision making power of presidents Strengthen the differentiation of salary / personnel scheme</td>
</tr>
<tr>
<td>Talents</td>
<td>Not attracting many international scholars Decline in number of applicants in PhD program</td>
<td>Facing difficulty to attract international scholars and students under increasing competition with Asian neighbors</td>
</tr>
<tr>
<td>Resources</td>
<td>Selection and concentration / diversified</td>
<td>Selection and concentration / diversified, some prestigious private universities seek public funding opportunities</td>
</tr>
<tr>
<td>Internationalization</td>
<td>Faculty needs to improve international capacity / offer more EMI courses</td>
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</tr>
</tbody>
</table>
Selection and Concentration

Taiwan

- Proposal of concentration of investment into the limited number of universities Higher Education Macro Planning Commission (HEMPC) (2003)
- Development Plan for World Class Universities and Research Centers of Excellence (2005–2016)
  → Moving into Top Universities Program (2011-2016)
    - internationalizing top universities and expending students’ global perspectives,
    - promoting universities’ research and innovation quality
    - building international capacity of faculty and students
    - strengthening collaboration between universities and industry
    - enhancing graduates’ competence in response to social and market demands

Japan

- Center of Excellence (21st Century 2002-2009; Global 2007-2014)
- World Premier International Research Center Initiative (WPI) (2007-)
- 1% cut of annual operational budget of national universities (2004-2010 in principle)
- 1st round performance assessment of national universities (2009): ignorable linkage with budgetary allocation
- Temporary salary cut of national civil servants and national university staff (2012) (around 8% maximum, variation among universities)
- Reallocate the national university budget toward 14 projects for “Acceleration of National University Reform” (2012-2013: 13.8-14.0 billion Japanese yen, national university operational budget cut: -1% in 2013, -5% but concluded as 2.6% increase by through a supplementary budget)
- Super Global Universities (planned 2014: 15.6 billion Japanese Yen requested, requested 6% increase of national university operational budget ↔ termination of temporary salary cut)
• Discussed for a long time
  – Apparent necessity under increasing global competition with decreasing share of working age population
  – Resistance of actual significant budgetary cut for large majority
• Started to be implemented quite recently
  – Critical points and Triggers: Tsunami/Nuclear Accident in 2011 (Japan)
  – Diffusion on the available data for performance assessment including governmental exercise of performance assessment
• Dilemma
  – Investment for excellence \(\Rightarrow\) excellent initiatives in research
  – Demand to strengthen the wider range of domestic human resources \(\Rightarrow\) excellent initiatives in education and professional/vocational training
  \(\Rightarrow\) “Funding according to functions” (Japan)
• Unclear direction of financial policies
  – “Abenomics”: (1) a massive fiscal stimulus, (2) more aggressive monetary easing from the Bank of Japan, and (3) structural reforms to boost Japan’s competitiveness
  – Tax increase for sustain the services and safety net in ageing society

**Policy Implication**

• An adequate and sustainable scheme for funding education is crucial to maintaining national strength within a globalized knowledge economy.

• A clear and effective policy for human resource development via university education is necessary, which raises the demand for internationally competitive faculty members, both in research and education.

• The role of the national government should be reconsidered with the aim of meeting world-class university requirements for greater institutional autonomy and more financial support.

• A system to assure international transparency and accountability is required to attract further investment into their universities from a wider base of both domestic and international stakeholders.
Thank you very much!