Investment Opportunities in Thailand
“Incentives for BIO-TECH Business”

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Thailand Board of Investment
April 2006
Thailand: Where Success Stories Begin

- Why Thailand
- Thailand Investment Statistics
- BOI Incentives for Biotech Business
- Investment Opportunities
Why Thailand:

- International Rankings
- Ease of Doing Business
- Low costs
Thailand Rated #3 Most Attractive FDI Location in Asia by UNCTAD Survey

**RANKING OF FDI PROSPECTS IN ASIA 2005-8**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 1</td>
<td>China</td>
</tr>
<tr>
<td>Top 2</td>
<td>India</td>
</tr>
<tr>
<td><strong>Top 3</strong></td>
<td><strong>THAILAND</strong></td>
</tr>
<tr>
<td>Top 4</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Top 5</td>
<td>South Korea</td>
</tr>
</tbody>
</table>

- UNCTAD survey of world’s 325 largest transnational corporations
- Asian region has most positive FDI prospects
- Overall, Thailand ranked #9 in world

UNCTAD Global Investments Prospects Assessment, Sept. 2005
### Improved Competitiveness: 2005 World Rankings

<table>
<thead>
<tr>
<th>Rank</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Singapore</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Japan</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Thailand</td>
<td>#27</td>
<td>29</td>
</tr>
<tr>
<td>Malaysia</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>Korea</td>
<td>29</td>
<td>35</td>
</tr>
<tr>
<td>China</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>India</td>
<td>39</td>
<td>34</td>
</tr>
</tbody>
</table>

**Improved government efficiency & Economic performance**

- Adaptability of govt policy to economic changes
- Gov’t leaders understand business challenges for effective policies
- High growth of labor force productivity
- Low VAT 7%
- Internet $15/mo

Source: IMD Institute for Management Development
# World Bank Top 20 Ease of Doing Business

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New Zealand</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Singapore</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Canada</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Norway</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Australia</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>Hong Kong</td>
<td>17</td>
</tr>
<tr>
<td>8</td>
<td>Denmark</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>United Kingdom</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>Japan</td>
<td>20</td>
</tr>
</tbody>
</table>

**FOR 10 BUSINESS AREAS:**
- Starting a business
- Hiring and firing workers
- Enforcing contracts
- Access to credit
- Closing a business
- Registering property
- Dealing with licenses
- Paying taxes
- Trading across borders
- Investor protection

Note: The ease of doing business measure is an average of the country’s ranking in each of the 10 areas of business measured in *Doing Business in 2006* by the World Bank.
### Thailand’s Economic Growth

<table>
<thead>
<tr>
<th>YEAR</th>
<th>GDP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>6.8</td>
</tr>
<tr>
<td>2004</td>
<td>6.2</td>
</tr>
<tr>
<td>2005</td>
<td>4.5</td>
</tr>
<tr>
<td>2006 Projection</td>
<td></td>
</tr>
<tr>
<td>Bank of Thailand</td>
<td>4.75 - 5.75</td>
</tr>
<tr>
<td>Finance Ministry</td>
<td>4.5 - 5.5</td>
</tr>
<tr>
<td>World Bank</td>
<td>5</td>
</tr>
</tbody>
</table>

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### Developed Infrastructure

<table>
<thead>
<tr>
<th>Highway system: 64,000 km to all provinces</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 million mobile phone users in 2003, growing 6 million/yr</td>
</tr>
<tr>
<td>World-class, Wi-Fi capabilities and inexpensive broadband widely available</td>
</tr>
<tr>
<td>Deep sea ports: capacity over 5 million TEU</td>
</tr>
<tr>
<td>4,000 km rail, links to Malaysia, Singapore</td>
</tr>
<tr>
<td>57 industrial estates</td>
</tr>
<tr>
<td>Low CBD Office rent: $12.5/sq. ft./year</td>
</tr>
<tr>
<td>7 international airports move 800,000 tons of cargo and 35 million passengers per year</td>
</tr>
</tbody>
</table>

**Suvarnabhumi Intl. Airport:** 45 million passengers/year
# Thai Graduates in Science and Engineering

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>45,451</td>
<td>7,216</td>
<td>52,667</td>
<td>74,616 (Total for all technical fields)</td>
</tr>
<tr>
<td>Computer Science</td>
<td>25,184</td>
<td>1,803</td>
<td>26,987</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>29,216</td>
<td>7,841</td>
<td>37,057</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td><strong>99,851</strong></td>
<td><strong>16,860</strong></td>
<td><strong>116,711</strong></td>
<td></td>
</tr>
</tbody>
</table>

Thai Universities With Engineering Programs:  
22 Public  14 Private

1 Source: Ministry of Education
IPR Framework

• Thailand has 8 intellectual property-related laws, all of which are consistent with international standards:
  – Copyright Act of 1994
  – Trademark Act of 1991, as amended by the Trademark Act (No.2) of 2000
  – Act for the Protection of Layout-Designs of Integrated Circuits 2000
  – Trade Secret Act of 2002
  – Protection of Geographical Indication Act of 2003
  – Plant Varieties Protection Act of 1999
  – Traditional Medicine and Practice Act of 1999
Science Park

• Thailand’s Science Park Serves as an incubation Center for Science-Related Investment
• Support Includes:
  – Joint investment (i.e. joint ventures)
  – Assistance in finding and acquiring technology
  – Analytical and technical services
  – Intellectual property services
  – Quality management services
  – Maximum BOI Incentives
**Strategic Location to Asian Markets**

(Countries and populations)

- **China: 1.3 billion**
  - Early Harvest: China-Thailand
  - China-ASEAN FTA

- **India: 1.1 billion**
  - Early Harvest Agreement

- **Japan: 128 million**
  - Japan-Thailand Economic Partnership Agreement

- **Taiwan: 23 million**

- **Thailand: 64 million**
  - No. of Tourists >13 million/yr

- **ASEAN: 550 million**
  - AFTA

- **New Zealand: 4 million**
  - Closer Economic Partnership

- **Australia: 20 million**
  - TAFTA

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Strategic Location to Asian Markets

(Countries and populations)
Thailand
Investment Promotion Statistics
Value of Net Applications Increasing

Unit: US$ Billion

2002: 6.16 (44%)
2003: 7.68 (25%)
2004: 16.29 (112%)
2005: 17.49 (7%)

FDI increases 62% to 12.4 billion

Total investment applications
## Net Applications by Country

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Foreign</td>
<td>668</td>
<td>5,988</td>
<td>749</td>
<td>7,624</td>
<td>849</td>
<td>12,388</td>
</tr>
<tr>
<td>100% Foreign</td>
<td>255</td>
<td>2,557</td>
<td>334</td>
<td>2,722</td>
<td>426</td>
<td>3,259</td>
</tr>
<tr>
<td><strong>By Country</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>261</td>
<td>2,561</td>
<td>340</td>
<td>2,529</td>
<td>387</td>
<td>4,353</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>38</td>
<td>1,142</td>
<td>39</td>
<td>875</td>
<td>52</td>
<td>195</td>
</tr>
<tr>
<td>Taiwan</td>
<td>56</td>
<td>191</td>
<td>61</td>
<td>231</td>
<td>54</td>
<td>284</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>11</td>
<td>299</td>
<td>18</td>
<td>64</td>
<td>25</td>
<td>278</td>
</tr>
<tr>
<td>Singapore</td>
<td>46</td>
<td>351</td>
<td>81</td>
<td>554</td>
<td>82</td>
<td>351</td>
</tr>
<tr>
<td>E.U.</td>
<td>67</td>
<td>877</td>
<td>94</td>
<td>796</td>
<td>121</td>
<td>887</td>
</tr>
</tbody>
</table>

Note 1: Investment projects with foreign equity participation from more than one country are reported in the figures for each country.

Note 2: 2002 US$=43.00 baht; 2003 US$=41.53 baht; 2004 US$=40.27
BOI Incentives
Role of BOI in Promoting Investment
Basic BOI privileges and incentives

**NON-TAX INCENTIVES**

- Land ownership rights for foreign investors
- Permission to bring in foreign experts and technicians
- Work permit/visa facilitation

**TAX INCENTIVES**

- Corporate income tax holidays up to 8 years
- Import duty reductions or exemptions on machinery and raw materials
Zone and Sector Matrix

Zones

Sector Matrix: Incentives to strengthen COMPETITIVENESS

Strategic or Priority Industries

Maximum incentives regardless of zone or location

Example: R&D

Zone-Based Incentives:
- Zone 1: Higher incentives
- Zone 2: Lower incentives
- Zone 3: Lower incentives

Zone-Based Incentives:
Incentives for Biotech Business

Priority Activity Incentives

- Exemption on machinery import duties
- 8 years corporate income tax holiday
- Additional incentive if locate in Science Park
Example of Promoted Biotech Project

Health Concepts International Ltd.
(Subsidiary of Concept Foundation)
- HIV serum bank and Cyclofem QC lab
- HIV testing service & contract testing for research organization
- Plasma sample for R&D
- Locate in Science Park
Incentives for Agro-Base Biotech

Priority Activity Incentives

- Exemption on machinery import duties
- 8 years corporate income tax holiday
Incentives for Additional Biotech Business

- Manufacturing of Scientific Equipment
- Manufacturing of Medical Supplies or Medical Equipment

Priority Activity Incentives

- Exemption on machinery import duties
- 8 years corporate income tax holiday
<table>
<thead>
<tr>
<th>Zone</th>
<th>Exemption of corporate income tax (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>5 Yrs</td>
</tr>
<tr>
<td>Zone 2</td>
<td>6-7 Yrs</td>
</tr>
<tr>
<td>Zone 3</td>
<td>8 Yrs</td>
</tr>
</tbody>
</table>

Must achieve GMP (Good Manufacturing Practice) standards corresponding with PIC/S (Inspection Cooperation Scheme) within 2 years of beginning operations.
Investment Opportunities
in Biotech
Thailand: World’s Leader in Agro-Based Products

Strong Agro-based Industries Total Export Value : US$7.5 Billion/ year

- Top five net food exporter in the world
- Leading exporter of natural rubber, rice, cassava, sugar, seafood, canned tuna, canned pineapples
- Rubber-based industry : World’s largest rubber producer
- Tapioca : abundance of raw material Tapioca 5 mil. tons
  Alcohol, bio fuel, food additives
- Use Thailand as the production base of agro-base bio-tech
Strengths and Opportunity in Medical Biotech

- Most private hospitals are gearing toward capturing patients from other countries/serving more than 1,200,000 patients in 2005
- Thai doctors study abroad, speak international languages and are among the best in the region
High Growth Industries & New Growth Industries

Known throughout the world as the automotive hub of Asia and traditional powerhouse of electronics and IT production, Thailand is now realizing its potential in the food, fashion, and value-added industries.

Blessed with natural resources, skilled labor force, and centralized ASEAN location, Thailand offers established industries with new markets and opportunities in a robust economic environment beyond your expectations.

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