The Role of Competition Policy in the Promotion of Economic Growth in Thailand

Nipon Poapongsakorn
Dean, Faculty of Economics
Thammasat University

A presentation at the CPRC International Symposium on the Role of Competition Policy in the Promotion of Economic Growth.
Organized by the Competition Policy Research Center,
Tokyo, 7 March, 2008
**Questions**

- Is there any evidence of the relationship between competition and economic growth in Thailand?
- What are some implications for the competition policy in Thailand?
Topics of discussion

• Theoretical link between competition and economic growth
• State of knowledge on the effect of competition in Thailand industry on growth
• The competition policy in Thailand: implications for growth
1. Theoretical link: How Competition Promotes Economic Growth

- Competition: entry / exit
- Innovation
- Efficiency
- Productivity

- Anti-competitive Policy
- Excessive Regulations
- Anti-competitive practice & lobbying

- Stagnant Growth/
  Welfare Loss

Source: Adapted from Ariyapruchya, et al. 2006
1. **Theoretical link: how competition promotes economic growth**

1.1 Theory 1: Schumpeter wrote that “capitalism is the perennial gale of *creative destruction*”. Why?

- Greater competition will foster innovation
- New entry by technological superior firms and exit of less efficient ones result in higher efficiency
  - Example: the entry of TESCO in Thailand retail business has resulted in a mass exit of small retailers
1. Theoretical link between competition and economic growth

1.2 Empirical evidence: how greater competition fosters innovation


- But in theory, greater product market competition between incumbent firms may have two different effects, one discouraging innovation, the other promoting it. For industries at already high level of competition and one technologically sophisticated firm, an increase in competition may discourage innovation by the lagging firms (Aghion, Bloom, et al 2006; Ahn 2002; Aghion, Blundell, et al 2006)
1.3 Theory 2: increased competition has positive effect on firms’ efficiency and productivity growth (Ahn 2002)
1. Theoretical link between competition and economic growth

1.4 Theory 3: government intervention affects competition and, therefore, retards growth

- **Barriers to entry: domestic and border measures**
  - Domestic regulations: licenses, price control, etc
  - Protection and trade barriers: tariff and non-tariff measures
  - State enterprises monopoly

- **Rationale for the anti-competition policy**
  - Economies of scale argument in favor of domestic monopoly
  - Non-economic argument: national security and social concerns
1.5 Theory 4: Anti-competitive practice/rent seeking behavior reduce social welfare and result in waste of real resource

- Anti-competitive practice includes: collusive practices (i.e., price fixing, bid rigging), merger, abuses by dominant firms and unfair trade practices
- Rent seeking behavior, e.g., lobbying by a monopolist creates social loss (rent dissipation and indirectly unproductive activities, see Bhagwati 1987)
1. Theoretical link between competition and economic growth

1.6 Channels of competition and benefits: trade and foreign direct investment

- Trade openness and learning by exporting spurs technology transfer:
  - Restrictive trade policies may be a significant barrier to international technological transfer through imports (Schiff, Wang, Olarreaga 2000)
  - Learning by exporting through technology transfer by the developed-country customers (Gill and Kharas 2007)
  - Industrial upgrading through export: Potential benefits of OEM-type contracts for developing – country exporters include economies of scale in production that involve less risk and cost relative to firms that attempt to break into global markets on their own (Hobday 2000; Hallward-Driemeier, Iarossi and Sokaloff 2002)
1. Theoretical link between competition and economic growth

1.6 Channels of competition (cont.)

– Technology transfer and spillovers through FDI

  • Foreign ownership conveys large productivity benefits for their local operation through the restructuring and the infusion of new technology
  • Superior technology among the affiliates of MNCs spills over to local suppliers or customers through vertical input-output links
1. Theoretical link between competition and economic growth

1.7 Measurement of competition

- **Market concentration:**
  - Herfindahl index: highly concentrate if $H>1,800$
  - Concentration ratio of top-2 and top-4 firms

- **Contestability or barriers to entry**

- **Market segmentation**

- **Economic rent**
2. State of knowledge on the effect of competition in Thai industries on economic growth

2.1 Limited number of studies in Thailand

– Data unavailability
  • Only “industry” data (4 digit ISIC)
  • No data on products and their market extent

– The enterprise surveys have allowed increasing number of research at the industry level, but not at the product level

2.2 How high is the concentration in Thai industries and service sectors?

– Concentration in selected industries: CR-2 and CR-4
Figure 1 Concentration Ratio of 2 Largest Firms in Selected Industries

### Market share of Foreign Firms in Business Service Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Market share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Service</td>
<td></td>
</tr>
<tr>
<td>Top 5</td>
<td>20.0</td>
</tr>
<tr>
<td>All Foreign</td>
<td>30.0</td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
</tr>
<tr>
<td>Top 4</td>
<td>22.0</td>
</tr>
<tr>
<td>All Foreign</td>
<td>33.0</td>
</tr>
<tr>
<td>Architect</td>
<td></td>
</tr>
<tr>
<td>Top 5</td>
<td>34.9</td>
</tr>
<tr>
<td>All Foreign</td>
<td>39.4</td>
</tr>
<tr>
<td>Computer Service</td>
<td></td>
</tr>
<tr>
<td>Top 4</td>
<td>12.5</td>
</tr>
<tr>
<td>All Foreign</td>
<td>18.6</td>
</tr>
<tr>
<td>Consultant</td>
<td></td>
</tr>
<tr>
<td>Top 4</td>
<td>0.9</td>
</tr>
<tr>
<td>All Foreign</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### Market Structure of Selected Public Utilities and Infrastructural Services

<table>
<thead>
<tr>
<th>Sector</th>
<th>Monopoly</th>
<th>Duopoly</th>
<th>Oligopoly</th>
<th>Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Telecom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- telephone-domestic</td>
<td>state monopoly</td>
<td>BTO concessions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- telephone-oversea</td>
<td>state monopoly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- cellular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- satellite</td>
<td>private monopoly (concession)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- cable TV</td>
<td>private monopoly (concession)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- trucking</td>
<td></td>
<td>competitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- maritime transport</td>
<td></td>
<td></td>
<td>competitive (license)</td>
<td></td>
</tr>
<tr>
<td>- rail transport</td>
<td>state monopoly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- inter-provincial bus</td>
<td>state monopoly and concessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- metropolitan bus</td>
<td>state monopoly and concessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- electricity generation</td>
<td>state monopoly</td>
<td></td>
<td>dominant firm (IPP and SPP)</td>
<td></td>
</tr>
<tr>
<td>- electricity transmission</td>
<td>state monopoly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- electricity distribution</td>
<td>state monopoly in BKK and up-provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- gas transport and distribution</td>
<td>state monopoly</td>
<td></td>
<td>dominant firm (license)</td>
<td></td>
</tr>
<tr>
<td>- gas production</td>
<td>state monopoly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- petroleum</td>
<td></td>
<td></td>
<td></td>
<td>competitive</td>
</tr>
<tr>
<td>4. Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- production and distribution</td>
<td>state monopoly in BKK (MWA) and up-province (PWA)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 Causes of high concentration

• High tariff rates (42.7 %) in the 1980s
  - but tariffs declined to 10 % in 2006
  - except a few imported items with tariffs exceeding 30 %: liquor, cars, cloth

• Limit entry in the past, especially capacity control: cars, sugar, glass, cement

• Barriers to entry: cumbersome procedures for the new business registration; discriminatory practice in the implementation of law and regulations;

• Before the late 1990s, investment policy used to be in favor of large scale firms at the expense of small and medium scale firms
2.3 Causes of high concentration in the service sectors (cont.)

- State enterprise monopoly in public utilities and infrastructural services
- Non-level playing field for the private concessionaires in telecom
- Legal barriers (foreign business law) against foreign firms, particularly firms in the service sectors
2.4 What are the costs of concentrated industry/monopoly? Or put it another way, “how does competition promote growth?” Three kinds of costs (or benefits)

- Higher prices of goods and services to the consumers and higher cost of doing business
- Wasteful resource cost from lobbying
- Reducing firms’ productivity (TFP), efficiency and thus economic growth
2.5 First cost: Lesser competition would result in higher prices of goods and services for consumers and high cost of doing business

• An entry of the third company in mobile phone industry has resulted in price war, and the pre-paid service boom (Nikomborirak and De Silva 2003)
Concentration in the mobile phone service has declined

Source: Nikomborirak and de Silva 2007
A surge in prepaid mobile phone after the entry of the third firm in 2001

No. of subscribers

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Postpaid</th>
<th>Total Prepaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>3,164,005</td>
<td>4,776,893</td>
</tr>
<tr>
<td>2002</td>
<td>4,235,697</td>
<td>13,217,593</td>
</tr>
<tr>
<td>2003</td>
<td>3,568,198</td>
<td>18,046,488</td>
</tr>
<tr>
<td>2004</td>
<td>3,849,403</td>
<td>22,501,145</td>
</tr>
<tr>
<td>2005</td>
<td>3,913,956</td>
<td>25,630,527</td>
</tr>
</tbody>
</table>

Source: Nikomborirak and de Silva 2007
2.5 Lesser competition would result in higher prices of goods and services (cont.)

- Concentrated telecom has resulted in higher prices of long distance call and lease line comparing to other ASEAN countries (TDRI 2002)
- Public utilities monopolies have excessive cost and are inefficient
- Public transport (bus) provide poor quality services
2.6 Second cost of concentrated industry: resource cost from lobbying

- In a few industries, especially liquor, there are evidence of the dissipation of economic rent (waste of resource) (Poapongsakorn 2005)
  - A monopolist spent real resources to prevent new entry, e.g., lobbying for preferential excise tax for its product, lobbying to win the monopoly concession
  - An econometric study finds that a concentrated industry is more likely to lobby for protection, hence a waste of real resources and detrimental effect on growth (Kohpaiboon 2007)
2.7 Third cost of concentrated industry/entry barriers: reducing the total factor productivity of Thai firms

- (a) Simple correlation between the proxies of competition and firm productivity
  - Low market concentration (Measured by Herfindahl index) is associated with high TFP
  - The lower the entry barriers (highly contestable), the higher the firm TFP
  - Firms that have smaller rent (highly competitive) tend to have higher productivity
Low Market Concentration (small Herfindahl index) is Associated with High TFP

Source: Ariyapruchya, et al. 2006
Less barriers to entry (no. of certificates to do business), high TFP

Source: Productivity and Investment Climate Survey

Ariyapruchya, et al. 2006
Less barriers to entry (time required for a company registration), high TFP

Source: Productivity and Investment Climate Survey

Ariyapruchya, et al. 2006
Less economic rent, more TFP

Source: Productivity and Investment Climate Survey

Ariyapruchya, et al. 2006
(b) Econometric studies on effect of tariff protection

- A 1% decrease in rent (product market competition) increases firm TFP by 0.5% (Ariyapruchya, et. al. 2006)

- A 1% increase in effective rate of protection decreases the industry value added by 0.3% (Poapongsakorn, et. al., 2007)

- The higher concentration the industry, the lower the growth in productivity (Ariyapruchya, et.al. 2006) and the lower value added per worker (Kohpaiboom 2006)
• Legal restrictions against foreign business in the service sectors (Deunden 2007)
  - impeding technology transfer and learning by Thai firms: merger, debt restructuring
  - creating shortage of professionals in certain areas: international lawyers, etc.
2.8 Benefit of greater competition: enhancing firms’ productivity and efficiency

- Greater competition have positive effect on firms’ productivity, measured by “total factor productivity” through the creative destruction process and technological development. Two groups of evidence:
  - A) simple correlation between free entry / competition and TFP (sale growth)
  - B) econometric findings
A-1) Creative destruction: Free entry creates both winners and losers

- High performance firms tend to be in vibrant markets.
- Winners and losers tend to occur together and thus allow productive firms to replace unproductive firms (Ariyapruchya, et al. 2006)
A) Creative Destruction Process: young firms have higher TFP since they tend to use new technology which is superior to old technology

Young Firms are More Productive (Ariyapruchya, et al. 2006)

Source: Productivity and Investment Climate Survey
(A-3) Competition (low rent) Fosters Research and Development

Source: Ariyapruchya, et al. 2006
– (A-4) Competition in the export market results in the spillover effect of export, and thus higher firms’ TFP

• Agriyapruchya, et. al. (2006) find that the exporting firms have higher productivity than non-exporting firms because they begin export quickly after entry and thus gain from learning experience
Importance of learning: exporting firms tend to be more productive since they begin exporting quickly after entry

Source: Productivity and Investment Climate Survey

Source: Ariyapruchya, et al. 2006
• (B-1) Econometric results on the spillover effect of export and FDI (cont.)
  • Kohpaiboon (2007) uses the co-integration estimate to prove the Bhagwati hypothesis.
    Three findings
  • (1) An export promotion regime is more conducive than an import-substitution regime to Thai economy in maximizing the growth-enhancing effect of FDI
(B-2) Econometric results on the effect of export and FDI (cont.)

- (2) The technology spillover from FDI to the industry’s productivity is a decreasing function of trade regime, i.e., industries with greater outward trade regime tend to yield more benefits in the form of technology spillover from foreign firms.

- (3) Finally, foreign presence also affects the productivity of locally owned industry and that technology spillover is far less under an IS regime than an EP trade regime.
2.9 Conclusion: there are enough and strong evidence to support two hypothesis
(1) that competition promotes growth, and
(2) that regulation/protection and lobbying are detrimental to growth
3. Policy implications

• Although Thailand already has implemented a competition law since 1999, it does not work. Why not?
• What kind of competition policy that could promote the economic growth?
3.1 Why the competition law does not work

- Dominance threshold was not established in the first 7 years. So section 25 (abuse of dominance) and section 26 (merger) could not be enforced.

- Inappropriate institutional design: (1) the commission and its secretariat are not free from political interference; (2) no clear rules and guidelines concerning the implementation of the laws, e.g., neither finding-of-fact report nor written decision reports were made public; (3) lack of protection of confidential and informant; (4) all violations are subject to criminal penalty which requires a proof beyond doubt.
3.1 Why the competition law does not work (cont.)

- The governments and bureaucrats do not want to have a competition policy because they still want to maintain the discretionary authority over the private business.
- Major flaw of the law: it provides blanket exemption to state enterprises which tend to use anti-competitive practices in order to stifle private competition.
- Therefore, there is an urgent need to reform the competition law and its institution.
3.2 What kind of competition policy that could promote the economic growth?

- What are the key policy issues that will have large impact on economic growth?
- Trade and investment policies are no longer the main concern as they have been liberalized, thanks to unilateral tariff reforms, bilateral/ regional free trade agreements
- There are two main concerns that will affect the future economic growth:
  - Entry barriers in the high-tech service sectors which need foreign expertise in certain specialized areas of legal and accounting services
  - Weakness in the competition law: (a) exemption to state enterprises results in non-level playing field; (b) no guidelines and clear rules to prevent collusion and anti-competitive practices of dominant firms, and to regulate merger
3.2 What kind of competition policy that could promote the economic growth? (cont.)

• 3.2.1 Three major weaknesses in the service sectors which are of high value and experiencing rapid technological change
  – (1) *most service sectors are not yet liberalized* and some remain a state enterprise with a statutory monopoly
  – (2) still *no regulatory regime* for some important public utility services
  – (3) the *Foreign Business Act* creates the legal barriers affecting the foreign firms in the service sector
3.2.1 Three Major weaknesses are in the service sectors

- (a) Most public utilities, e.g. transport, telecom, energy) are still not liberalized and provided by state enterprises with a statutory monopoly that they sometimes auction off to private concessionaires
- Yet some state enterprises still hold regulatory control over competing private concessionaires, resulting in a non-level playing field
3.2.1 Three Major weaknesses are in the service sectors

- (b) Except the telecom and a recent regulatory framework law on energy, there is not yet any regulatory commission monitoring the services of the state enterprises and private natural monopoly in transport and water supply
3.2.1 Three Major weaknesses are in the service sectors (cont.)

- (c) According to the Foreign Business Act, the business service sectors are still legally closed to foreign investors and professionals, i.e., accounting, law, consultant, special delivery, architect, etc.
- But practically, they are very much open to them as foreign investors and professionals are able to circumvent some of the stringent restrictions partly due to legal loopholes and lax law enforcement.
  - Foreign investors are able to acquire complete control of a company, despite the direct equity share limitations, through indirect equity holding (legally) and Thai nominees (which are illegal)
3.2.1 Three Major weaknesses are in the service sectors (cont.)

• (c) Problems with FBA (cont.)
  – If the law that bars foreign telecom operators were to be strictly enforced, competition in the telecom market would be limited to the detriment of the industry and Thai consumers
  – It will also have serious ramification effect on other service sectors that are subject to regulations by the FBA
3.2.2 Competition policy reforms

- An urgent need to reform the competition law and its enforcement mechanism, e.g., state enterprises should not be exempted by the law; commissioners must be independent; guidelines and clear rules for implementation
- Liberalization of the telecom and other business service sectors: streamlining the FBA
- Privatization of state enterprises: a better thought-out plan and transparent criteria for privatization to avoid political vested interest problems
- Establishing the regulatory framework and authority to monitor and regulate the public utilities, transport and infrastructural services, with the transparent, good governance and participatory rule-making procedures
Thank you