#### **CPRC Discussion Paper Series**

# **Competition Policy Research Center Japan Fair Trade Commission**

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

Nipon Poapongsakorn

Dean, Faculty of Economics Thammasat University

CPDP-30-E May 2008

To be presented at the International Symposium on "The Role of Competition Policy in the Promotion of Economic Growth," Competition Policy Research Center, Fair Trade Commission, March 7, 2008, Tokyo.

1-1-1, Kasumigaseki, Chiyoda-ku, TOKYO 100-8987 JAPAN

Phone:+81-3-3581-1848 Fax:+81-3-3581-1945

URL:www.jftc.go.jp/cprc/index.html

E-mail:cprcsec@jftc.go.jp

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

Nipon Poapongsakorn

Dean, Faculty of Economics

Thammasat University

7 March, 2008

#### 1. Introduction

The competition policy is the new development in Thailand. Although Thailand legislated the Trade Competition Act in 1999 and the Trade Competition Commission has been appointed and began to work since 1999, the implementation of the law has been very disappointing (Poapongsakorn 2004; Nikomborirak 2006, 2007). The studies on the enforcement of competition law find that the governments have been reluctant to enforce the law since it took more than 8 years before the definition of dominant firm is determined. Without the definition, the law cannot be effectively implemented because two of the most important sections on the prohibited trade practices cannot be enforced. Thus, it is not exaggerated that the Thai governments have no competition policy.

Yet the academia have keen interest in the competition policy. Their interest is boosted after the long-awaited definition of dominant firm was approved by the cabinet in 2007. The effective implementation of the law is expected to enhance competition in the Thai industries and, hopefully, benefit the consumers as well as lead to higher economic growth.

Most of the Thai literature on competition policy are on the measurement of industrial concentration, the economic problems of the public utilities and regulations, as well as productivity impact of protection, export and foreign direct investment. There is only one academic work on the role of competition policy in the promotion of economic growth (Ariyapruchya, et. al. 2006). This note will address the last issue by reviewing the literature and assembling some key findings from those studies to shed some light on the role of competition policy in the promotion of economic growth.

The objectives of this paper, therefore, are three-folds:

- (a) it will provide a brief summary of the theoretical link between competition and economic growth
- (b) it will provide evidence of the relationship between competition and economic growth in Thailand
- (c) it will discuss some policy implications for the role of competition policy in the promotion of Thailand's economic growth.

#### 2. Theoretical link between competition and economic growth

There are 4 theories that link competition with economic growth. It should be noted that the third theory is in fact the corollary of the first two theories (see Figure 1).

#### 2.1 Schumpeter's creative destruction

Schumpeter wrote that "capitalism is the perennial gale of creative destruction". There are two reasons for the above statement. Firstly, greater competition will foster innovation. Secondly, new entry by technological superior firms and exit of less efficient

ones result in higher efficiency For example, the entry of TESCO in Thailand retail business has resulted in a mass exit of small retailers who are technologically inferior.

Figure 1: Theoretical link: How Competition Promotes Economic Growth



Is there any empirical evidence on how greater competition fosters innovation? Empirical evidence on the positive correlation between product market competition and innovation can be found in Nickell 1996; Blundell, Griffith and van Reenan 1999; Ayyagari, Demirgu Kunt and Maksimovic 2006.

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 2005; Ahn 2002; Aghion, Blundell, et al 2006). A careful literature review

by Symeonidis (1996) shows that there is little evidence in support of the Schumpeterian hypothesis that market power and large firms stimulate innovation.

- 2.2 The second theory is that increased competition has positive effect on economic performance other than innovation, i.e., overall firms' efficiency and productivity growth. Ahn (2002) provides the evidence on this issue.
- 2.3 The third theory is that government intervention affects competition and, therefore, retards growth. There are 3 types of barriers to entry that affect growth:
  - Domestic regulations: licenses such as price control, etc.
  - Protection and trade barriers: tariff and non-tariff measures
  - State enterprises monopoly

There are two rationales for the anti-competition policy. First, protection of the domestic monopolists will help them achieving the economies of scale. The second rationale is the non-economic argument such as national security and social concern.

- 2.4 The fourth theory: Anti-competitive practice and rent seeking behavior reduce social welfare and result in waste of real resource (Tullock 1967; Bhagwata 1987). Anti-competitive practice includes collusive practices (i.e., price fixing, bid rigging), merger, abuses by dominant firms and unfair trade practices. The rent seeking behavior, e.g., lobbying by a monopolist, creates social loss. The behavior is also known as directly unproductive profit-seeking activities (Bhagwati 1987).
- 2.5 In addition to domestic competition, there are two additional channels of competition, i.e., trade and foreign direct investment

While 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). The benefit of learning by exporting is the technology transfer by the developed-country customers (Gill and Kharas 2007). Moreover, export also result in industrial upgrading. 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).

The second channel is foreign direct investment which will provide technology transfer and generate spillovers for the country that receives FDI. Foreign ownership conveys large productivity benefits for their local operation through the restructuring and the infusion of new technology. Moreover, superior technology among the affiliates of MNCs spill-overs to local suppliers or customers through vertical input-output links

**2.6 Measurement of competition.** There are 4 measures of competition (Ariyapruchya, et al. 2006).

- Market concentration and market power can be measured by (1) Herfindahl index. If the HI is larger than 1,800, the industry is highly concentrated; (2) concentration ratio of the top-2 and top-4 firms.

- Contestability or barriers to entry
- Market segmentation
- Economic rent

# 3. State of knowledge on the effect of competition in Thai industries on economic growth.

There are limited number of studies on the effect of competition in Thailand industries on economic growth. The main reason is data unavailability.

- Only "industry" data (4 digit ISIC) is available.
- There is no data on products and their market extent.

However the enterprise surveys have allowed increasing number of research at the industry level.

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

Figure 2 shows the concentration ratio (CR-2) in selected industries. There are at least 6 industries with the CR-2 exceeding 90%.

Figure 3 provides the market shares of foreign firms in selected service sector. It shows that the architecture services and accounting are dominated by 4-5 foreign firms. Table 1 provides the market structure of the telecommunication and public utilities. Most of these sectors are monopoly or oligopoly. In conclusion, the public utilities sector is still dominated by a few firms, especially the state enterprises. At the same time the concentration in the Thai industries has been declining, yet there are still a few industries with high concentration.

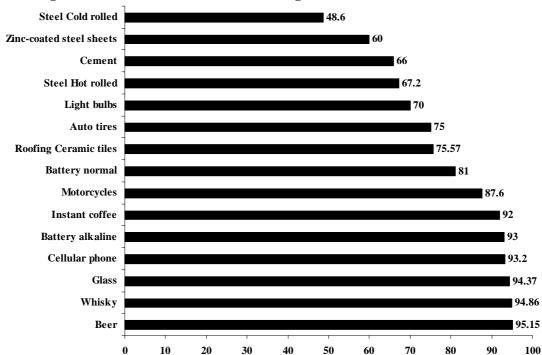


Figure 2: Concentration Ratio of 2 Largest Firms in Selected Industries

Source: Nikomborirak, Deunden, Saowalak Cheevasittiyanond, Rajitkanok Chitmunchaitham and Weerawan Paiboonchit-aree(2002), A Survey of Trade Practices in 12 Industries, TDRI Report.





Table 1: Market Structure of Selected Public Utilities and Infrastructural Services

Sector	Monopoly	Duopoly	Oligopoly	Competitive
1. Telecom				
- telephone-domestic		BTO concessions		
- telephone-oversea	state monopoly			
- cellular			6 BTO concessions	
- internet				13 BTO concessions
- satellite	private monopoly (concession)			
- cable TV	private monopoly (concession)			
2. Transport				
- trucking				competitive
- maritime transport				competitive (license)
- rail transport	state monopoly			
- inter-provincial bus	state monopoly and concessions			
- metropolitan bus	state monopoly and concessions			
3. Energy				
- electricity generation			dominant firm (IPP and SPP)	
- electricity transmission	state monopoly			
- electricity distribution	state monopoly in BKK and up-provinces			
- gas transport and distribution	state monopoly			
- gas production			dominant firm (license)	
- petroleum				competitive
4. Water				
- production and distribution	state monopoly in BKK (MWA)			
	and up-province (PWA)			

Source: Deunden 2006.

#### **3.2 Causes of high concentration.** There are at least 7 sources.

- Tariff rates were high (42.7%) in the 1980s, but tariffs declined to 10 % in 2006; except a few imported items with tariffs exceeding 30 % e.g., liquor, cars, cloth. This is why the Thai industries are now quite competitive.
  - Limit entry in the past, especially capacity control: cars, sugar, glass, cement.
- -Barriers to entry includes cumbersome procedures for the new business registration and 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.
- State enterprise monopoly still dominate the public utilities and infrastructural services.

- Non-level playing field for the private concessionaires is still the major problem in telecommunication.
- There are still important legal barriers against foreign firms, particularly firms in the service sectors. The most important barrier is the foreign business law.
- **3.3** What are the costs of concentrated industry/ monopoly? Or put it another way, "how does competition promote growth?" There are 3 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.
- a) First cost: Lesser competition would result in higher prices of goods and services for consumers and high cost of doing business. As shown in Figures 4-5, 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). Figure 4 shows that the entry of the third telecom company in 2002 reduced the HI; while Figure 5 indicates that the number of pre-paid subscribers jumped from 3.16 million in 2001 to 5.63 million in 2005. So competition which brings down the price has generated the growth of telecom.

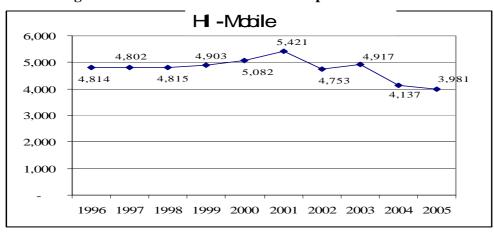


Figure 4: Concentration in the mobile phone service

Source: Nikomborirak and de Silva 2007

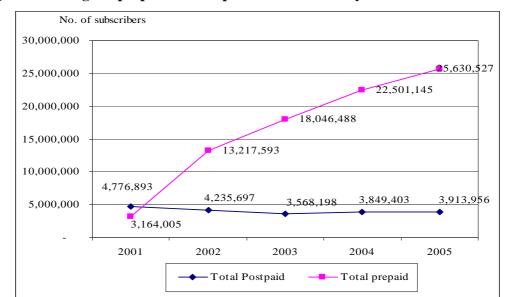


Figure 5: A surge in prepaid mobile phone after the entry of the third firm in 2001

Source: Nikomborirak and de Silva 2007

On the other hand, the concentration in long-distance telephone has resulted in higher prices of long distance call and expensive lease line comparing to other ASEAN countries (TDRI 2002). In addition, public utilities monopolies have excessive cost and are inefficient; and public transport (bus) provides poor quality services for the consumers.

#### 3.4 Second cost of concentrated industry: resource cost from lobbying

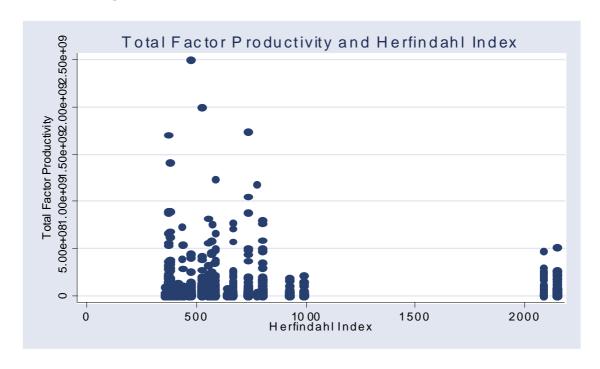
In a few industries, especially liquor, there are evidence of the dissipation of economic rent (waste of resource) (Poapongsakorn 2005). A monopolist spent real resources to prevent new entry, e.g., lobbying for preferential excise tax for its product, lobbying to win the monopoly concession.

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).

## 3.5 The third cost of concentrated industry/ entry barriers is a decline in total factor productivity of Thai firms. There are two groups of evidence.

- a) The first evidence is the simple correlation between the proxies of competition and firm productivity.
  - Low market concentration (measured by Herfindahl index) is associated with high TFP (Figure 6).
  - The lower the entry barriers (highly contestable), the higher the firm TFP (Figure 7-8).
  - Firms that have smaller rent (highly competitive) tend to have higher productivity (Figure 9).

Figure 6: Market Concentration (Herfindahl index) and TFP



Eim Total Factor Productivity

0 5.00e+091.00e+092.00e+092.00e+092.00e+092.00e+092.00e+093.00e

Figure 7: Less barriers to entry (no. of certificates to do business), high TFP

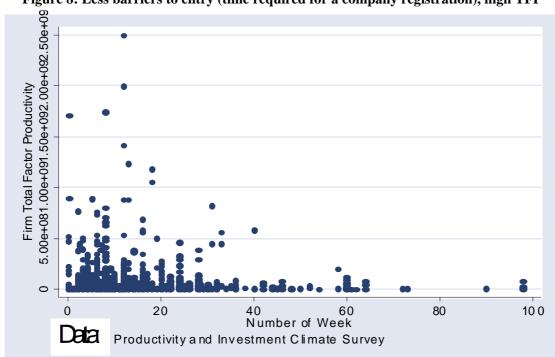


Figure 8: Less barriers to entry (time required for a company registration), high TFP

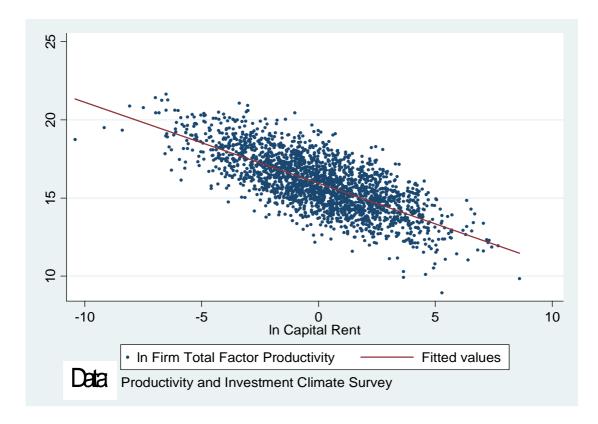


Figure 9: Less economic rent, more TFP

- b) The second group of evidence is the econometric studies on effect of tariff protection. Here are the results.
  - 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) impeded technology transfer and learning by Thai firms e.g., merger, debt restructuring. They also created shortage of professionals in certain areas: international lawyers, etc.
- **3.6 Benefit of greater competition.** Competition will enhance 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: simple correlation and econometric
  - a) Simple correlation between free entry / competition and TFP (or sale growth). Figure 10 shows that free entry creates both winners and losers.

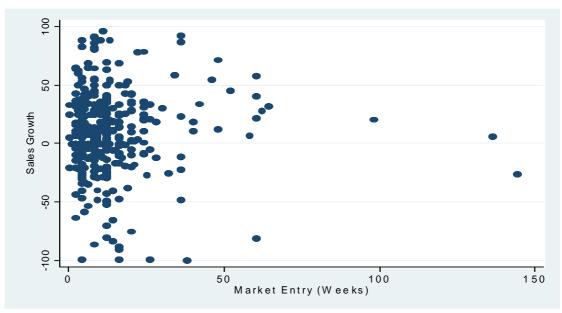


Figure 10: Creative destruction and sale growth

- High performance firms tend to be in vibrant markets. Figure 11 shows that
  young firms have higher TFP since they tend to use new technology which is
  superior to old technology.
- Winners and losers tend to occur together and thus allow productive firms to replace unproductive firms (Ariyapruchya, et al. 2006).
- Moreover, competition (measured by low level of rent) fosters R&D (Figure 12).

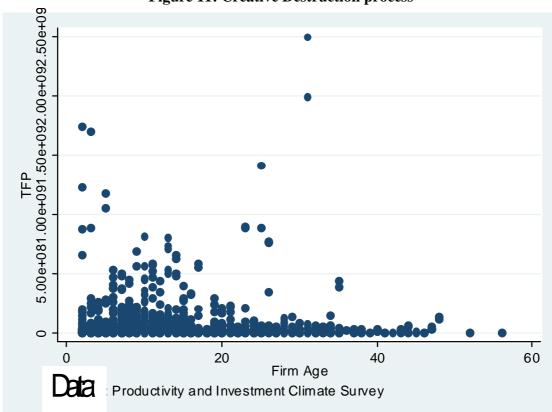


Figure 11: Creative Destruction process

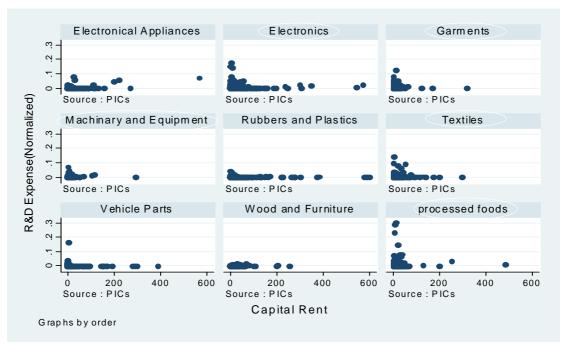


Figure 12: Competition (low rent) Fosters Research and Development

• 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 (Figure 13).

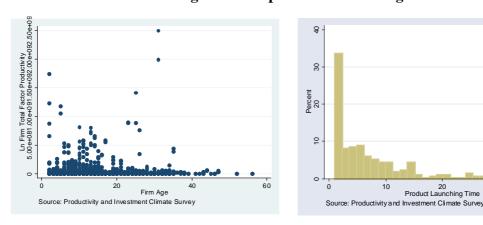


Figure 13: Importance of learning

40

- b) Kohpaiboon (2007) uses the co-integration estimate to prove the Bhagwati hypothesis. There are 3 main findings.
  - An export promotion regime is more conducive than an importsubstitution regime to Thai economy in maximizing the growth-enhancing effect of FDI
  - 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.
  - 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.

Conclusion: there are enough and strong evidence to support 2 hypothesis, i.e., (1) that competition promotes growth, and (2) that regulation/protection and lobbying are detrimental to growth.

#### 4. Policy implications

There are two policy questions. Although Thailand already has implemented a competition law since 1999, it does not work. Why not? The second question is what kind of competition policy that could promote the economic growth?

- **4.1 Why the competition law does not work.** There are at least 4 reasons.
  - Dominance threshold was not established in the first 7 years. So section 25 (abuse of dominance) and section 26 (merger) could not be enforced

- Institutional design is inappropriate for the following reasons: (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.
- 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 competition 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

#### 4.2 Competition policy to promote 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. But 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.

In the service sectors which are of high value and experiencing rapid technological chang, there are 3 major weaknesses.

- (1) *Most service sectors are not yet liberalized* and some remain a state enterprise with a statutory monopoly.
- (2) There is no regulatory regime for some important public utility services. 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.

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) *The Foreign Business Act* creates the legal barriers affecting the foreign firms in the service sector. 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.

Therefore, 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).

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.

### 4.3 Competition policy reforms. There are 4 areas of competition policy reform.

- (a) There is 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.
- (b) The telecom and other business service sectors should be liberalized as soon as possible. The FBA has to be streamlined.
- (c) Privatization of state enterprises has to be carefully implemented. A better thought-out plan and transparent criteria for privatization is needed if one wants to avoid political vested interest problems.
- (d) There is a need to establish 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.

#### References

- Aghion, Philippe, Nick Bloom, Richard William Blundell, Rachel Susan Griffith, and Peter Howitt. 2005. "Competition and Innovation: An Inverted-U Relationship." Quarterly Journal of Economics 120 (2) 701-28.
- Aghion, Philippe, Richard William Blundell, Rachel Susan Griffith, Peter Howitt, and Susanne Prand. 2006. "The Effects of Entry on Incumbent Innovation and Productivity." Draft working paper, National Bureau of Economic Research, Cambridge, MA.
- Ahn, Sanghoon. 2002. "Competition, Innovation, and Productivity Growth: A Review of Theory and Evidence." OECD Economics Department Working Paper 317, Economics Department, Organisation for Economic Co-operation and Development, Paris.
- Ariyapruchya, Kiatpong, Jirapan Olarnthanaset and Chatsurang Karnjanasai. 2006. "Strengthening the Competitiveness of Thai Firms: What Needs to be Done?". A paper presented at the 2006-Bank Of Thailand Symposium.
- Ayyagari, Meghana, Asli Demirguc-Kunt, and Vojislav Maksimovic. 2006. "Firm Innovation in Emerging Markets: Role of Governance and Finance." Unpublished working paper, World Bank, Washington, DC.

- Bhagwati, Jagdlsh N. 1987, "Directly Unproductive Profit-Seeking (DUP) Activitles."

  The New Palgrave Dictionary of Economics. Edited by J. Eatwell, New York:

  Stockt on Press. 1987: 845-847.
- Blundell, Richard William, Rachel Susan Griffith, and John van Reenen. 1999. "Market Share, Market Value, and Innovation in a Panel of British Manufacturing Firms."

  Review of Economic Studies 66 (3): 529-54.
- Cowling, Ketith and Dennis C. Mueller. 1978. "The Social Costs of Monopoly Power." Economic Journal. Vol. 88. (December): 727-748.
- Gill, Indermit and Homi Kharis. 2007. *An East Asian Renaissance-Ideas for Economic Growth*. Washington DC: World Bank.
- Hallward-Driemeier, Mary, Giuseppe Iarossi, and Kenneth L. Sokoloff. 2002. "Exports and Manufacturing Productivity in East Asia: A Comparative Analysis with Firm-Level-Data." NBER Working Paper 8894, National Bureau of Economic Research, Cambridge, MA.
- Hobday, Michael. 2000. "East Versus Southeast Asian Innovations: Comparing OEM-and TNC-Led Growth in Electronics." *In Technology, Learning, and Innovation:*Experiences of Newly Industrializing Economies, ed. Linsu Kim and Richard R.

  Nelson, 129-69. Cambridge: Cambridge University Press.
- Kohpaiboon, Archanun. 2006. *Multinational Enterprises and Industrial Transformation- Evidence from Thailand*. Cheltenham, UK: Edward Elgar Publishing.
- Nickell, Stephen J. 1996. "Competition and Corporate Performance." *Journal of Political Economy* 104 (4): 724-46.

- Nikomborirak, Deunden. 2001. "State-owned enterprises: The last bastion of monopoly and the greatest challenge to competition authority, paper presented at the Fifth APEC/PFP Course on Competition Policy, Bangkok, 13-15 March.
- Nikomborirak, Deunden, S. Cheevatsittiyanond, R. Chitmunchaitham and W. Paiboonchit-Aree. 2002. A Survey of Trade Practices in 12 Industries. A TDRI Research Report. Bangkok.
- Nikomborirak, Deunden, Harsha de Silva. 2007. LIRNE Asia Six Country Multi-Component Study, 2006-07. LIRNE Asia.
- Nikomborirak, Deunden. 2007. "Thailand Country Report on the Service Sector and MNCs". Thailand Development Research Institute.
- Poapongsakorn, Nipon. 2002. "The New Competition Law in Thailand: Lessons for Institution Building" *Review of Industrial Organization*, 21: 2, (September).
- Poapongsakorn, Nipon, Chalongphob Sussangkarn, Achanun Kohpaiboon, Suwanna Tulyawasinpong and Chaiyasit Anuchitworawong. 2007. A Study of the Industrial Tariff Structure Reform. With. A research report prepared for the Office of the Industrial Economics, Ministry of Industry. Thailand Development Research Institute.
- Rodrik, Dani. 2004. "Industrial Policy for the 21<sup>st</sup> Century." Unpublished working paper,

  September, John F. Kennedy School of Government, Harvard University,

  Cambridge, MA.
- Schiff, Maurice, Yanling Wang, and Maurice Olarreaga. 2002 "Trade-Related Technology Diffusion and the Dynamics of North-South and South-South Integration." Policy Research Working Paper 2861, World Bank, Washington, DC.

Symeonidis, George. 1996." Innovation, Firm Size and Market Structure: Schumpeterian Hypothesis and Some New Themes". OECD Report. Paris.

Tullock, Gordon. 1967. "The Welfare Cost of Tariffs, Monopolies and theft." Western Economic Journal (now Economic Inquiry). Vol. 5 (June): 224-232.

\_\_\_\_\_