

1. THAILAND'S INVESTMENT CLIMATE TODAY: MAIN FINDINGS OF THE 2007 SURVEY AND INTERNATIONAL COMPARISON

1. The investment climate is the fundamental socio-economic framework in which firms operate – the macroeconomic and trade policies they face, the labor and financial markets in which they recruit and raise money, the available infrastructure and imposed regulations, as well as all other areas of public policy impacting on private business. An improvement in the investment climate raises returns to current activities and so increases investment in these lines. It generally also creates new possibilities—for example, through trade or access to new technology. It influences the psychology of entrepreneurs, affecting their assessment of whether innovation and research will pay off. It puts competitive pressure on firms. This may cause some firms, perhaps those close to technological frontiers, to shine—even as others fail. Yet investment climate fueled growth is not simply a shift toward some technological frontier, and it is not only benefiting the most advanced firms. Instead a better business environment induces changes through a complex dynamic of innovation and competition, relationships between firms and government, and the associated entrepreneurial expectations or “animal spirits”, to use the Keynesian term. Large gains may be realized through basic but fundamental improvements to doing business.

THE 2004 AND 2007 PRODUCTIVITY AND INVESTMENT CLIMATE SURVEYS (PICS)

2. The Productivity and Investment Climate Survey (PICS) of Thailand was funded by the Royal Thai Government and carried out by the Foundation for Thailand Productivity Institute (FTPI) under the supervision of the Ministry of Industry, with technical assistance from the World Bank on survey design and implementation. Moreover, a Technical Advisory Committee composed of representatives from the World Bank, the Ministry of Industry, the National Economic and Social Development Board, the Bank of Thailand, the National Statistics Office, and other agencies, provided guidance. The PICS is a collaborative effort of the Royal Thai Government and the World Bank.

3. The first round (PICS 2004) was conducted between March 2004 and February 2005; the second round (PICS 2007) between April 2007 and November 2007. They share a similar survey framework, covering six regions – North, Central, Bangkok and vicinity, East, (Upper and Lower) Northeast, and South – and nine industries – food processing, textiles, garments, automobile components, electronic components, electrical appliances, rubber and plastics, furniture and wood, and machinery and equipments. PICS 2004 surveyed 1,385 establishments in manufacturing and 100 in information and communication technologies (ICT); PICS 2007 surveyed 1043 establishments in manufacturing and 101 in ICT. 426 manufacturing firms participated in both surveys. The

present report focuses on these manufacturing firms. Both rounds include interviews with CEOs, Chief Financial Officers, Human Resource managers, and workers.

4. The general purpose of the surveys is to understand the investment climate in Thailand and how it affects business performance. PICS 2004 and PICS 2007 provide subjective assessments by firm managers and objective measures of various aspects of the investment climate, as well as information on corporate finance for 2001 and 2002, and 2003 to 2006 respectively. The two rounds of survey data allow an examination of the variation of investment climate across and within regions, industries, firms of different sizes and ownerships, and of the impact of the investment climate on firm productivity. A comparison of the results of PICS 2004 and 2007 sheds light on the differential effects of business climate on firm performance over time. In PICS 2007, firms' perception on several important aspects of investment climate, such as macroeconomic stability and economic policy certainty, were to a large extent affected by the interim government arrangements and may thus reflect temporary rather than permanent changes. A third and fourth round of PICS would provide useful information to explore the linkages between changes in investment climate and changes in firm performance on a sounder econometric basis and thus offer more solid support to help policy-makers improve investment climate and stimulate growth more effectively.

GROWTH AND PRODUCTIVITY IN THAILAND

5. Thailand's GDP has grown very fast over the past twenty years. The challenge now faced by the country is to avert the "middle-income country trap." Thailand's rapid per capita income growth of almost 6 percent over the period of 1980-1997 — like that of other emerging economies of East Asia (see Figure 1) — has enabled the country to transition quickly from low-income to lower middle-income country status.¹ Thai exports have increasingly moved from being resource-based and labor intensive to high-tech and capital intensive (see Figure 2). This was the result of many factors including export-orientated policies, opening up of the industrial sector to foreign direct investment (FDI), and the use of abundant cheap labor as well as capital accumulation.²

6. However, in recent years, Thailand's real GDP growth has decelerated and is lower than those of other developing East Asian countries. Thailand's real GDP growth fell from 6.2 percent in 2002-2004 to 4.8 percent in 2005-2007, compared with a 2005-07 average of 8.3 percent for emerging East Asian countries.³ With the intensifying global competition and higher commodity prices, Thailand now faces a serious challenge of

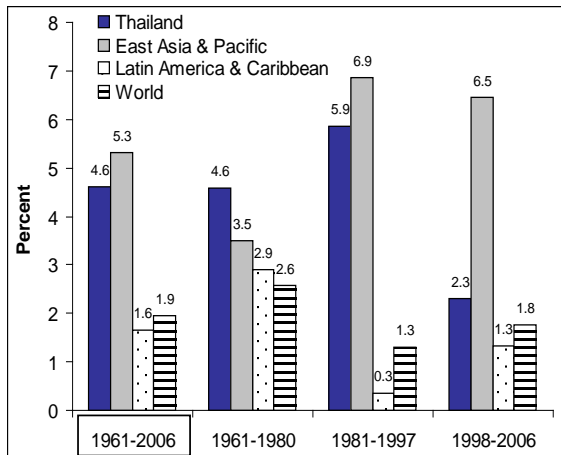
¹ Based on the World Bank Atlas methodology, countries are divided into several groups based on their 2006 GNI per capita: low income country, less than US\$900; lower middle income country, between US\$900 and US\$3,500; upper-middle income country, between US\$3,500 and US\$11,000, and high income country, greater than US\$11,000. Thailand, with a per capita income around US\$3,000, is a lower-middle income country.

² Thailand has adopted export-oriented policies since the mid-1970s and has opened up its manufacturing sector to foreign direct investment in the 1980s. In the late 1980s, there was an influx of Japanese FDI into Thailand as the yen appreciated sharply after the Plaza Accord. After that, Japanese firms relocated their production to other countries in East Asia to take advantage of lower production costs.

³ Source: East Asia Update, April 2008.

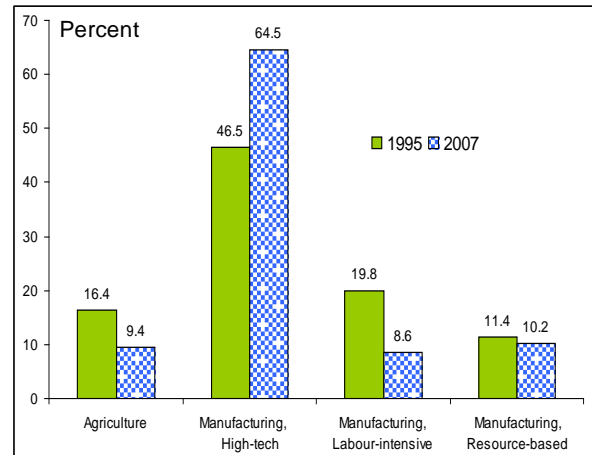
sustaining higher growth if it wants to transition to higher income country status. Policies and stimulus measures to mitigate the short-run downside risks to growth are being put in place. But Thailand also needs to turn to the longer term challenges: it needs to improve its productivity and its competitiveness if it wants to avoid being stuck at the middle income level like many Latin America countries have been for several decades.

Figure 1. Average Annual Growth of GDP per Capita, 1961-2006 (Percent)



Source: World Bank

Figure 2. Export Share by Product Groups, 1995 and 2007



Source: BOT

7. Thailand's rapid growth was mainly the result of rapid increase in employment and capital goods, but productivity growth was low. From 1985-2005, Thailand's real GDP growth expanded at a respectable average rate of 5.9 percent per annum. Almost half of this growth came from an increase in employment, particularly in the industrial sector to which excess agricultural sector migrated. A third of this growth came from the increased use of capital goods (machines and equipment). Education or improved labor quality accounts for only a fraction of this growth. Productivity growth accounts for only 15 percent of overall growth. It contributed only a small fraction to growth in industry and agriculture and was actually negative in the service sector (see Table 1). This calls for greater attention to productivity in all sectors. In an increasingly competitive global economy where an increasing number of countries with cheap labor and abundant resources are trading, Thailand can no longer rely on cheap labor and capital accumulation to support its GDP growth rate as in the past. Instead, to remain competitive and sustain high and balanced growth, it needs to improve productivity in all sectors.

Table 1. Sources of Growth in Thailand, 1985-2005

	Total Economy	Agriculture	Industry	Services
Output growth	5.9	2.8	7.6	5.4
of which				
Employment	2.6	0.5	4.9	4.5
Education	0.4	0.2	0.4	0.4
Capital	2.0	1.9	1.9	0.9
Factor Productivity	0.9	0.2	0.4	-0.4

Source: *Measuring Output and Productivity in Thailand's Service-Producing Industries (2008)*, NESDB and World Bank

8. Improvements in the business climate are critical to stimulate investment and productivity growth in Thailand. In the next section, the results of PICS 2004 and 2007 are outlined in order to give an overview of the key constraints to doing business in Thailand. It is critical that these are addressed if Thailand is to overcome the productivity and growth challenges outlined above.

RECENT DEVELOPMENTS IN THAILAND'S INVESTMENT CLIMATE

9. The PICS provide two types of investment climate indicators: objective and subjective. The objective indicators, such as the quality and reliability of basic infrastructure services, are a key concern when exploring the relationship between the business environment, productivity and growth.⁴ Such objective measurements, however, are not necessarily identical with the wide variety of factors that influence subjective opinions of firms about the business climate. As subjective judgments are important for actual investment decisions, it is very important to record these perceptions directly.

10. An analysis of the PICS data on objective and subjective investment climate indicators yields the following key results:

- The changes in objective investment climate indicators were ambiguous and generally small in magnitude between 2004 and 2007. This result—an objectively stable business climate—is not unexpected given the timeframe. Three years is a relatively limited period for fundamental changes to occur in real variables such as the physical infrastructure, the regulatory framework or the skill composition of the labor market.
- Strikingly, however, the subjective indicators record a very significant deterioration in perceptions about a wide variety of aspects of the investment climate. This broad based decline in subjective measures is likely to be related to the recent political crisis in Thailand.

⁴ Dramatic changes, for instance a drastic deterioration in the public power supply, would be expected to have strong effects on firms' productivity and growth.

- Aside from the general increase in pessimism, we find the ranking of the perceived main constraints to be very similar in 2004 and 2007. In other words, businesses tended to worry about the same constraints in 2007 as in 2004, only more so given the background of political crisis. Four of these key constraints—analyzed in more detail in chapters 3, 4, 5 and 6 of this report—are the following:
 - The weak macroeconomic environment and inadequate access to finance
 - The shortage of skilled labor
 - Taxes and the regulatory framework
 - The quality, price and reliability of infrastructure

Objective Indicators

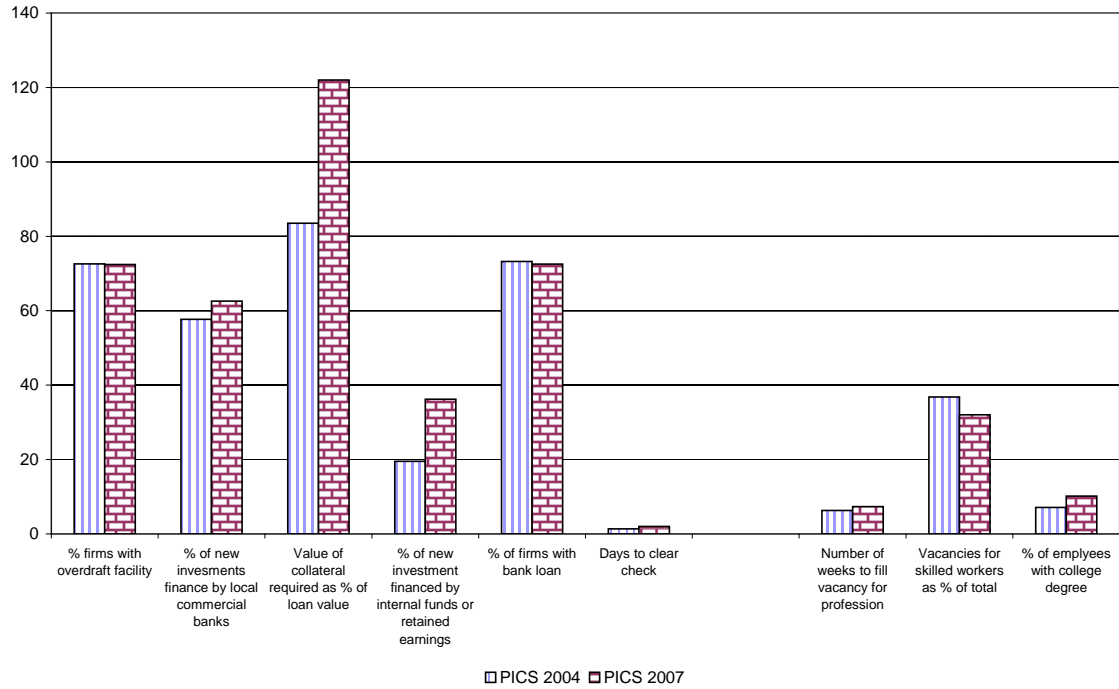
11. The PICS surveys ask firms to provide data on a wide array of objective investment climate indicators. These include measures of physical infrastructure (for instance, ‘yearly number of power outages’), of the regulatory environment (for example, ‘percentage of manager time dealing with regulations’) as well as the efficiency of financial and labor markets (‘percentage of firms with overdraft facility’, ‘average number of weeks to fill vacancy for professional position’, etc.).

12. As Figure 3 illustrates, only few of the indicators show large changes and these are of mixed direction.⁵ Most objective indicators appear relatively stable over time. The production loss due to power-outages, the number of weeks required to fill a vacancy for a professional position, the percentage of firms with a bank loan and those with an overdraft facility, as well as days to clear export customs remained virtually unchanged.

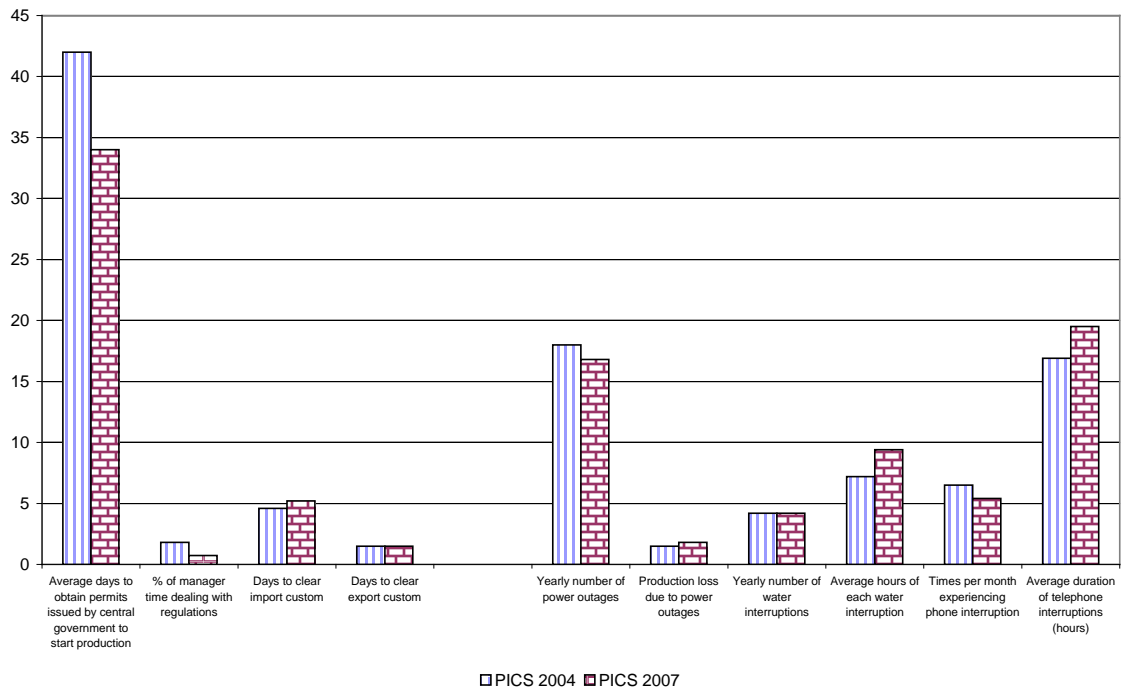
⁵ If instead of the full, nationally representative samples, we use the panel-data containing only those firms that were surveyed in both years, then the changes are even smaller.

Figure 3. Objective Indicators of Thailand Investment Climate, PICS 2004 and PICS 2007

Access to Finance and Skills

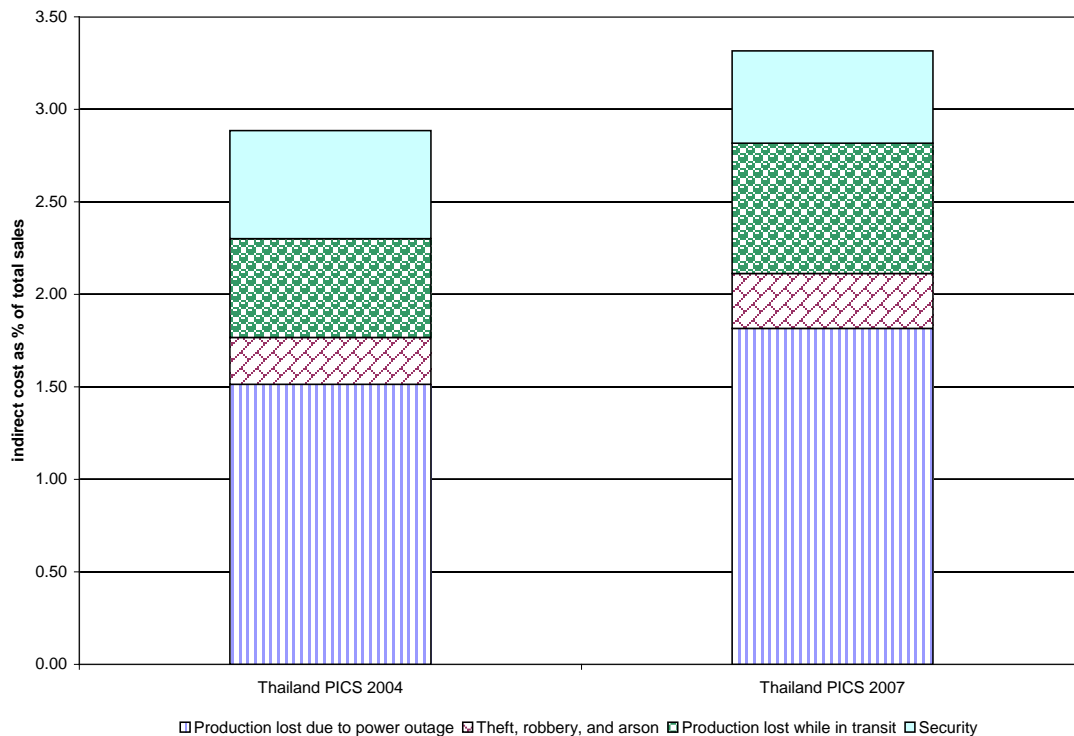


Regulations and Infrastructure



13. The indirect costs for Thai firms due to power disruptions, theft, robbery and arson, transportation, and security increased only slightly from 2.9 percent of total sales in PICS 2004 to 3.3 percent in PICS 2007. (Figure 4). The cost of production loss due to power outages increased from 52 percent of the total indirect costs to 55 percent; the cost of theft, robbery and arson remained at 9 percent of total indirect cost; the cost of production loss in transit increased from 19 percent of the total indirect costs to 21 percent; and the cost of security declined from 20 percent of the total indirect costs to 15 percent.

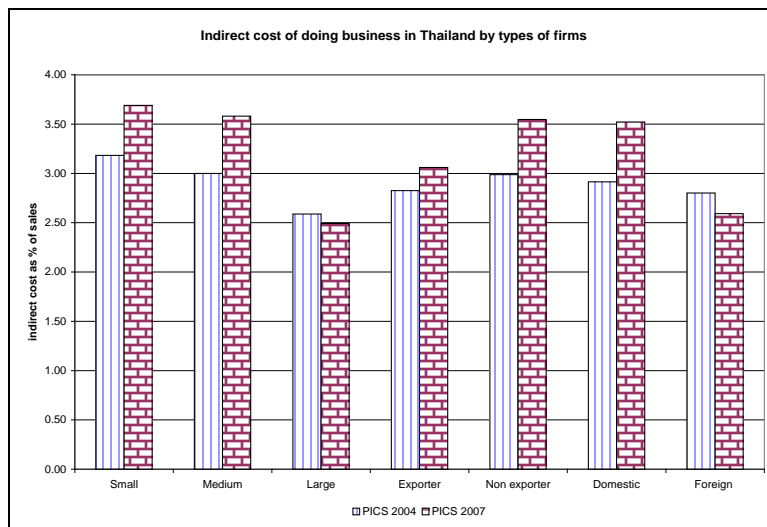
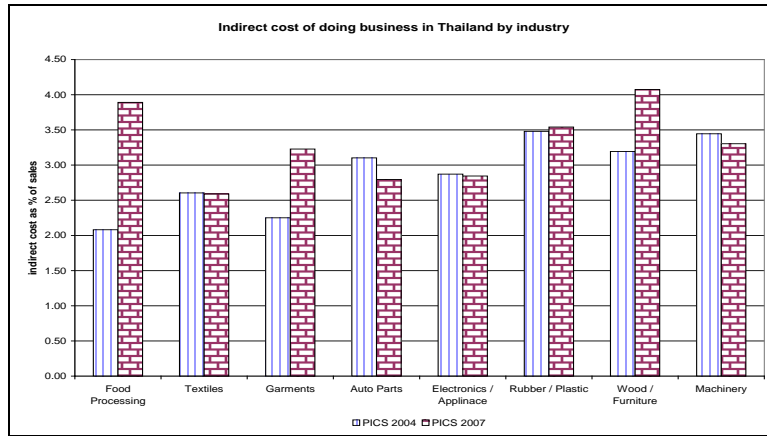
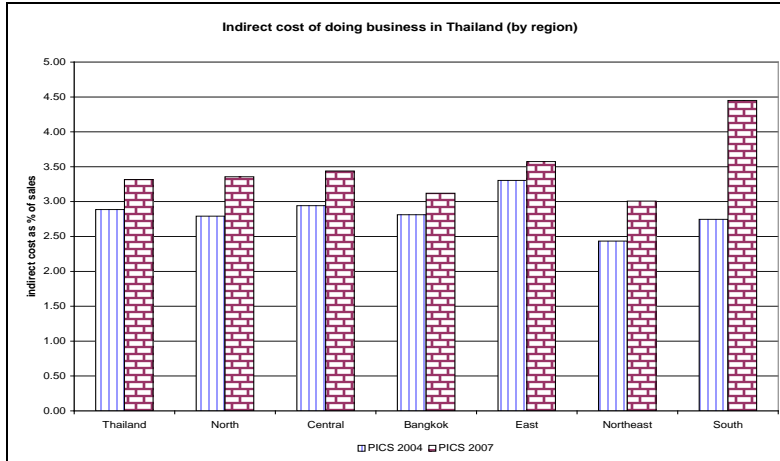
Figure 4. Indirect Costs of Doing Business in Thailand, PICS 2004 and PICS 2007 (Percent of Total Sales)



14. Indirect costs as a percentage of sales vary within Thailand (Figure 5).⁶ In PICS 2007, indirect costs increased in all regions—with the highest indirect costs recorded in the South (about 4.5 percent of sales). Food processing enterprises reported the highest *increase* in indirect cost for manufacturing, followed by firms producing garments and furniture. Food processing and furniture reported the highest *level* of indirect cost—both amounting to approximately 4 percent of sales. If we consider different firm types, large firms reported lower indirect costs than small and medium firms, and foreign firms reported lower indirect costs than domestic firms. The two categories large firms and foreign firms reported a decline in indirect costs, and small/medium firms and domestic firms reported an increase. Indirect costs are slightly higher for non-exporter firms than for exporter firms.

⁶ See Table 30 for details.

Figure 5. Indirect Costs of Doing Business in Thailand, Sub-National Breakdowns (Percent of Total Sales)



Subjective Perceptions of Enterprise Managers

15. For measuring Thai firms' subjective perceptions about the investment climate, this report uses two sets of statistics available in PICS. The first allows ranking investment climate constraints by the percentage of firms that considers them among their top three constraints to doing business. The second statistic is based on a question asking firms to rate, on a close-ended scale, how problematic each of 18 dimensions of the investment climate is for the operation and growth of their business⁷.

Perceptions about the Three Top Constraints to Doing Business

16. Given the method of computation of this statistic, it cannot record a general increase in concern, but only a relative change in what firms consider their most pressing investment climate constraints. The ten obstacles judged most important in 2004 and 2007, respectively, are summarized in Figure 6.⁸ The key results are the following:

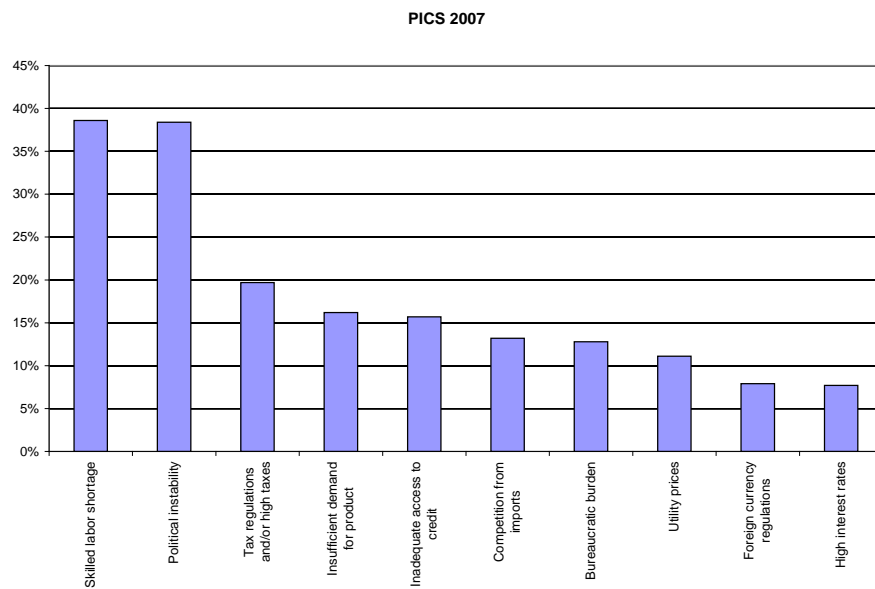
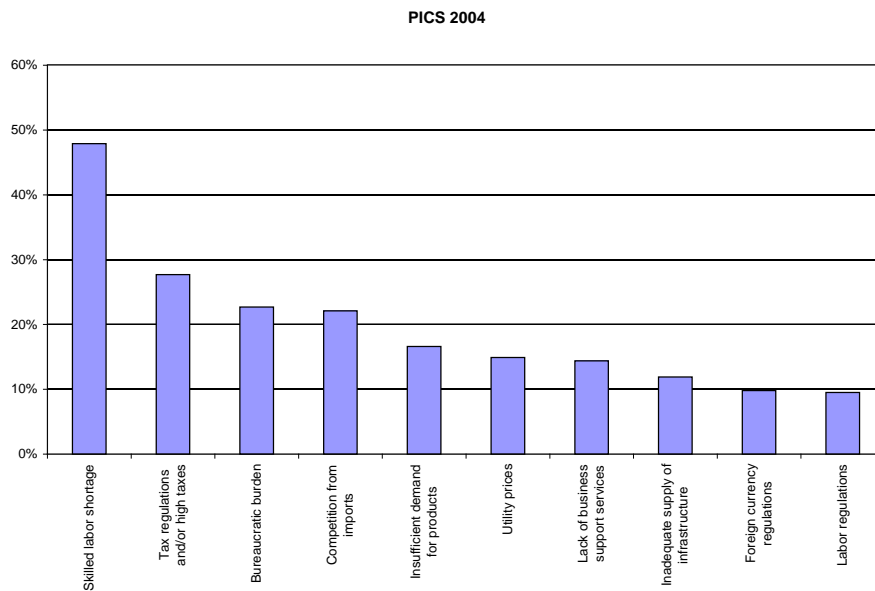
- The impact of the political crisis is clearly visible. In PICS 2004, only 8 percent of firms ranked 'political instability' as among their three biggest constraints to doing business. In the 2007 survey, however, 38 percent perceived political instability as a major constraint, making it second only to 'skilled labor shortage'
- The shortage of skilled labor was perceived as the biggest obstacle to doing business by the largest percentage of firms in both PICS 2004 (48 percent) and PICS 2007 (39 percent). Vacancies unfilled or hire less qualified labor to do the job both lowered firm performance.
- 'Tax regulations and/or high taxes' and 'bureaucratic burden' were the second and third most cited among 'top three' obstacles in PICS 2004, and the third and sixth highest ranked in PICS 2007.
- Concerns related to macroeconomic issues, such as 'insufficient demand for products' and 'competition from imports', were cited by 15 to 20 percent of firms as among their top three constraints.
- Obstacles relating to infrastructure, such as 'utility prices' or 'inadequate access to infrastructure', were ranked among the ten most frequently cited top-three obstacles in PICS 2004 and 2007.⁹

⁷ In this question, zero stands for not an obstacle, one for minor obstacle, two for moderate obstacle, three for major obstacle, four for severe obstacle, and NA means not applicable.

⁸ Macroeconomic policy uncertainty was not among the 22 investment climate constraints listed in the survey for firms to choose as one of their three biggest obstacles.

⁹ Inadequate access to credit was perceived by 15.7 percent of firms in PICS 2007 as a big obstacle compared to 9.2 percent in PICS 2004, suggesting a general tightening of credit accessibility over this period.

Figure 6. Percentage of Firms Perceiving a Particular IC Constraint as One of Their Top Three Constraints to Doing Business



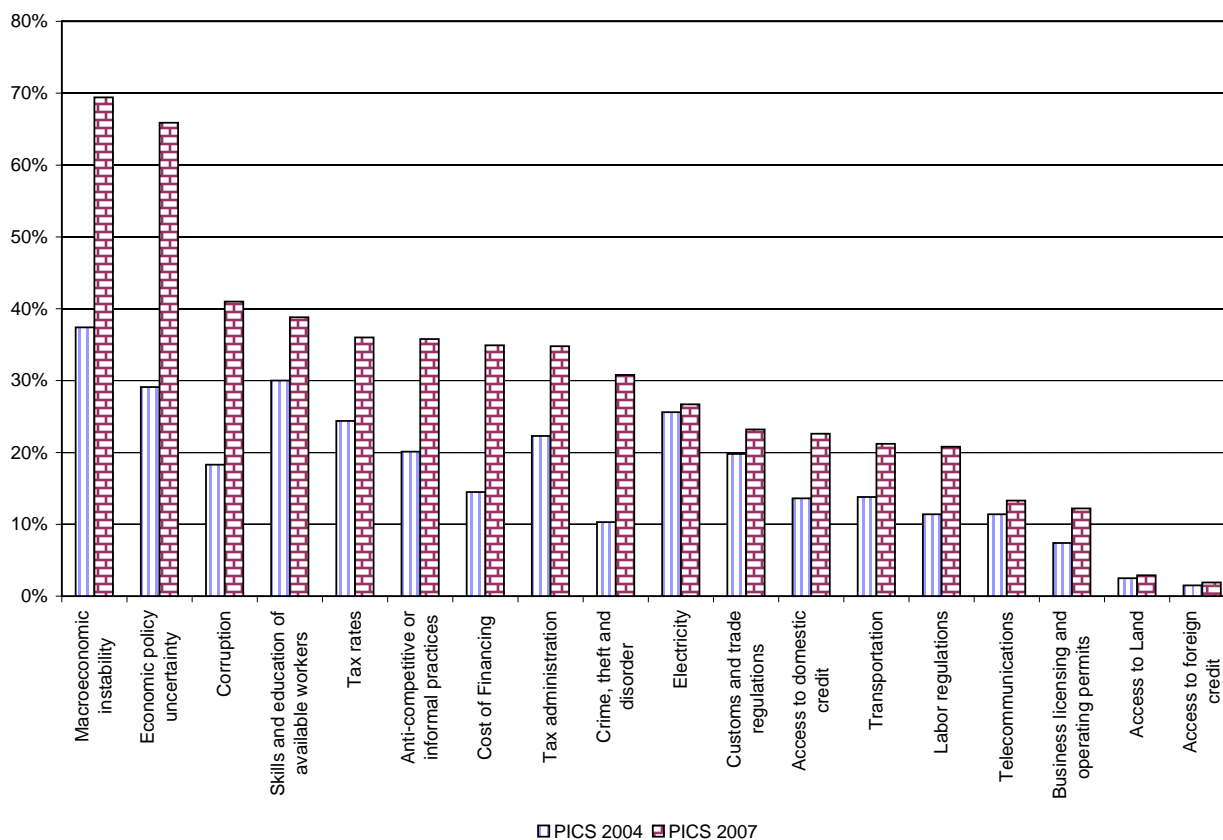
Perceptions of the Severity of Investment Climate Constraints

17. The second type of statistic recording subjective investment climate asks firms to rank the perceived severity of 18 obstacles to doing business on a five point scale. Figure 7 provides an overview of the percentage of firms ranking a particular constraint as ‘major’ or ‘severe’ in PICS 2004 and 2007 respectively. The key results are the following:

- The impact of the recent political crisis seems to be strongly reflected in Figure 7 in two ways. Firstly, in 2007 every single of the 18 obstacles was perceived as ‘major’ or ‘severe’ by a higher percentage of firms than in 2004. This suggests a broad-based increase in pessimism typical for a general political crisis of confidence. Secondly, the increase in perceived severity was particularly pronounced in indicators closely related to the political and administrative sphere, such as ‘economic policy uncertainty’, ‘corruption’¹⁰ and ‘crime, theft and disorder’.
- Both in PICS 2004 and 2007, however, ‘macroeconomic instability’ was the obstacle which the highest percentage of firms rated as ‘major’ or ‘severe’. The ‘cost of financing’, linked to increases in the interest rate as well as the availability of formal credit, is viewed particularly severely in 2007.
- Skill shortages and lack of education of workers was perceived as a ‘major’ or ‘severe’ obstacle by the second highest number of firms in 2004 (30 percent), and the fourth highest percentage in PICS 2007 (38 percent).
- ‘Tax rates’ and ‘tax administration’ were perceived as major or severe obstacles by a relatively high percentage of firms both in 2004 and 2007. The former is the fifth highest both in 2004 and 2007, the later the sixth and eight highest respectively. The comparatively high percentage of firms in both survey rounds perceiving ‘anti-competitive or informal practices’ as major or severe problems. ‘Customs and trade regulations’ were perceived more severely than ‘labor regulations’ and ‘business licensing’ in both years.
- In comparison to the other concerns, basic infrastructure constraints seem somewhat in the background. However, ‘electricity’, at least, is the fourth highest ranked concern in 2004, and tenth in 2007. Transportation was viewed as a major or severe problem by around 15 and 20 percent of firms in 2004 and 2007 respectively, and in both rounds more than ten percent perceived telecommunications in this way.

¹⁰ The percentage of firms that perceived corruption as a major or severe obstacle more than doubled—from 18 percent to 41 percent.

Figure 7. Percentages of Firms Perceiving Particular Investment Climate Indicators as Major or Severe Obstacles to Doing Business in Thailand



18. To summarize, the picture that emerges from the PICS surveys is one of relatively stable objective conditions, contrasted by a marked decline of perceived investment climate. The increased pessimism seems to be closely linked to the recent uncertain political situation. The actual business climate obstacles about which firms are most concerned, however, are largely similar in 2007 and 2004.¹¹

19. The following section compares both objective and subjective Thai investment climate indicators with those of other middle income countries. This provides a useful international perspective before moving to a more detailed examination of Thai productivity and growth and the most relevant elements of investment climate.

THAILAND FROM AN INTERNATIONAL PERSPECTIVE

Objective Indicators

20. Thailand ranks in 15th place out of 178 economies in terms of overall “ease of doing business”, based on the 2008 Doing Business report, up from the 17th place in the

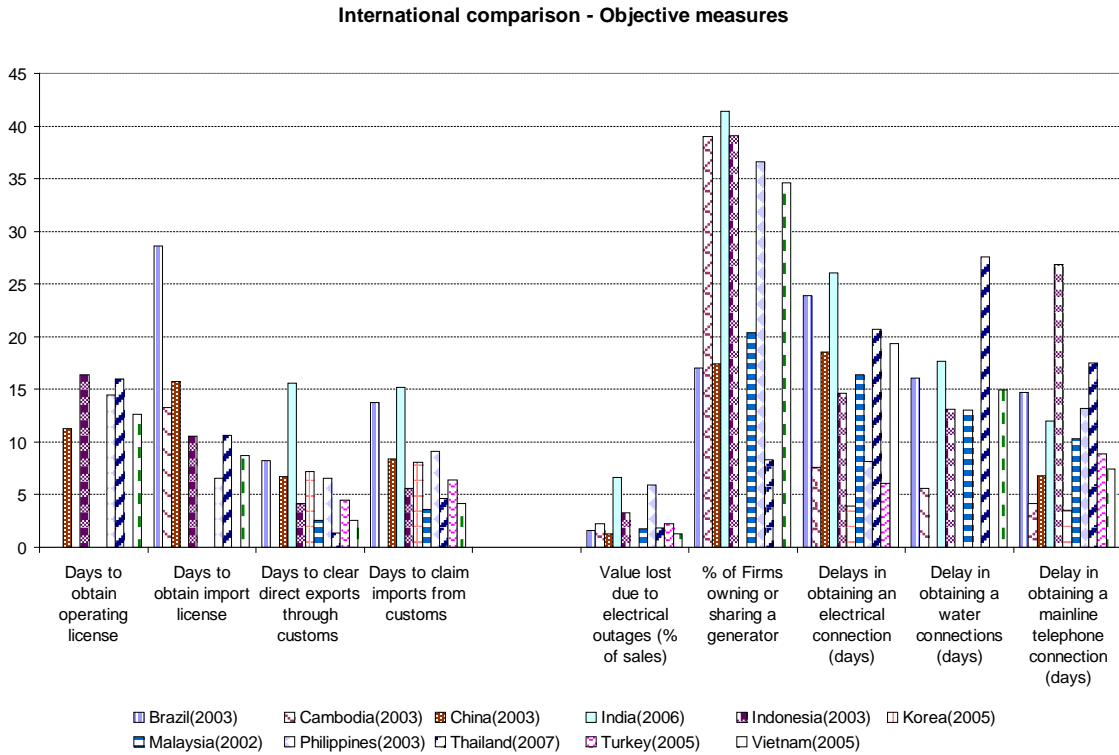
¹¹ Note that these key results also hold when the indicators of perceived investment climate are computed using the panel-samples which include only those firms that were surveyed in both rounds.

previous year. This compares favorably with other East Asian countries, such as Malaysia (24th place), Indonesia (123rd place), Philippines (133rd place), and Lao PDR (164th place)—though it lags behind the best performer, which is Singapore (1st place). The ten key dimensions of “ease of doing business,” are starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business. All changed only slightly over the last five years.

21. From an international point of view, in terms of regulations and logistics, the number of days to obtain an operating license and an import license in Thailand (16 and 11 days, respectively) is relatively high compared with comparator countries;¹² while the number of days to clear direct export through customs and to clear import customs (1.5 and 5 days) are relatively short (Figure 8). This suggests that, in a relative sense, customs clearance is more efficient in Thailand but more effort in license regulation is needed. In the area of infrastructure, electricity supply in Thailand measured by production loss due to power outage as a percentage of sales compares favorably with most comparator countries—this is consistent with the finding that a lower percentage of firms that own or share a generator (8.3 percent). However, it takes Thai firms a relatively long time to get infrastructure services connected: for electricity, water, and telephone line connection, it takes 21, 28 and 17 days, respectively.

¹² Comparator countries, selected on the basis of income level, export structure, and availability of data, include Brazil, Cambodia, China, India, Indonesia, Korea, Malaysia, Philippines, Turkey and Vietnam. The indicators are selected based on data availability.

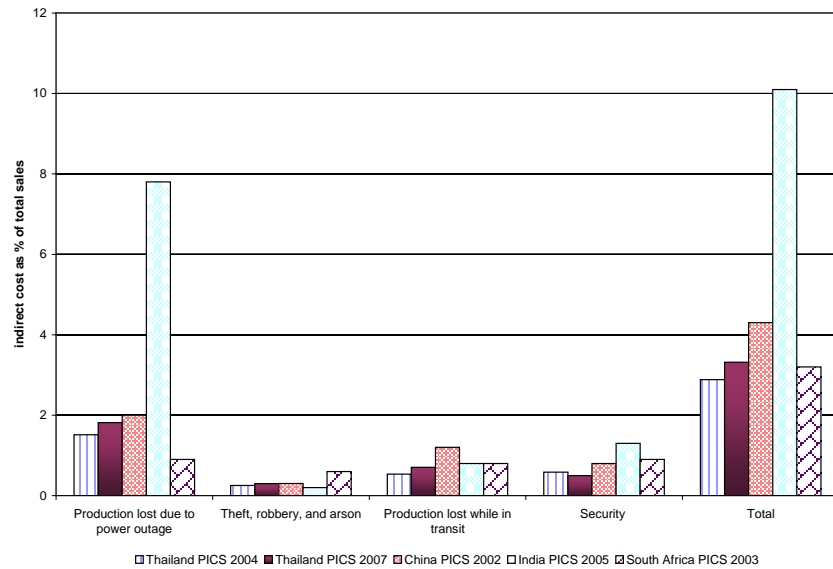
Figure 8. International Comparison - Objective Indicators



22. Firms’ indirect costs as a percentage of sales often are an important measure of the overall investment climate since, in general, it is less costly for firms to do business in locations with a better investment climate, others being equal. The overall indirect costs of doing business in Thailand are at par with South Africa, and lower than China and India (Figure 9).¹³ The cost of doing business in Thailand associated with production loss due to power outages is relatively high.

¹³ The comparator countries are selected based on data availability. In the PIC surveys of China, India, and South Africa, the indirect costs that firms reported—in addition to production loss due to power outage, theft, robbery, and arson, production loss while in transit, and security—also include bribes, which represents 1.9 percent, 2.1 percent, and 0.3 percent of total sales respectively. For comparison, the cost of doing business associated with bribes is not included in total indirect costs in China, India, and South Africa in this report.

Figure 9. International Comparison: Indirect Costs (Percent of Total Sales)

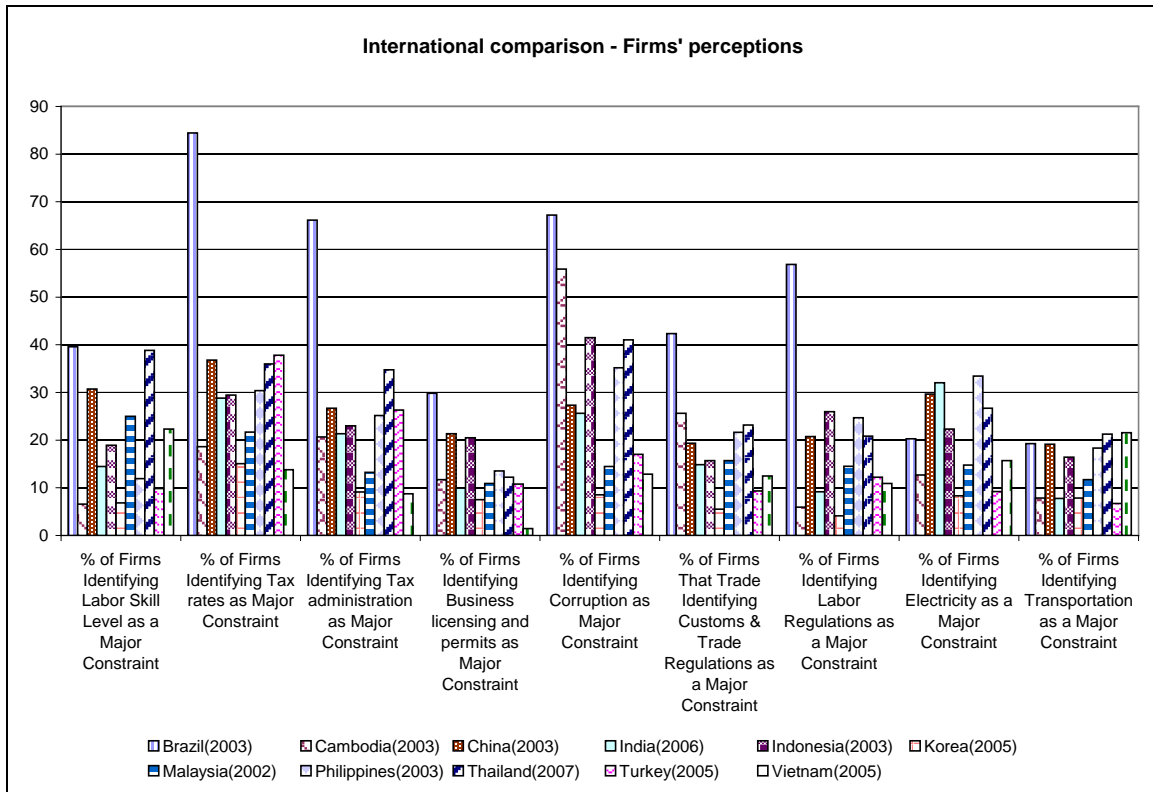


Subjective Perceptions of Enterprise Managers

23. Relative to comparator countries, a larger share of Thai firms considers many aspects of investment climate as major or severe constraints to doing business - the exception being Brazil (Figure 10). For example, the share of firms that perceive skilled labor shortage and transportation as major or severe constraints in Thailand is among the highest internationally.

24. The fact that many Thai firms consider the investment climate to be a major or severe constraint although many aspects of it are good by objective measures, suggests that improving the investment climate (and making firms aware of the improvements) is important to increase the firms' performance.

**Figure 10. International Comparison of Perceptions
(Percentage of Firms Identifying a Particular Constraint as ‘Major’ or ‘Severe’)**



FOCUSING ON THE MAIN INVESTMENT CLIMATE ISSUES

25. The various dimensions of the investment climate interact. For example, without an increase in skilled labor supply, efforts to encourage R&D may not be effective; similarly without alleviating the regulatory burden on trade logistics, improving transport facilities alone may not go far enough in stimulating exports. As the PICS results show, the recent political instability seems to exert a general downward pull on perceptions, which in turn may constrain investments in spite of stable, internationally still competitive objective conditions.

26. Simultaneously addressing the full set of investment climate constraints may be costly and disruptive for the economy and thus not feasible. Therefore, it is important to sequence policy reforms in order to improve the investment climate. The most effective sequence is to start by addressing key binding constraints, giving firms the incentive and the confidence to invest. The process can then be sustained by addressing other constraints in order of their importance.

27. Chapters 3-6 of this report focus on four dimensions of the investment climate that were identified as the key perceived constraints to firm performance above: the macroeconomic environment and financing of firms, skilled labor; regulations, and infrastructure.

- A reasonable level of macroeconomic stability and economic policy certainty is fundamental for a good investment climate. Without this, progress in other areas is unlikely to have traction. Well-functioning financial markets are also important for connecting lenders with borrowers to fund ventures and share risks appropriately. Limited access to finance often jeopardizes investment opportunities and raises costs unnecessarily.
- A skilled labor force is important for the adoption of new and more productive technologies and for increased productivity. A better knowledge base creates higher returns in a sustainable way at any given amount of inputs. Making education more relevant to the skill needs of firms is therefore important.
- Regulations and taxation play a major role in shaping the investment climate. Sound regulations address market failures that inhibit productive investment and reconcile the interests of firms with wider social goals. Sound taxation generates the revenues to finance the delivery of public services that improve the general investment climate.
- Reliable infrastructure services conditions the productivity of firms. They affect the timeliness and predictability of firms' response to market demand, which is more than ever important in a modern economy. Government intervention in the provision of infrastructure is particularly important due to its "natural monopoly" characteristics. This report looks closely at four types of infrastructure – power, water, telecommunications, and transport – of great importance for a wide range of firms.