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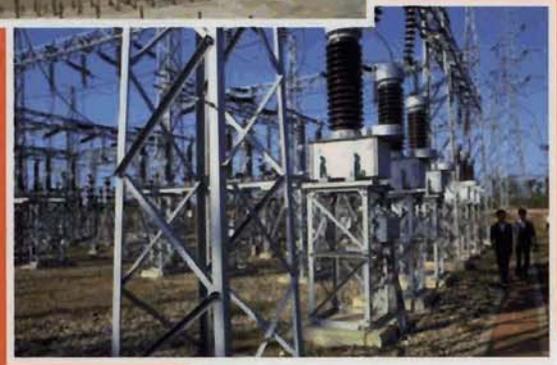
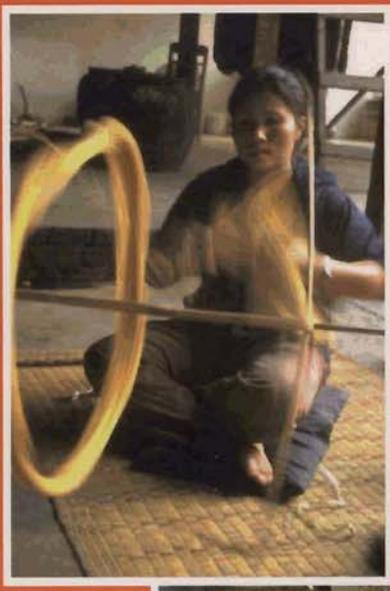
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Lao People's Democratic Republic 41845
Private Sector and Investment Climate Assessment

Reducing Investment Climate Constraints to Higher Growth



Lao People's Democratic Republic
Private Sector and Investment
Climate Assessment

REDUCING INVESTMENT CLIMATE CONSTRAINTS TO HIGHER GROWTH

A Joint Document of the Asian Development Bank and the World Bank

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Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila
Philippines
Tel +3 2 632 4444
www.adb.org

The International Bank for Reconstruction
and Development/The World Bank
1818 H Street, NW
Washington, DC 20433
USA
Tel +1 202 473 1000
www.worldbank.org

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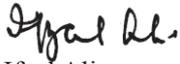
Foreword

AS THE EXTENSIVE literature on the subject points out, a good investment climate ensures conducive conditions for a firm's decision to invest, create jobs, and expand—by reducing costs of production and the risks of doing business, and by creating incentives to increase productivity. It is therefore important to assess the quality of the investment climate in an economy to inform policy reform. To this end, this Investment Climate Assessment is a snapshot of the business environment and investment climate in the Lao People's Democratic Republic (Lao PDR) in 2005 that is based on perceptions and reports by firms of types, sizes, or ownership, and that identifies constraints for these firms to invest, create jobs, and expand.

The knowledge and policy recommendations that the study provides would be useful to policy makers and other stakeholders who may potentially benefit from an improved investment climate in the Lao PDR, including private sector operators and poor people who are shown to benefit from opportunities that private sector entrepreneurship and employment offer. Moreover, the comparison to the neighboring countries that an Investment Climate Assessment is able to provide is useful in terms of determining of comparative advantages and binding constraints that have been overcome by the Lao PDR's neighbors. This feature of the Investment Climate Assessment will help the Lao PDR in its regional activities, including the Regional Cooperation Strategy Program of the Greater Mekong Subregion activities, as well as its ASEAN membership.

The National Socio-Economic Development Plan (NSED) of the Government of the Lao PDR for the period of 2006–2010 has proposed an ambitious agenda to strengthen the role of the private sector to increase productivity, investment, and cross-border trade in the medium term. The Plan's strategic thinking in terms of private sector development proposes to continue strengthening the protection of property rights and the overall regulatory framework to provide a supportive environment for the growth of the private sector. Through the round table process, this study has informed the dialogue between the Government and its development partners. The dialogue between the Government and the private sector in the Lao PDR has also been developing in recent years, and this study informed this development—through a series of presentations and consultation workshops, including a feature presentation at the First Lao PDR Business Forum in May 2006.

This Investment Climate Assessment was conducted jointly by the World Bank and the Asian Development Bank. We hope that this fruitful collaboration between our institutions will continue.



Ifzal Ali
Chief Economist
Asian Development Bank



Ian Porter
Country Director
for South-East Asia, World Bank

Acknowledgment

THIS INVESTMENT CLIMATE ASSESSMENT has been prepared by a joint team from the World Bank and the Asian Development Bank, and in close collaboration with the Committee for Planning and Investment and other government agencies. The report benefited from inputs and comments from various agencies of the Government of the Lao PDR, from the donor community, and from the country teams of the World Bank and Asian Development Bank (ADB). While preparation of this report has been through participation of all these partners, the core team that coordinated and put together the final report was led by Ajay Tandon on ADB side and Ekaterina Vostroknutova on the World Bank side. The joint team included George Clarke (Senior Economist, World Bank), Gemma Estrada (ADB), Eric Suan (ADB), and Charles C. Udomsaph (World Bank). Main contributors to specific chapters were Morten Larsen (Electricity and Mining), David Peters (Tourism), Francisco Quintana (Informality, Regulation, and Taxation), and Gemma Estrada (Informality).

The report was peer reviewed by Albert Zeufack (Senior Economist, WB), Mary Hallward-Driemeier (Senior Economist, World Bank), and Warrick Smith (Senior Manager, International Finance Corporation [IFC]). The team has enjoyed guidance and support from (in alphabetical order) Ifzal Ali (Chief Economist, ADB), Abuzar Asra (Senior Statistician, ADB), Indermit S. Gill (Sector Manager, EASPR), Rana Hasan (Senior Economist, ADB), Patchamuthu Illangovan (Country Manager, World Bank), Homi Kharas (Sector Director, EASPR), Kazi M. Matin (Lead Economist, EASPR), James Nugent (Country Director, ADB), Bishnu D. Pant (Assistant Chief Economist, ADB), and Ian C. Porter (Country Director), and help from Amanda Carlier (World Bank), Somneuk Davading (World Bank), Mona Haddad (World Bank), Rattanatay Launglatbandith (LRM-ADB), Manfred Matzdorf (GTZ), Sengxay Phousingoa (IFC), Tanatat Putthasuwan (World Bank), and Charles Schneider (IFC). The team has benefited from excellent assistance by Araceli Patricio (ADB), Chanthalath Pongmala (ADB), Vatthana Singharaj (World Bank), and Rowena Vicente (ADB). Special thanks are due to Indochina Research Limited in conducting the investment climate survey under the supervision of Tim Smith and Chansada Souvanlasy. The design, layout, and typesetting were carried out by Mercedita Cabañeros and Rhommell Rico. Editing was done by Deborah Davis.

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Currency Equivalents

(as of 20 January 2006)

US\$1 = 10,800 Lao Kip (KN)

Note: In this report, “\$” refers to US dollars.

Abbreviations and Acronyms

ACMECS	Ayeyawaddy-Chao Phraya Mekong Economic Cooperation Strategy
ADB	Asian Development Bank
ADF	Asian Development Fund
AFTA	ASEAN of Free Trade Area
APB	Agricultural Promotion Bank
ASEAN	Association of Southeast Asian Nations
BAO	Bangkok Area Office
BCEL	Banque pour le Commerce Extérieur Lao
BOL	Bank of Lao PDR
CEM	Country Economic Memorandum
CMT	cut, make, and trim
DMC	developing member country
DTIS	Diagnostic Trade Integration Study
DTO	District Tax Office
EACTF	East Asia Countries Thailand Field Office
EASMAT	East Asia Multidisciplinary Advisory Team
EASPR	East Asia and Pacific Region
EBS	Enterprise Baseline Survey
EdL	Electricité du Laos
FDI	foreign direct investment
FOB	free-on-board
FOF	foreign-owned firms
GDP	gross domestic product
GDS	Global Development Solutions
GMS	Greater Mekong Subregion
GOL	Government of Lao People’s Democratic Republic
GSP	general system of preferences
GTZ	German Agency for Technical Cooperation

HBE	household-based enterprise
HRDME	Human Resource Development for Market Economy
ICA	Investment Climate Assessment
ICS	Investment Climate Survey
IFC	International Finance Corporation
IFS	International Financial Statistics
ILO	International Labour Organization
IMF	International Monetary Fund
IQR	interquartile range
LAOPA	Lao PDR Poverty Assessment
LATA	Lao Association of Travel Agents
LECS	Lao Expenditure and Consumption Survey
LDB	Lao Development Bank
LDC	least developed country
LECS	Lao Expenditure and Consumption Survey
LHRA	Lao Hotel and Restaurant Association
LIC	low-income country
LICUS	low-income country under stress
LNTA	Lao National Tourism Administration
MIH	Ministry of Industry and Handicraft
MOIC	Ministry of Information and Commerce
MOIC	Ministry of Industry and Commerce
MPSDF	Mekong Private Sector Development Facility
MTCPC	Ministry of Communication, Transportation, Post, and Construction
MW	megawatt
NEM	New Economic Mechanism
NSEDP	National Socio-Economic Development Plan
NGPES	National Growth and Poverty Eradication Strategy
NLMA	National Land Management Agency
NSC	National Statistical Center
NTDS	National Tourism Development Strategy
NTO	National Tax Office
PDR	People's Democratic Republic
PSD	Private Sector Development
SFA-TFI	Strategic Framework for Action on Trade Facilitation and Investment
SIDA	Swedish International Development Association
SMEs	Small and Medium Enterprises
SMEPDO	Small and Medium Enterprise Promotion and Development Office

SNV	Stichting Nederlandse Vrijwilligers (Netherlands Development Organization)
SOE	State-Owned Enterprise
PRSO2	Second Poverty Reduction Support Operation
TEPCO	Tokyo Electric Power Company
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNIDO	United Nations International Development Organization
VIS	value information system

Summary of Findings

A *GOOD INVESTMENT* climate ensures conducive conditions for a firm's decision to invest, create jobs, and expand—by reducing costs of production and the risks of doing business, and by creating incentives to increase productivity. A country's investment climate thus covers a number of key elements such as: the degree of macroeconomic (un)certainty; the quality and accessibility of infrastructure; the extent of government regulation; the nature of taxation; the access to and cost of financing for firms; access to, cost, and quality of the factors of production; the degree to which the government creates a level playing field for firms; governance and corruption; and security.

The World Bank and Asian Development Bank (ADB), in collaboration with the Government of the Lao People's Democratic Republic (Lao PDR), undertook jointly an Investment Climate Assessment (ICA) based on an Investment Climate Survey (ICS) carried out in 2005. The survey covered 303 firms in six sectors and seven provinces (Vientiane City, Oudomxay, Luang Prabang, Luangnamtha, Xayaboury, Savannakhet, and Champassack). The survey included 246 firms in manufacturing covering wood processing, construction materials, garments, textiles/handicraft, and food and beverage sectors and 57 firms in tourism covering hotels, tour operators, and travel agencies. With the exception of the garment and wood processing sectors, which traditionally have larger firms and more foreign investment, most firms in the sample were domestic small and medium enterprises (SMEs).

The survey provided three types of information useful for the Investment Climate Assessment: perceptions of firms operating in the Lao PDR regarding the relative importance of investment climate constraints to their businesses; quantitative data on firms' performance and productivity; and comparator country information from their ICAs, for benchmarking the Lao PDR's investment climate against regional standards.

This ICA report provides a detailed discussion of the investment climate issues, and this Summary provides an overview of the main findings and lessons.¹

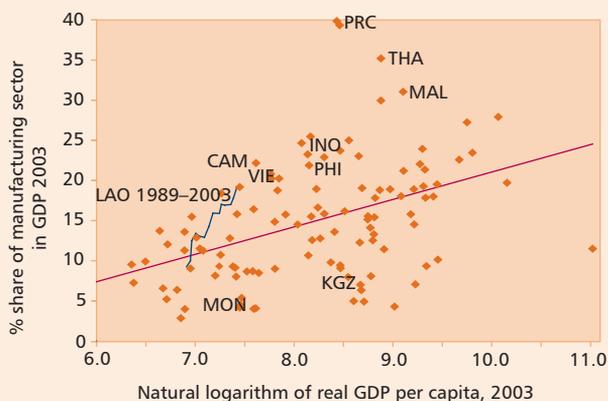
¹ All figures in the executive summary are from the main Investment Climate Assessment (ICA) report.

The Lao PDR has already shown impressive growth, but more attention is needed to harness the full potential of the private sector in sustaining strong growth and reducing poverty

The adoption of the New Economic Mechanism by the Lao PDR Government in 1986 paved the way for economic reforms and higher public investment. The reforms included the removal of price controls, withdrawal of the Government's monopoly on trade, and reduction in the number of state-owned enterprises (SOEs), and increased private participation, as well as the expansion of infrastructure and schools. As a result of these reforms and public investment, the country achieved an impressive record of high economic growth, averaging more than 6% per year since the 1990s, with the incidence of poverty falling from 47% in 1992/1993 to 33% in 2002/2003. In addition, the country witnessed rising foreign direct investment (FDI), which in 2004–2005 was estimated at more than 10% of gross domestic product (GDP), with the private sector becoming more important than SOEs in the strong growth of both exports and total investment.

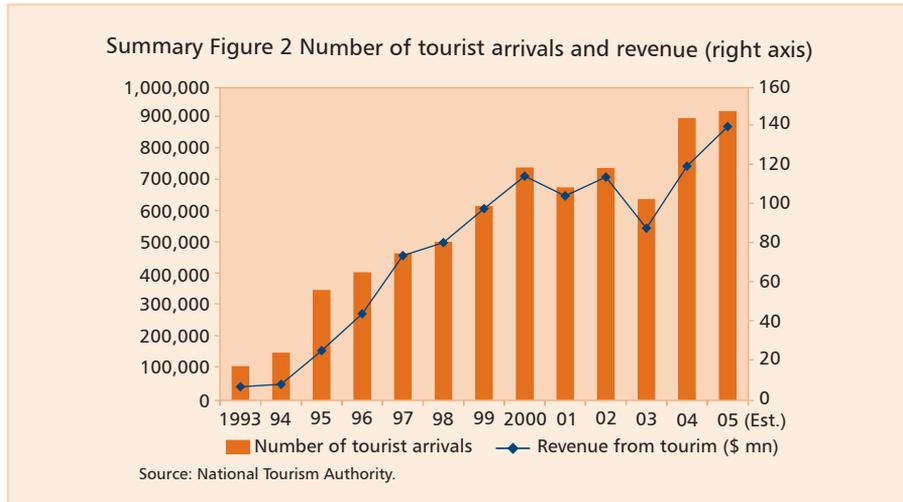
In the last few years, industry and services have grown rapidly, crowding out agriculture's share of GDP. Manufacturing has grown significantly since 1989: its share in GDP rose from below 10% to almost 20% by 2004 (see Summary Figure 1). Value-added in the services sector expanded at an average rate of 6% since 2000, and by 2004 the sector's contribution was about 15% of

Summary Figure 1 Manufacturing growth in international perspective



Notes: Calculations based on the data from the World Development Indicators, World Bank.
 CAM=Cambodia, INO=Indonesia, KGZ=Kyrgyz Republic (the), LAO=Lao People's Democratic Republic, MAL=Malaysia, MON=Mongolia, PHI=Philippines, PRC=People's Republic of China, THA=Thailand, VIE=Viet Nam

GDP. Most of the growth in services has come from transportation and trade, including tourism (see Summary Figure 2).



The Lao PDR's manufacturing sector and tourism expanded rapidly in the 1990s, and collectively employs around 122,000 workers. The small and micro enterprises dominate the manufacturing sector, with 23,000 firms each employing less than 10 employees, and three quarters of them, employing only 1–2 employees. Another 542 firms employ anywhere between 10 and 99 people, and 116 firms employ more than 100 people each, most of them being foreign-owned garment firms. This predominance of small enterprises in the manufacturing sector² is good for employment, but not so good for capital accumulation and productivity growth. Food and beverage, garments, wood processing, and construction materials are the three largest manufacturing subsectors in the Lao PDR, with garments and wood processing representing the largest manufacturing exports.

The tourism sector in the Lao PDR has grown at an annual rate of 24% since 1993. It employs around 22,000 workers to look after 800,000 foreign tourists a year (2005), with 70% of them from neighboring countries, i.e., Thailand, People's Republic of China, Viet Nam, and Japan.

The Lao PDR is committed to continuing integration with the region and the world as also to private sector development and export growth. Its existing commitments under the Association of Southeast Asian Nations (ASEAN) and the Greater Mekong Subregion (GMS) will make the country increasingly open

² See World Bank, 2004a.

regionally and its planned accession to the WTO will do so globally. This means that production of goods and services for the domestic market will have to be just as competitive as that for the export markets. The recent Sixth National Socio-Economic Development Plan (NSED 2006–2010) commits it to promoting the private sector and exports as a means of achieving the objectives of the Plan. Thus expanding private sector investment and productivity has an urgency in the Government's agenda.

Maintaining robust growth in manufacturing and tourism will be the key to ensuring sustained strong growth and rapid reduction in poverty over the medium term. This growth can be achieved by increasing productivity and enhancing the ability of private firms to compete effectively in an increasingly more open domestic and regional market. Exploiting the full potential of the private sector to invest, expand, create jobs, and increase productivity will be key to achieving and maintaining growth in manufacturing and services in the Lao PDR. Agriculture and agro-processing will remain important not only for meeting domestic demand but also for exports to a rapidly growing region. This will require a better understanding of the barriers to the growth and productivity of firms in these sectors, including policies to address the constraints identified by the surveyed firms, in order to improve the investment climate.

The ICS enterprises shows that manufacturing and tourism firms continue to face significant constraints to investment, productivity, and growth, and these have to be addressed. The three dominant constraints identified by manufacturing firms are infrastructure, regulations, and taxation (Summary Figure 3); next in importance are macroeconomic uncertainty and financing. Governance and skills/land come after that. However, the survey indicated that firms in tourism—unlike in other sectors—highlight inadequate skills and education of workers to be the most important impediment to doing business in their sector. Skills/education was ranked among the top three constraints by tourism firms, along with infrastructure and taxation. Macroeconomic uncertainty and regulatory burden came after those constraints.

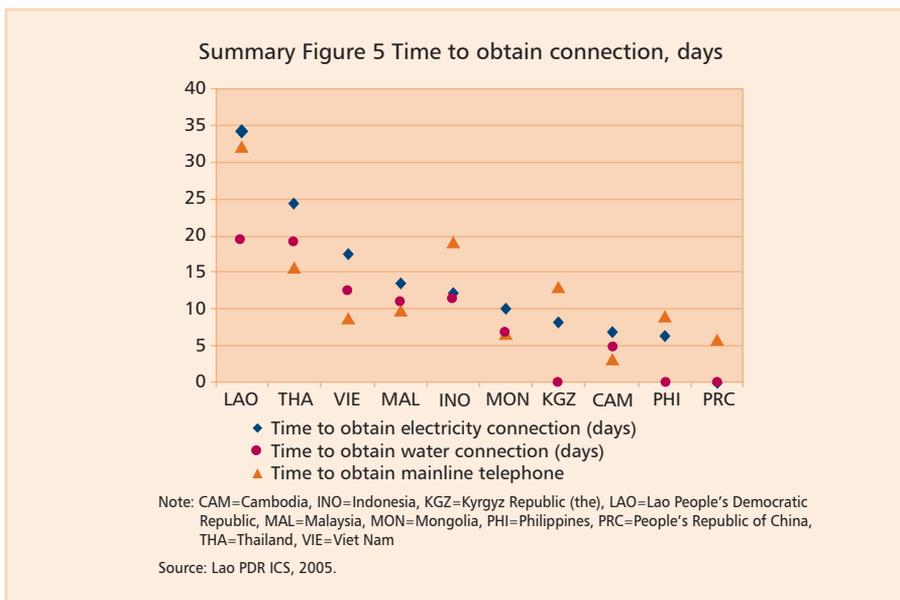
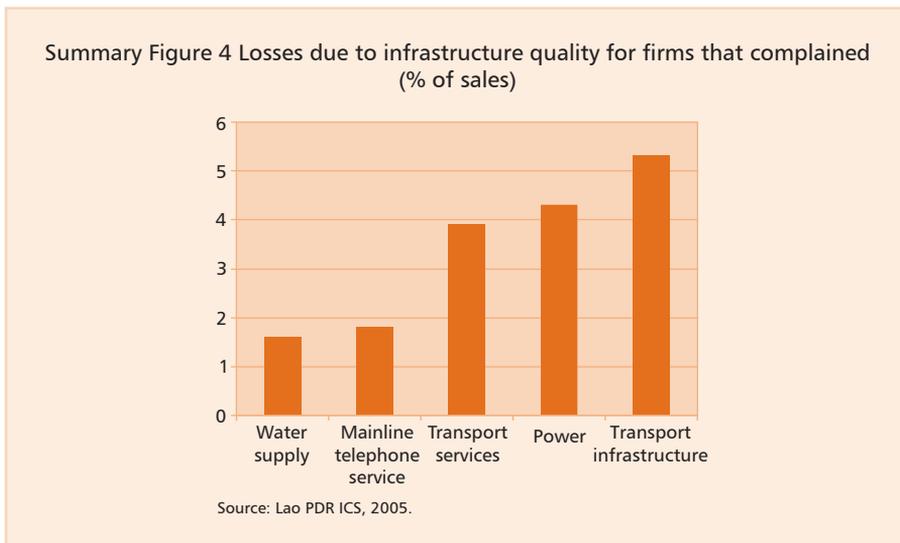
Infrastructure and regulations are two of the top three constraints for all manufacturing subsectors that were surveyed, as for all provinces surveyed, except Luangprabang. On regulatory burden, the survey also shows that large firms, exporting firms, and foreign-owned ones that also have higher productivity, are being affected disproportionately more than others; this may be because they have to compete with more efficient firms and thus feel the burden of uncertainty about regulations more acutely. It also means that alleviating regulatory uncertainty will generate greater increases in investment and productivity.



Notwithstanding recent growth, firms in all manufacturing sectors identified poor infrastructure, cumbersome regulations, and discretionary taxation as three most important constraints to investment and productivity growth, macroeconomic uncertainty, and lack of affordable finance came next

Quality of and access to infrastructure services are inadequate, imposing high fixed costs, which are especially harmful to small and informal firms

More than 50% of firms found the quality of infrastructure services to be a major or severe constraint. Indeed, the quality of infrastructure such as electricity is well below the regional average. An average firm that used each of the services was estimated to lose up to 5.5% of sales due to poor transport infrastructure, 3.9% due to poor transport services, 4.3% due to poor electricity, 1.6% due to water supply problems, and 1.8% due to poor telephone services (see Summary Figure 4). More than 30 days were required to obtain an electricity connection or a mainline telephone connection, and almost 20 days were needed on average to obtain a water connection. This was longer than in any comparator country, including Cambodia, Thailand, Viet Nam, and other Asian countries (see Summary Figure 5). Fixed costs of switching to an industrial/commercial distribution network nearly tripled the electricity bill for informal small firms (small consumers), while it “only” doubled for larger ones.



Firms cited high tariffs for electricity—combined with a low quality of supply—as an important constraint. Most firms surveyed found tariffs to be “expensive” or “very expensive.” This is surprising, since the Lao PDR has one of the lowest tariffs for industrial and commercial consumers in the region. The dissatisfaction appears to be rooted in exceptionally low traditional tariff rates, the absence of cost incentives for energy management and efficiency, and poor

consumer information. In addition, power interruptions were more frequent in the Lao PDR than in any other comparator country except Viet Nam and the Kyrgyz Republic. Losses due to these interruptions were second only to losses experienced by firms in the Philippines. This will require special attention to the generation and transmission of power for domestic use, in particular to ensure that the Government's current strategy of exporting hydropower does not detract from meeting the country's domestic needs efficiently.

Firms that cited transportation as a major or severe constraint had lower value added and experienced higher lead times

Firms that cited transportation as a major or severe constraint had lower value added and experienced higher lead times. Firms that complained about transportation had lower value added (by 6.3%) due to transportation problems and poor access to markets, which was almost double of costs incurred by firms that did not complain. Firms that cited transport as a severe problem also had longer lead times (27 against 22 days) and higher transportation expenditures (36% higher) than those that did not complain. Firms in Champassak, Oudomxay, and Luangprabang are most affected by inadequate road conditions. This suggests that more investments in roads and in transport services are needed, notwithstanding the very significant public investments in roads that took place between 1995 and 2004.

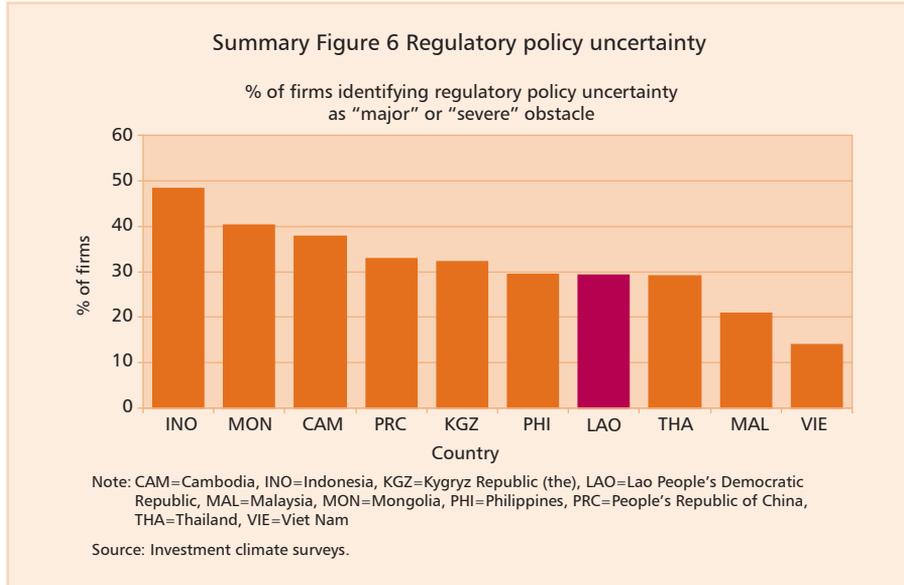
Restrictive and cumbersome regulations hamper enterprises and introduce yet other unnecessary fixed costs to starting and doing business. These resources are not collected by the Government but wasted

The Doing Business database found that the Lao PDR had a high number of procedures required to start a business and, more importantly, a significantly long time to complete them. Since registration of business is required before connection to infrastructure networks (such as electricity) can be obtained, lengthy and cumbersome start-up procedures create even tighter bottlenecks for business development.

Discretion given to officials of the regulatory bodies, and especially tax authorities, adds to the unnecessary fixed costs of doing business and forces firms to stay informal

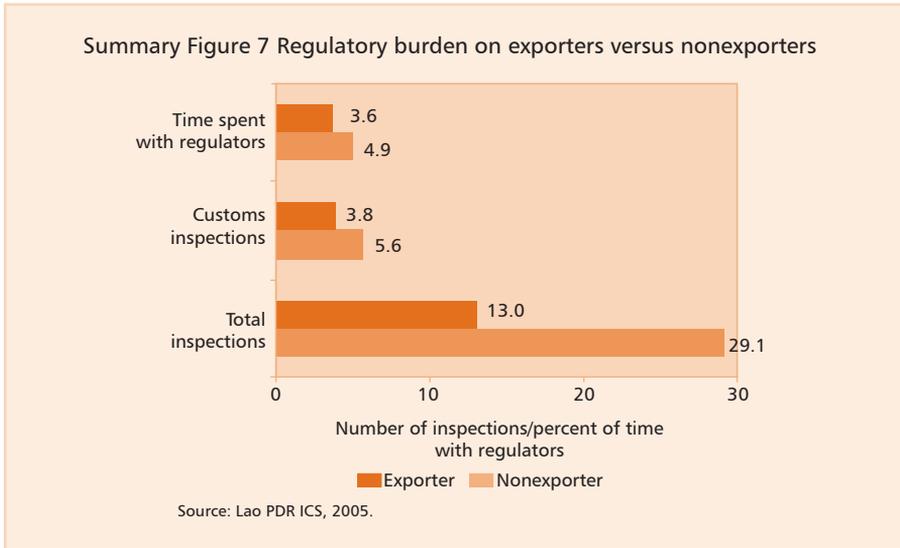
Firms place regulatory uncertainty—i.e., inconsistent interpretations of laws and regulations—high on the list of major or severe constraints to their businesses (see Summary Figure 6). Almost 30% of firms, and nearly half of firms in Champassack, complained about regulatory policy uncertainty being a

severe constraint to their business. In addition, on average, firms spent about 5% of their time dealing with officials, with firms in textiles spending more than 6% of their time.



Garment industry firms and exporters in general reported the highest burden of regulations, especially customs regulations, while firms located in Champassack felt especially burdened by unpredictable regulations. Textile firms reported higher "time tax," i.e., time spent with regulators. Wood-processing firms have more inspections (averaging 26 times a year) due to inspections by the Forestry Department in addition to several other agencies. Firms that exported felt more burdened by regulations than other firms (Summary Figure 7). This has important policy implications for the Lao PDR since its Sixth NSEDP emphasizes rapid export growth as a key driver of overall growth, and reducing regulations maybe a least-cost way of promoting that objective.

The Doing Business database, using a different methodology, also reconfirms that the Lao PDR has a high number of procedures to start a business and, more importantly, takes a significantly long time to complete them. Since registration of business is required before connection to infrastructure networks (such as electricity) can be obtained, lengthy and cumbersome start-up procedures create even tighter bottlenecks for business development. This may account for the relatively low number of private firms that operate in the country.



More than 20% of firms cited tax or tax administration as a major or severe obstacle—higher than the proportion of firms in Cambodia and Viet Nam. Tax rates in the Lao PDR are not excessively high by international standards, and yet the most important issue on taxation for Lao firms is the perception of high rates and discretionary application of existing rates by tax authorities.

SMEs were particularly burdened by the prevalent tax rates and their discretionary application compared to larger firms. While small and large firms agree on the ranking of constraints, they assess taxation and perceive tax administration differently. This suggests the existence of an informal economy that consists mainly of microfirms and firms that pretend to be small. The main concern of firms appears to stem from the “contract” system of taxation which generally involves an arbitrary negotiation between the tax officers and entrepreneurs. Most firms engage in negotiation with tax officers, leading to the unequal application of the tax rates and rent-seeking behavior by tax officers, in part because of inadequate transparency of tax rules and regulations and in part because of inadequate training of tax officials.

Owing to the nature of the contract taxation system, the inadequacy of the accounting system, and cumbersome regulations, businesses stay informal or partly informal. Evidence suggests that firms are inclined to register themselves as small at the district level where regulations are less restrictive. For example, the Tax Office has reported a sharp decrease in the number of registered medium-

sized firms in the past 3 years, which suggests intended misclassifications. This and other related inefficiencies have contributed to losses in tax collections: tax revenues have stagnated as percent of GDP in recent years. Yet, enforcement of the existing system without reform may not lead to an increase in tax collection but to more informality.

Inspections are more common in the Lao PDR than in most comparator countries. Firms that were inspected more often spent a longer time dealing with government authorities and were also more likely to pay bribes. Most inspections came from the Forest, Customs, and Tax departments, and these agencies—plus the economic police—were among those most frequently expecting informal payments. For example, 56% of firms said that a bribe was expected for getting an import or export license, and more than 30% of firms said that a payment was expected by a tax official.

Yet only 9% of firms cited corruption as a major or severe constraint, notwithstanding high regulatory uncertainty, considerable officials' discretion and frequent inspections. This share of firms is also significantly less than what was found in the PRC, though Transparency International assessed levels of corruption to be similar in the PRC and the Lao PDR in 2005.³ The estimated “bribe-tax” is also similar in both countries. More work is clearly necessary to understand these apparent inconsistencies among different sources.

Once a business is operating, other factors constrain its growth and potential productivity and performance

Financial services are scarce and inaccessible, especially for small and informal firms

The financial sector is underdeveloped in the Lao PDR, and 25% of firms rank access to or cost of finance as a major constraint to their business. Thirty-three percent of firms in the garment sector think that finance is the single most important constraint to their business.

Firms of all sizes, locations, and industries rely overwhelmingly on internal funds for financing, as informal funds are prohibitively expensive. Only 10% of firms have overdraft facilities from banks, compared to 71% of firms in Malaysia, 44% of firms in Viet Nam, and 19% of firms in Indonesia. Lao firms, therefore, rely heavily on retained earnings or own funds to finance their new investments

³ PRC's ranking in the Corruption Perception Index in 2005 was 78 and Lao PDR's, 77, with scores of 3.2 and 3.3 correspondingly (higher index indicates lower perceptions of corruption).



(see Summary Figure 8). Few firms have long-term loans, and only 9% of the loans have maturities of more than 3 years.

Access to finance is significantly better for larger firms vis-a-vis SMEs. Larger firms in the Lao PDR are more likely: to have a loan, to have an overdraft facility, to finance more new investment, to have working capital through bank financing, and to have longer-term loans than smaller enterprises.

Due to these investment climate drawbacks, firms bear additional fixed costs and their performance is lower than in comparator countries

Investment climate constraints have directly reduced the performance and productivity of firms.⁴ For example, infrastructure failures have been costly: every 10 hours of power outages was associated with a 3% and a 7% lower value-added for the food and beverages sector as well as for the construction materials sector, respectively. Overall, firms incurred substantial costs, up to 5% of sales, due to infrastructure bottlenecks (see Summary Figure 4).

Some investment climate constraints may impact firms of various types and locations differently. There were significant differences in productivity among different types of firms. Small firms were less productive and more

⁴ Productivity here being defined as value added per worker.

capital intensive, even though they had the least access to capital. Exporters were more productive than non-exporters. Firms in Luangprabang and Savannakhet had higher productivity than those in Oudomxay. Firms in garments and wood processing were the most productive in the Lao PDR, in part due to greater foreign investment and thus access to better technology and management. Their productivity was, however, also more adversely affected by the unpredictability of regulations. Lack of backward linkages, burdensome regulations, limited access to finance, and a passive marketing approach were the main impediments to competitiveness of firms in the garment industry.

In the manufacturing sector, more productive firms complained the most about the following key investment climate constraints: finance, infrastructure, regulation, and macroeconomic uncertainty. Among these, finance was the most significant constraint for high-productivity firms. Firms that complained more about less important constraints, such as labor and land, had lower productivity than others. Firms that complained about taxation and governance had the same levels of productivity, suggesting that these constraints impact efficient and inefficient firms in the same way, or impose only fixed costs.

Labor productivity is low in the Lao PDR by international and regional standards. This is true even in garments and wood processing, which generally has higher labor productivity than other sectors in the Lao PDR. As measured by value-added per worker, labor productivity in garments is only just above that of Cambodia (see Summary Figure 9); and in wood processing, it is only marginally above that of Viet Nam (see Summary Figure 10). Productivity in other sectors is at the bottom among comparator countries

In services, tourism firms' productivity is reduced by the same constraints as in manufacturing, except that the tourism sector also is much more affected by inadequate numbers of skilled workers

In the tourism sector, the critical constraints to doing business are skills and education of workers, and transportation. These constraints are in addition to the constraints that firms in the manufacturing sector identified; i.e. electricity, regulation, and taxation, followed by macroeconomic uncertainty and finance. Tourism firms in the Lao PDR performed worse than those in Thailand.

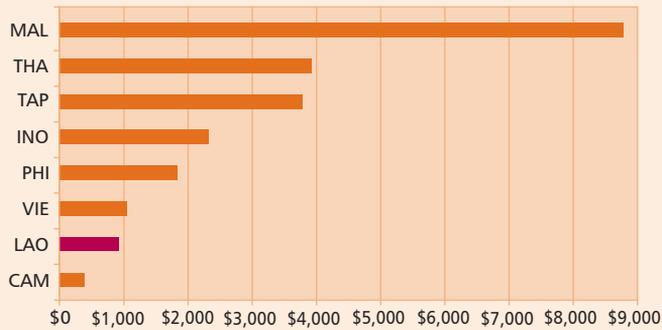
Significant differences exist between the impact of investment climate on the productivity of firms in manufacturing and in tourism. Foreign and domestic firms in the manufacturing sector do not significantly differ in productivity levels, suggesting similar investment climate constraints for both groups. Foreign firms

in tourism, on the contrary, have much higher productivity than domestic firms, possibly due to better access to skilled labor and better external networks.

The services sector as a whole has a large informal component...

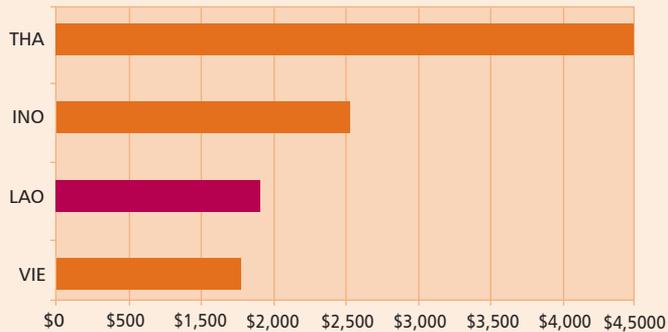
In a small separate survey, informal and microfirms complained mostly about the lack of affordable finance, and said that they stayed informal due to discretionary taxation, regulations, and fixed costs imposed by inadequate infrastructure

Summary Figure 9 Median labor productivity in garment industry



Note: CAM=Cambodia; INO=Indonesia; LAO=Lao People's Democratic Republic; MAL=Malaysia; PHI=Philippines; THA=Thailand; TAP=Taipei,China; VIE=Viet Nam
Source: Investment climate surveys.

Summary Figure 10 Median labor productivity in wood processing



Note: INO=Indonesia, LAO=Lao People's Democratic Republic, THA=Thailand, VIE=Viet Nam
Source: Investment climate surveys.

Informality is a growing and largely unexplored phenomenon in the Lao PDR. Broadly defined as household businesses and microfirms that may or may not be registered, the informal sector in the Lao PDR is large. More than 60% of urban firms are microenterprises.⁵ In 2002/2003, nonagricultural income-generating activities of households accounted for 16% of total employment, up from 12% in 1996. The number of households engaged in non-farm activities has also grown from 40% to 60% in the last 5 years; during the same period, the number of households that hired labor grew from 7% to 21%.⁶

The majority of household and microbusinesses are in service sectors (wholesale/retail trade, community, social and personal services, and tourism services), and only 16% are in manufacturing. Informal household enterprises are more likely to be located in urban areas, to have been in operation for less than 5 years, and to be operated from home. The informal sector serves as a backward linkage in the formal sector's supply chain, providing materials and unskilled labor. The supply chains of the formal sector are seriously constrained by the lack of capacity in informal suppliers. Microfirms often fail to meet the quality standards set by bigger formal sector firms, resulting in a number of unsuccessful experiences reported by firms.

The surveyed microfirms mentioned access to financing as the most important constraint. Almost none of the surveyed entrepreneurs had ever considered borrowing from a commercial bank, and relied on retained earnings and relatives for finance. Indeed, richer households operated more household-based enterprises (82% of the highest quintile) than poor households (only 2%). Other important constraints to informal firms were cumbersome regulations and complicated, discretionary taxation. Most surveyed microfirms reported that they remained small to avoid taxation.

Businesses were far more likely to thrive in areas with a good investment climate. Simulations indicate that addressing the constraints in areas with poor investment climate—those lacking access to infrastructure, financing facilities, and markets—could lead to a significant increase in the number of microenterprises, generating widespread employment opportunities. Since areas with a poor investment climate also tend to have higher poverty rates, improvements in the investment climate are likely to have important implications for poverty reduction.

⁵ See Ministry of Industry and Handicraft–German Agency for Technical Cooperation (MIH-GTZ, 1996). SMEs in the Lao PDR: The Results of a National Survey. Lao-German Small Enterprise Development Project.

⁶ These results are based on the Lao PDR Expenditure and Consumption Survey III database (2002/2003).

The actions that would help firms move from the informal to the formal sector, and to increase productivity, stem from the observations above

Improve infrastructure that is important for business:

- Improve the quality of service and reliability of electricity provision, the latter especially during the rainy season and in the North. Review Electricité du Laos' (EdL's) tariff structure with respect to micro and household businesses to minimize the large tariff distortion between residential and commercial consumers. Use an information campaign to inform users about tariff changes.
- Improve road transportation and cross-border transportation, to broaden access to local and neighboring country markets. Encourage private investment in trucking services and inland dry ports to facilitate cross-border trade and transportation.
- To promote tourism, pursue an “open skies policy” so that direct air links with countries outside the region—particularly Europe, Japan, and the United States (US)—can be started easily. Establishing joint-venture activities for Lao Airlines would increase the airline's resources, help upgrade its fleet, and enhance management.

Reduce unnecessary government regulation:

- Move from a licensing to a registration principle with regard to starting a business. Hasten approval of the implementing decrees for the new Enterprise Law approved in 2005. Investment laws and incentives should be made public and easily available.
- The number of obligatory procedures for starting a business should be reduced, especially line ministry licenses in most sectors; and company seal requirements should be simplified or removed. Re-registration procedures could also be simplified.
- Rationalize inspections, eliminate those that are unnecessary, and carry out others no more than twice a year. Make the aims of inspectors transparent, and pre-identify criteria for inspections to reduce opportunities for rent-seeking.
- Reduce the large number of approvals and signatures required for exports. Streamline customs procedures.
- Support ongoing efforts to harmonize cross-border regulations through subregional cooperation in the GMS to facilitate trade and investment.

- Introduce GMS visas. Streamline the process for obtaining tourist visas, with opportunities of renewal outside Vientiane.
- Promote foreign and regional cross-border investments into manufacturing (including agro-processing) and services as they can transfer technology and good management practices and contribute to higher productivity in the relevant subsector.

Reduce discretion in the taxation system and improve administration:

- Amend the policy on annual registration for tax purposes, extending the validity of registration for medium and large firms.
- Simplify tax procedures. The current contract system should be replaced with a nondiscretionary system. Increasing the number and capacity of tax officers is also important, while eliminating their discretion to determine tax payments.
- Simplify customs regulations and make them more transparent. Unnecessary discretion in import and export licensing procedures should be removed.

Maintain macroeconomic stability and reduce uncertainty:

- Promote a productive public–private dialogue and provide capacity building to industry associations, to enable them to play a more active role in shaping public policy.

Widen opportunities to access formal sources of financing:

- Continue efforts to reform, restructure, and recapitalize the banking system, together with substantial improvements in corporate governance and technical training. Encouraging the entry of foreign banks can provide expertise and much-needed financing: for example, by leveling the playing field between state-owned commercial banks and private banks, and by encouraging strategic investors to partner with state banks.
- Review the banks' lending procedures to simplify the application process and foster the creation of commercial-based lending criteria, to ease financing for private companies with viable investment projects.
- To support the expansion of micro and small household businesses and firms, and encourage the growth of microfinance institutions.

Undertake steps to improve the skills and education of workers to ensure a steady supply of well-qualified staff in the tourism industry:

- Strengthen vocational training for tourism workers. Develop a training institute for the tourism industry, drawing on regional or international examples such as the Dusit Thani School in Thailand. For example, encourage a joint-venture hotel school with initial support of the National Tourism Authority.



I. BACKGROUND

1. State of the economy

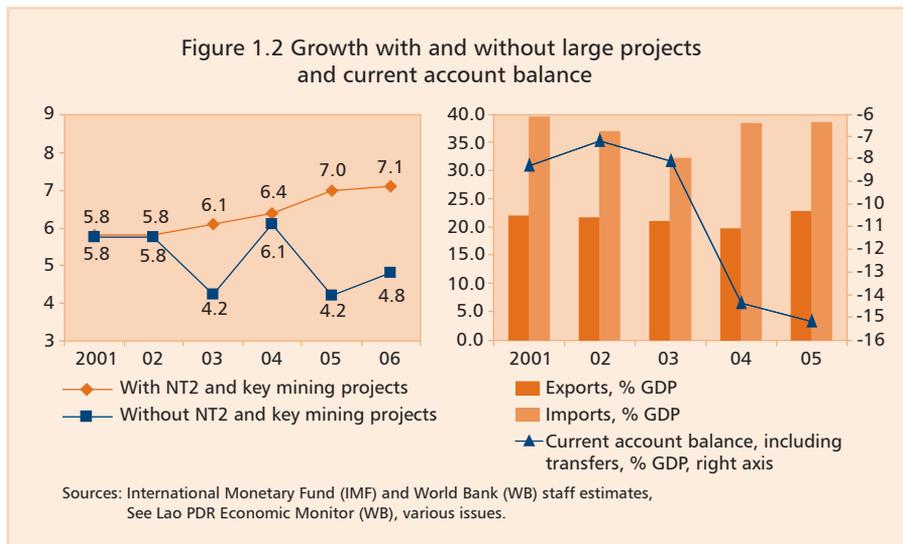
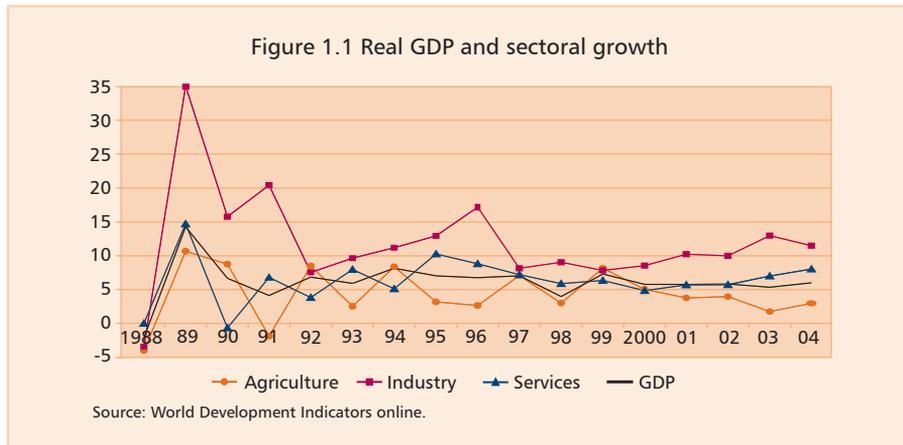
The Lao People’s Democratic Republic (Lao PDR) is a small⁷ transition economy in which the private sector plays an unusually important role in the gross domestic product (GDP). The Lao PDR is landlocked in the middle of the Greater Mekong Subregion (GMS). It is a one-party state led by the Lao People’s Revolutionary Party. With an estimated per capita income of \$390 in 2004, the Lao PDR is one of the poorest countries in Asia. From 1975 to the late 1980s, the Lao PDR had a centrally planned economy. In 1986, however, the Government introduced the New Economic Mechanism, ushering in a transition from a centrally planned to a more market-oriented economy. This entailed a gradual removal of price controls; abandonment of socialist cooperative farming; unification of the exchange rate system; removal of the Government’s monopoly on trade; reduction in the number of state enterprises; and free establishment of private firms. Currently, the private sector accounts for more than 80% of GDP.

Since the end of the 1980s and building on these reforms, the Lao PDR has established an impressive track record in sustaining high economic growth. In the 1990s, despite the challenges of transition and the sharp reduction in growth during the regional crisis of 1997 to 1999, real GDP grew at an annual average rate of 6.3%. Exports⁸ grew an average of 15% per year over the same period. All sectors grew rapidly—with industry growing the fastest albeit from a low base (Figure 1.1). The share of agriculture in GDP has fallen from more than 60% in 1987 to below 50% in 2002. However, this impressive growth has been in major part due to the large mining and hydropower projects (see Figure 1.2), and thus attention to nonmining sectors of economy is considered one of the main priorities of the Government at this time.

⁷ The World Bank classifies the Lao PDR as a low-income country (LIC) and as a low-income country under stress (LICUS). For the Asian Development Bank (ADB), Lao PDR is classified as a developing member country (DMC) with very low per capita gross national product (GNP) and limited debt repayment capacity, fully eligible for concessional Asian Development Fund assistance. Under United Nations classification, the Lao PDR is considered a least developed country (LDC).

⁸ In US dollar terms.

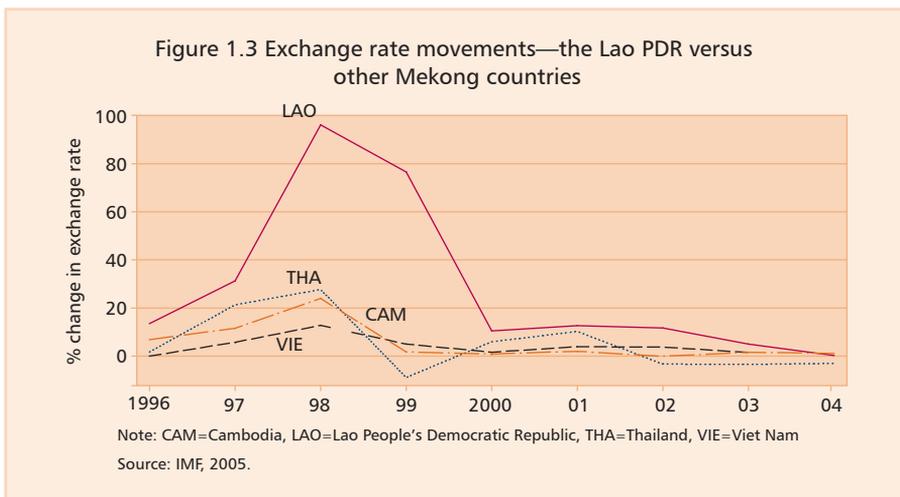
2 REDUCING INVESTMENT CLIMATE CONSTRAINTS TO HIGHER GROWTH



Economic growth, improved infrastructure, and the structural change have been the main drivers in reducing poverty in the Lao PDR. The Lao PDR Poverty Assessment (LAOPA) showed that improvements in the investment climate have had a significant positive impact on household businesses. According to the LAOPA, a significant decline in poverty has been achieved during the last decade; using the Lao PDR’s national poverty line,⁹ the incidence of poverty fell from 46% in 1992/1993 to around 33.5% in 2002/2003.

⁹ While derived in a complex way, it is approximately equal to \$1.5 a day in 2003 prices. See Lao Poverty Assessment, 2006.

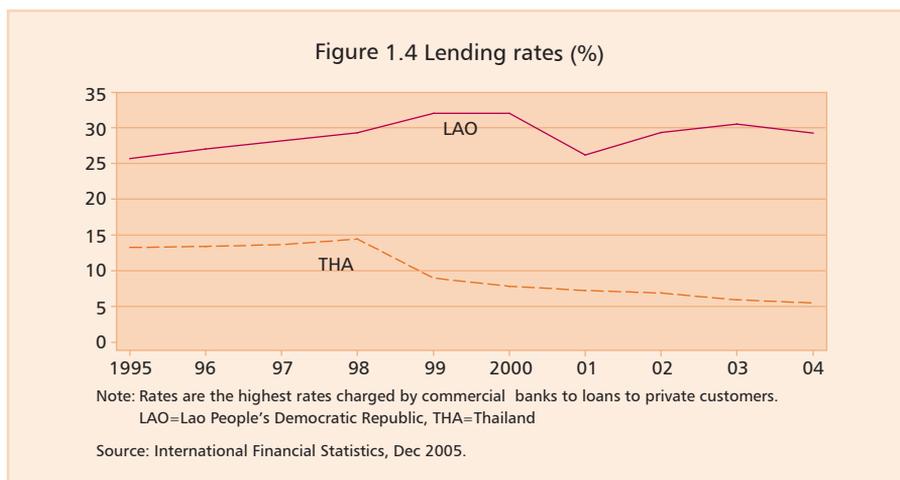
Recent growth has been supported by broadly stable macroeconomic conditions, especially since the country's recovery from the aftermath of the Asian financial crisis. Inflation has been brought back to single digits, with the period average of the consumer price index falling from 15.5% in 2003 to 7.2% in 2005. The kip exchange rate has stayed in a very narrow band, and the Bank of Lao PDR (BOL) has maintained monetary stability. In line with the experience of other countries in the region, the kip gradually depreciated until 2005. It should be recalled that the value of the kip deteriorated sharply during the Asian financial crisis (Figure 1.3). While a high dollarization¹⁰ of the economy helps maintain some degree of financial stability, currency mismatches at the firm level render firms vulnerable to exchange rate shocks. This fact, and the psychological aftermath of the Asian financial crisis, may be the reasons behind the perception of firms regarding macroeconomic uncertainty. The same risks are likely to be present in the financial system.



The cost of borrowing in the Lao PDR is high. Lending rates are significantly higher than those in Thailand (Figure 1.4). The ratio of M2 to GDP is only 18%. The entire banking system has only about \$500 million in assets (which amounts to 23% of GDP) and \$250 million of loans (11% of GDP). Efforts are underway to reform the banking sector to reduce entry barriers and promote the expansion of private banks. The draft amendment to the Presidential Decree on Commercial Banks submitted to the National Assembly is aimed at

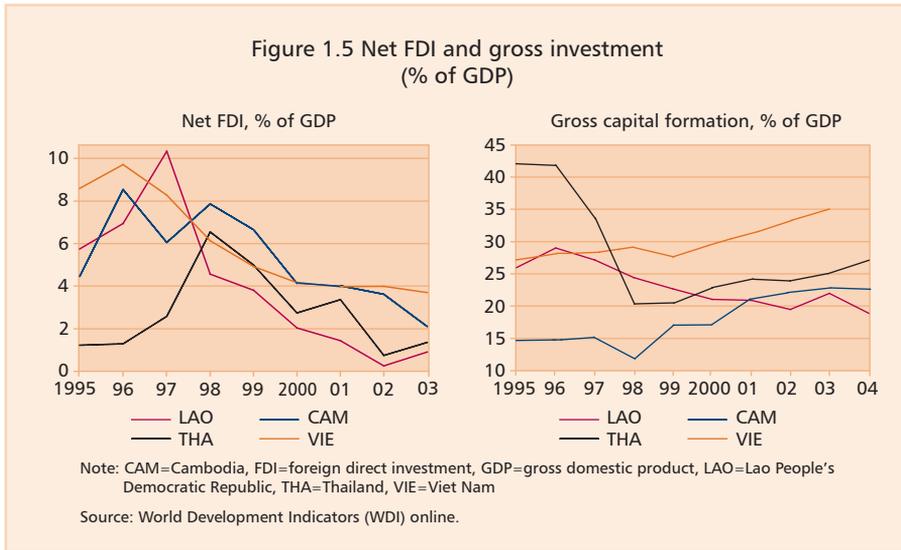
¹⁰ The share of foreign currency deposits in M2 exceeds 70%, up from 35% in 1995 (IMF 2004). Anecdotal evidence also suggests that barter may be used for up to 80% of all economic transactions.

partially removing the restrictions for foreign banks to set up branches outside Vientiane. Encouraging the entry of private banks is expected to foster greater competition in the banking system and help widen access to financing.



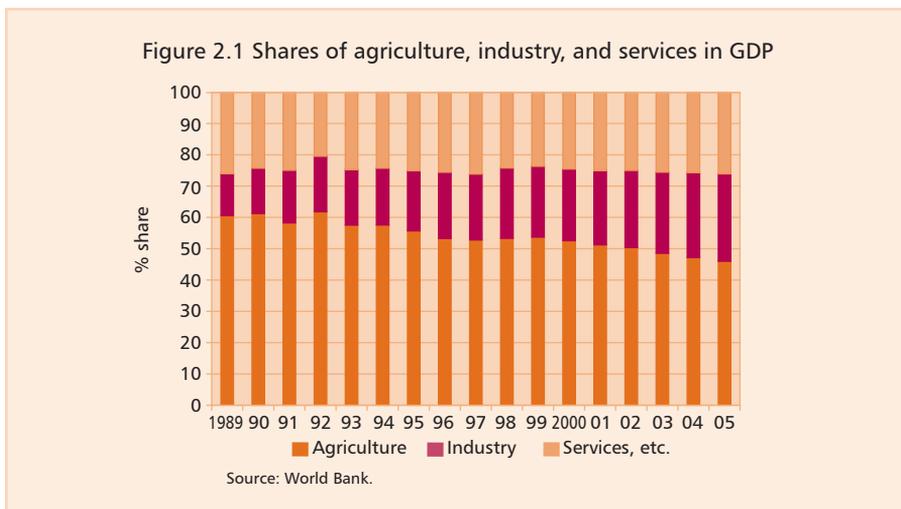
Foreign direct investment (FDI) has grown rapidly, but this has mainly been due to large mining projects. Mining-related FDI is expected to continue to grow rapidly in the coming years. Increasing both private domestic and foreign investments has been a key issue in the Lao PDR. While gross capital formation as a share of GDP in the late 1990s was higher in the Lao PDR than in other Mekong countries, in recent years the position of the Lao PDR has deteriorated (Figure 1.5). In 2003–2004, among the largest recipients of both domestic and foreign investment projects in the Lao PDR were the power, tourism, construction, and mining sectors. Some estimates suggest that private investments, in large projects constitute 35% of total investments; other private investments, about 40%; and Government investments, about 25%. Due to investments in large projects, some estimates of FDI are as optimistic as 10–18% of GDP in 2004 and 2005.¹¹

¹¹ See Lao Economic Monitor, various issues.



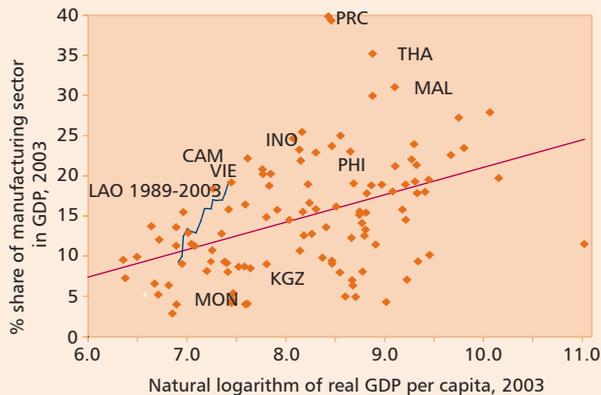
2. Structural change

Apart from being a transition economy, the Lao PDR is undergoing a process of rapid industrialization. Production has moved from agriculture to industry, especially in recent years. The share of services with respect to other economic activities has increased substantially, due largely to tourism (Figure 2.1).



The manufacturing sector in the Lao PDR has grown very rapidly, raising its share in GDP to levels higher than that of many countries at similar income levels. The Lao PDR's manufacturing sector expanded its share of GDP from 9% in 1989 to 19% in 2003 (Figure 2.2). Small enterprises dominate the manufacturing sector. Around 23,000 firms employ less than 10 employees, and three quarters of these employ only 1–2 employees. Another 542 firms employ 10–99 people, and 116 firms employ more than 100 people each. Most firms employing more than 100 people are foreign-owned garment firms. This distribution of enterprises, and the fact that the manufacturing sector employs only about 100,000 people, indicates the predominance of small enterprises in the manufacturing sector.¹²

Figure 2.2 Lao PDR's manufacturing growth in international perspective



Notes: The line corresponds to the predicted share of manufacturing in GDP from a regression on the natural logarithm of real GDP per capita and a constant, with slope equal to 3.415 (standard error equal to 0.691). CAM=Cambodia, INO=Indonesia, KGZ=Kyrgyz Republic (the), LAO=Lao People's Democratic Republic, MAL=Malaysia, MON=Mongolia, PHI=Philippines, PRC=People's Republic of China, THA=Thailand VIE=Viet Nam

Source: Calculations based on the data from World Development Indicators.

Food and beverage, garments, wood processing, and construction materials are the largest manufacturing subsectors in the Lao PDR. Within the manufacturing sector, faster growth has occurred in sectors that supply retail trade and construction. Garment sector output also grew from 0.7% to 1.1% of GDP (Table 2.1). Garments and wood processing products also represent the largest manufacturing exports: at present, garment exports are second only to electricity and mining (Figure 2.3).

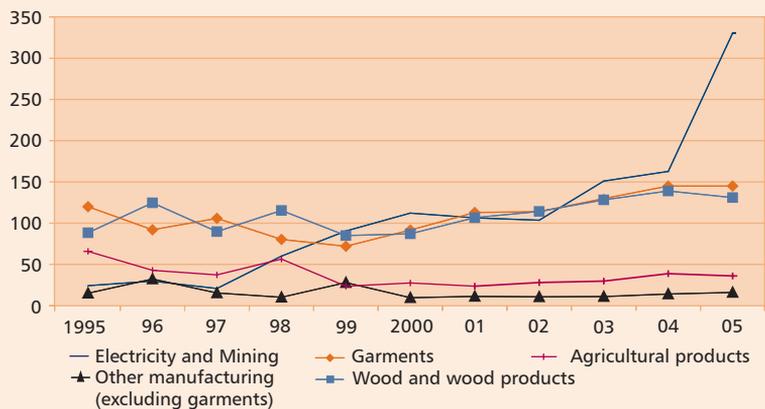
¹² See World Bank, 2004a.

Table 2.1 Sectoral distribution within manufacturing (% of GDP)

	1991–1995	1996–2000	2001–2002
Food and beverage	10.1	12.8	14.6
Construction	3.1	3.0	2.3
Garments	0.7	1.0	1.1
Wood processing	0.8	0.6	0.6
Construction materials	0.2	0.4	0.6
Tobacco products	0.7	0.6	0.5
Fabric metal products	0.2	0.3	0.3
Water	0.1	0.1	0.1
Chemicals	0.1	0.1	0.0

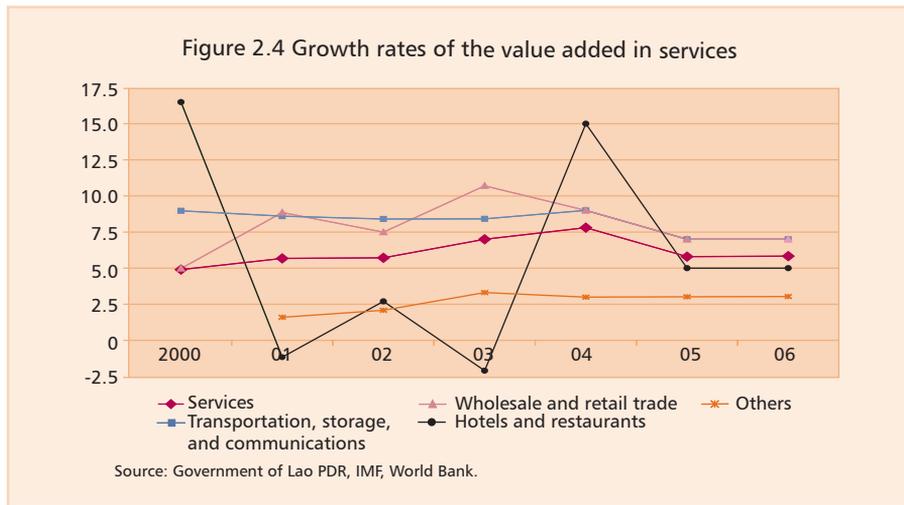
Source: Country Economic Memorandum (CEM), World Bank, 2004.

Figure 2.3 Exports composition by sector (\$ million)



Source: Lao PDR Economic Monitor, 2006.

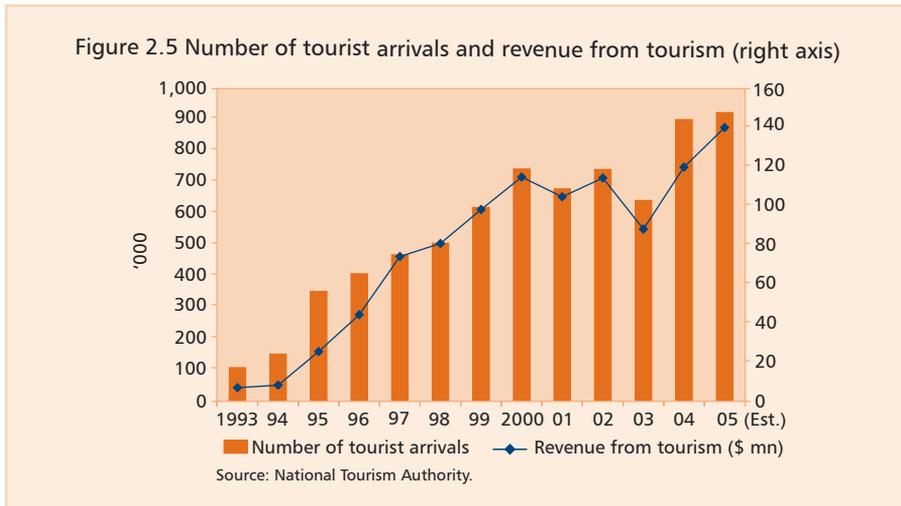
Value added in services grew at a higher rate, at par with real GDP growth. Hotels and restaurants grew at an uneven pace but at a rate reaching 15% in 2004 (Figure 2.4). The potential of the tourism sector is yet to be unlocked and this can be achieved by improving the investment climate, education of workers, and basic infrastructure.



The tourism sector in the Lao PDR has strong potential to accelerate development and generate additional employment. In 2003, tourism contributed around 8% of GDP (hotels and restaurants contributed approximately 2%)¹³ and provided direct and indirect employment to about 22,000 workers.¹⁴ While tourism's contribution to total output is comparable to that of Thailand and higher than that of Viet Nam, total tourism arrivals in the Lao PDR accounted for only about one-fourth those of Viet Nam and 6% those of Thailand in 2003. More than 800,000 foreign tourists visited the Lao PDR in 2005, as compared with around 700,000 in 2000. The average annual growth of tourist arrivals has been 24% since 1993 (Figure 2.5). More than 70% of tourists came from neighboring Asian countries (primarily Thailand, and, to a lesser extent, People's Republic of China [PRC]), Japan, and Viet Nam). Tourism arrivals are expected to further increase with the abolition of visa restrictions in ASEAN countries; the Government's intensified promotion of the Lao PDR as a tourism destination; and greater cooperation among countries in the GMS in developing and implementing tourism strategy. For the tourism sector to develop further and take advantage of these opportunities, there needs to be an appropriate set of policies and support mechanisms to address current investment climate constraints.

¹³ See World Bank, 2004a.

¹⁴ Asian Development Bank, 2005.



3. Related challenges

The Lao PDR remains a transition economy, with a large private sector that is undergoing structural change. This has two consequences for economic policy. First, the Government will not be able to exercise strict state control over the private sector, and therefore needs to move the emphasis from control to monitoring. Attempts to impose old-fashioned controls would only lead to the expansion of informal activities and a reduction in compliance. Second, the transformation from a planned to a market economy entails not only economic structural change, but also a change in ways of doing business. In particular, enterprises still have limited capacity to function in the new economy, and learning by doing will need to take place before the transition is complete.

Although recent growth has been pro poor and broad based,¹⁵ production is largely confined to very small, informal, and household businesses. The growth of both nonfarm work opportunities for households (including nonfarm businesses), and improvements in infrastructure (roads access and electricity supply) contributed to poverty reduction. The main drivers of poverty reduction are growth and improvements in agricultural productivity. The informal economy is estimated at around 30% of GDP.¹⁶ The growth of the informal economy has been due mainly to cumbersome regulations and discretion in taxation laws and regulations. In addition, low levels of development (thus

¹⁵ Between 1998–2003. See Lao PDR Poverty Assessment (2006) and ADB's Country Strategy and Program Update for the Lao PDR (2005).

¹⁶ See Schneider, 2004.

low capital intensity), subsistence agriculture, and a small state-owned enterprise (SOE) sector have made the Lao PDR predisposed to microfirms: about 63% of urban households and 17% rural households run a household business.

The lack of capacity for doing business in a market-oriented economy and continuing structural change have created a gap between perceptions of the private sector and the direction of government policies. This gap partly explains the disconnect between government regulations and firms' compliance, resulting in the expansion of the informal economy. It also sheds light on the disconnect between perception and quantitative data in the Investment Climate Survey.

Sustaining growth is one of the key objectives and revenue mobilization is one of the first priorities of the Government of the Lao PDR, in light of the current budget and trade deficits. The Government of the Lao PDR has explicitly committed to promote private sector development (PSD) and to open up trade, as articulated in its National Growth and Poverty Eradication Strategy (NGPES; 2005) and most recently in its Sixth National Socio Economic Development Plan (NSEDP 2006–2010). These have emphasized private sector development as one of the drivers of export-led growth. The Government is working in several directions, gradually involving more government agencies and expanding the scope of policy reform. Box 3.1 outlines the development goals of the private sector, as stated in the Sixth NSEDP and the NGPES.

Box 3.1 Government strategies focusing on private sector development

Both the Sixth Five-Year Socio-Economic Development Plan (2006–2010) and the national poverty reduction strategy focus on development of the private sector via the following priorities for the medium term:

- Mobilize investment from the private sector in the economy to reach 22% of GDP, while the total investment would be about 32% of GDP to achieve the GDP growth of 7.5% per annum.
- Promote small and medium enterprises, focus on household output to progress to become a group or a cooperative, and increase the variety of products and improve their quality;
- Promote the production of goods for exports, and attract foreign investment and technology;
- Expand domestic private sector from 10.5% in 2005 to 12.5% in 2010; and
- Expand the labor force from 2.7 million in 2005 to 3.4 million in 2010.

Source: Sixth National Socio Economic Development Plan (draft), January 2006.

The main challenges are to sustain current growth in manufacturing and services, to ensure that the private sector can produce goods and provide services that meet regional export demand, and to expand the domestic market. To meet these challenges, the Lao PDR needs to respond to private sector concerns by managing the changing perceptions during the transition period and taking into account international best practices in business regulation from the GMS region.

The main objective of the Investment Climate Assessment is to support the Government strategy for promoting sustainable growth and industrial and business development. The report will also contribute to support the Lao PDR's attempts to strengthen regional and international competitiveness of its economy, given increasing competition with ASEAN and GMS countries. Implementation of the PSD program would increase employment and speed up poverty reduction by generating higher growth and by empowering the poor.¹⁷

¹⁷ Most poor people in the world indicated employment and business opportunities as the most effective tools that would bring them out of poverty (World Development Report, World Bank, 2005).

II. INVESTMENT CLIMATE AND FIRM PERFORMANCE IN MANUFACTURING

4. Manufacturing survey

The Investment Climate Survey (ICS) was undertaken jointly by the Government of the Lao PDR, the Asian Development Bank (ADB), and the World Bank. In all, 303 firms were sampled. Of these, 246 were manufacturing firms, and 57 firms were from the tourism sector. Through face-to-face interviews with managers and owners, the ICS gathered qualitative and quantitative information regarding the investment climate and the performance of firms in sampled provinces and industries. Topics included infrastructure, finance, labor, regulatory burden and administrative delays, governance, innovation and technology, and firm productivity. Taken together, the qualitative and quantitative data help connect the characteristics of the investment climate in the Lao PDR with the firms' performance. The data and results from the ICS are intended to help develop policy reforms that would further promote growth and productivity of firms in the Lao PDR.

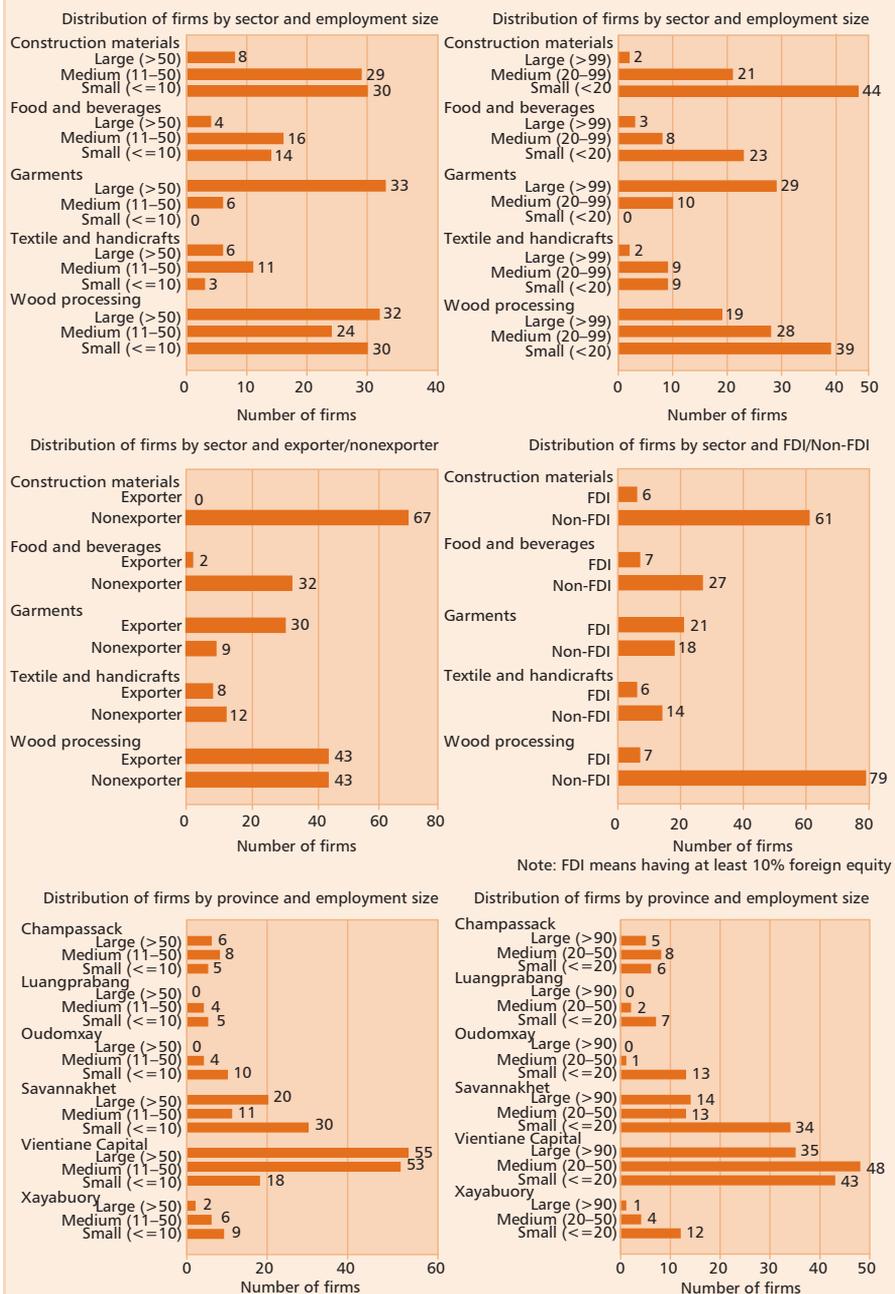
The manufacturing part of the survey was carried out in six provinces, namely, Vientiane, Oudomxay, Luangprabang, Xayaboury, Savannakhet, and Champassak. It covered five industries: wood processing (35%), construction materials (27%), garments, textiles/handicraft (25%), and food and beverage (14%). Forty-seven percent of surveyed firms were small (less than 20 workers), 31% were medium (20-99 workers), and 22% were large (more than 99 workers)¹⁸ (Figure 4.1).

¹⁸ Following the new definition used by the Government, small firms are those with 19 workers, medium firms with 20–99 workers, and large firms with 100 or more workers. This new definition is used in the national small and medium enterprise (SME) strategy currently being formulated by Small and Medium Enterprise Promotion and Development Office (SMEPDO) at the Ministry of Industry and Commerce (MOIC).

	Turnover	Assets	Workers
Small	< 400 m kip	< 250 m kip	< 19
Medium	< 1,000 m kip	< 1,200 m kip	< 99
Large	> 1,000 m kip	> 1,200 m kip	> 100

However, the ICS sampling was carried out before this definition was officially adopted, and therefore it was impossible to use this definition throughout the report. Notes are made in all figures and tables concerning the definition used.

Figure 4.1 Distribution of manufacturing firms in the investment climate survey, 2005



Source: Lao PDR ICS, 2005.

Private domestic firms comprise most of the surveyed firms. While 11% of the surveyed firms were previously owned by the Government, now only 2% can be considered government firms, based on ownership shares. Forty-seven firms have at least 10% foreign equity, roughly half of them in the garment sector. The remaining firms are equally distributed across sectors. The firms are relatively young, averaging 9 years in existence. Eighty-three firms (34%) are from the export sectors, mainly comprising of wood processing and garments (see Table 4.1).

In most of the cross-country comparisons, this report uses nine comparator countries. It benchmarks the Lao PDR's investment climate to neighboring countries that have generally similar GDP per capita and/or geographical endowment: Cambodia, People's Republic of China, Indonesia, Kyrgyz Republic, Malaysia, Mongolia, Philippines, Thailand, and Viet Nam. Some comparisons may be limited by the availability of the ICS in the comparator countries, and others by the unmatched questionnaires.

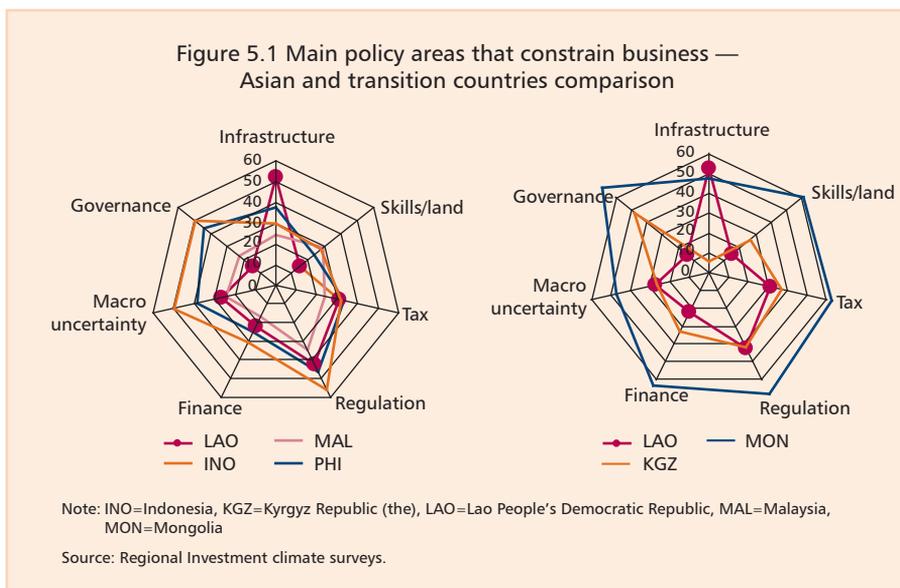
A gap exists between the perceptions of firms and quantitative data, which is not usually present in other countries. The presence of such a gap can be explained by the transition period and ongoing structural change in the economy, which precludes the ability to conduct a productivity analysis using the Lao PDR's ICS data. This is due to the fact that more productive firms complain more about investment climate constraints, therefore reducing the significance of the regression results. Usually, the assumption underlying the productivity analysis is that a poor investment climate leads to lower firm productivity (see section on firm performance and Appendix Table 3).

5. Investment climate constraints

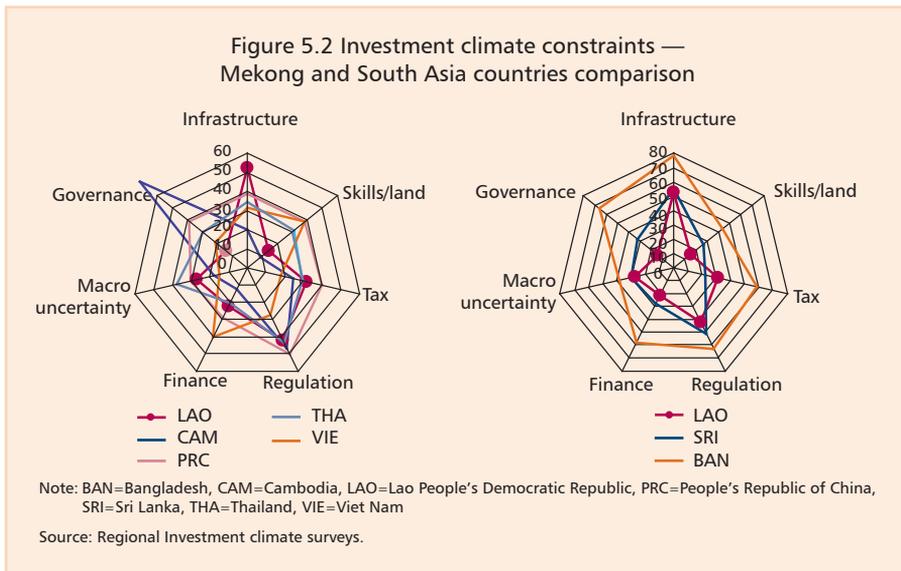
The investment climate is the set of location-specific factors that shapes opportunities and incentives for firms to invest productively, create jobs, and expand their businesses.¹⁹ While firms see opportunities to do these things, they assess the costs and risks that are inherent in this process. These costs and risks are shaped by Government policies in various areas, which determine whether there is a level playing field and influence competition among firms. The quality of interaction between governments and firms could help determine the pace of economic growth, investment expansion, and poverty reduction.

¹⁹ World Bank, 2004b.

In ranking its top constraints, the Lao PDR is quite dissimilar to both Cambodia and Viet Nam, as well as to other GMS countries. It is also different from that of other transition countries in the region (Figure 5.1, Figure 5.2). It stands out in the region for having the highest proportion of firms that rate electricity as a major or severe obstacle. Interestingly, the top constraints reported by firms in the Lao PDR are more similar to those reported by firms in South Asia (Figure 5.2). There is also wide dissatisfaction over the provision of electricity and regulatory policy uncertainty among firms in Bangladesh, Sri Lanka, and Nepal—a country that is landlocked like the Lao PDR.²⁰ Concerns of the Lao PDR firms about the quality of infrastructure are higher than the average among the comparator countries. Perceived quality of infrastructure seems to be the largest problem in the Lao PDR compared with other countries. Regulation and taxation, as well as macroeconomic policy uncertainty and finance constraints, seem to be at comparator country average. Resources (labor, skills, and land) and governance concerns are at the comparator country minimum (Figure 5.1, Figure 5.2).



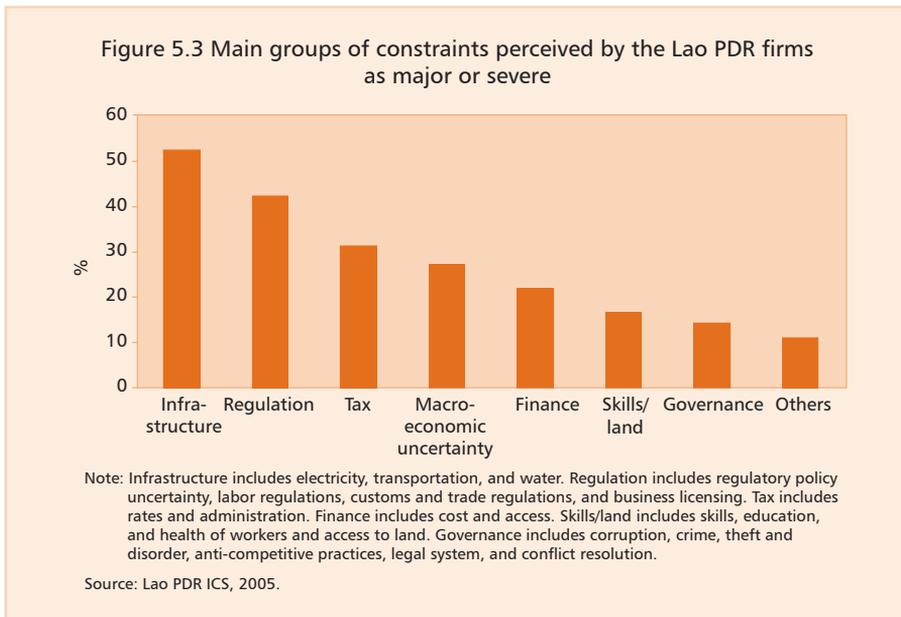
²⁰ The Nepalese Investment Climate Assessment included fewer constraints in the ICS questionnaire and thus is not presented in the graphs.



In the Lao PDR, firms perceive the three main constraints to growth and operations are infrastructure, regulation, and taxation, followed by macroeconomic uncertainty and finance (Figure 5.3). Within these constraints, around 40% of firms consider electricity to be a major or severe obstacle, citing the price–quality relationship as being problematic. Regulatory policy uncertainty is a major issue for 29% of firms, and uncertainty arising from the macroeconomic environment is a major constraint for 27%.²¹

Surveyed firms do not consider skills, access to land, and corruption to be binding constraints to their operations. There was relatively low concern about other components of the investment climate, such as the skills and health of workers, access to land, corruption, crime, theft and disorder, anticompetitive practices, and the legal system and conflict resolution. This indicates that these constraints are not binding at this stage.

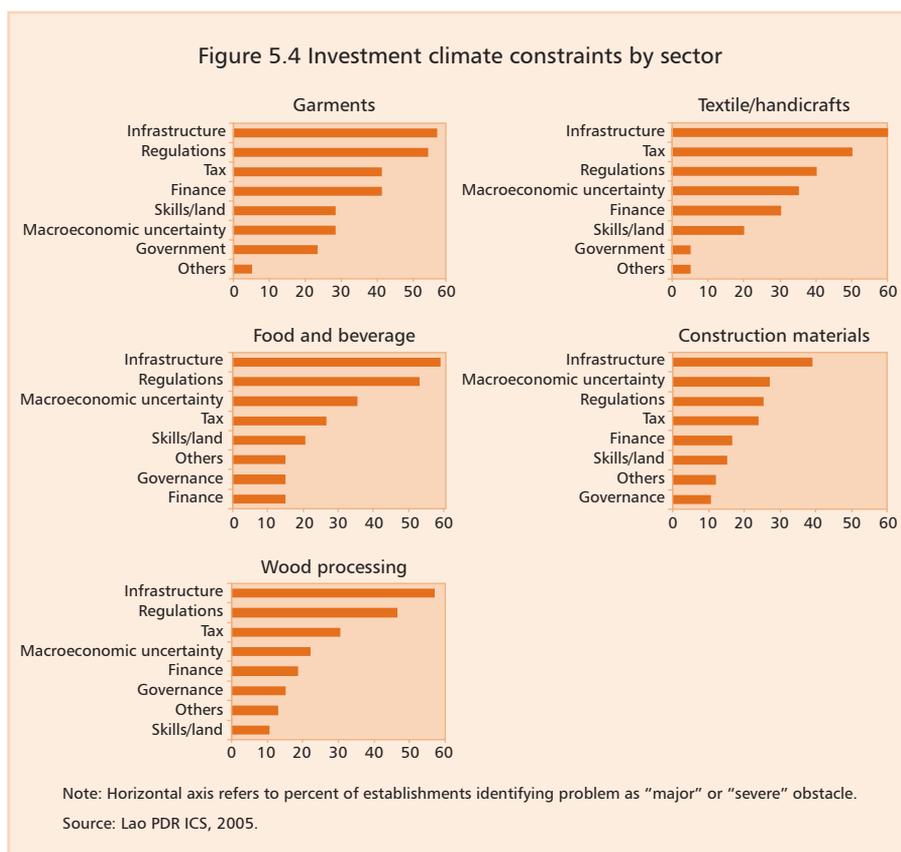
²¹ Other organizations have commissioned other studies of the constraints to private sector development in the Lao PDR. In some of them, the list or prioritization of constraints differs from this study. These differences are mostly due to different data collection methods (survey versus interviews) or from different sampling frames. The results in this study should be analyzed with care, as they can only be generalized for the sectors and firm types included in the sample of ICS. The results of these various studies are discussed in Appendix 1, while sample constraints for this study are discussed in the beginning of Chapter 2 and in the appendices on Manufacturing and Tourism.



Firms in all sectors perceive infrastructure, particularly electricity, to be the top investment climate constraint (Figure 5.4). Section 6.1 deals with electricity and explains that the main reason for such negative perceptions appears to have been the price quality relationship, probably triggered by the recent tariff increases. Note, however, that the ranking of constraints here was limited to 19 preselected factors, which are roughly common among ICS questionnaires used across countries. A common set of constraints is used in the questionnaires to allow for cross-country comparisons.²²

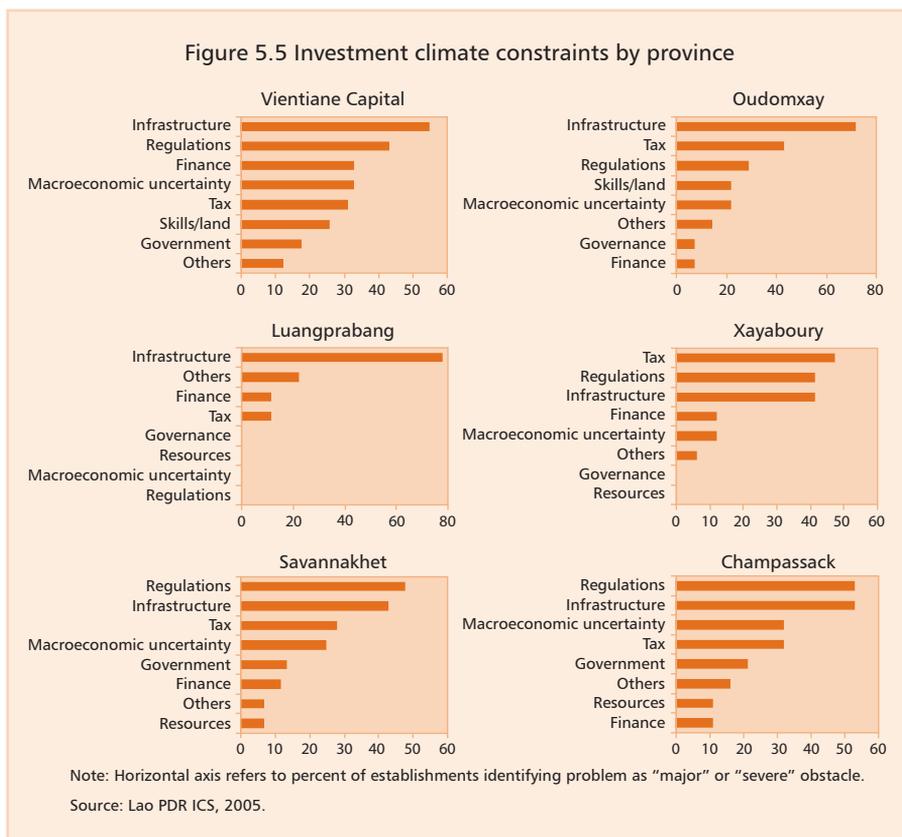
For most sectors, regulatory policy uncertainty is the second most important constraint. Taxation is also an issue that runs across all sectors, but is more pronounced among garments and textiles/handicrafts. Access to finance is also a significant constraint in the garments and textiles sector. For firms in wood processing and construction materials, a common important issue is transportation. Bad or inaccessible roads and high transport costs can hamper their access to their main (resource-based) inputs.

²² The investment climate factors are telecommunications; electricity; transportation; regulatory uncertainty; tax administration; customs and trade regulations; skills and education of workers; health of workers; access to financing; cost of financing; corruption, crime, theft, and disorder; anti-competitive or informal practices; legal system; access to land; tax rates; labor regulations; business licensing/operating permits; and macroeconomic uncertainty. The questionnaire also allowed firms to identify other constraints that were not listed.



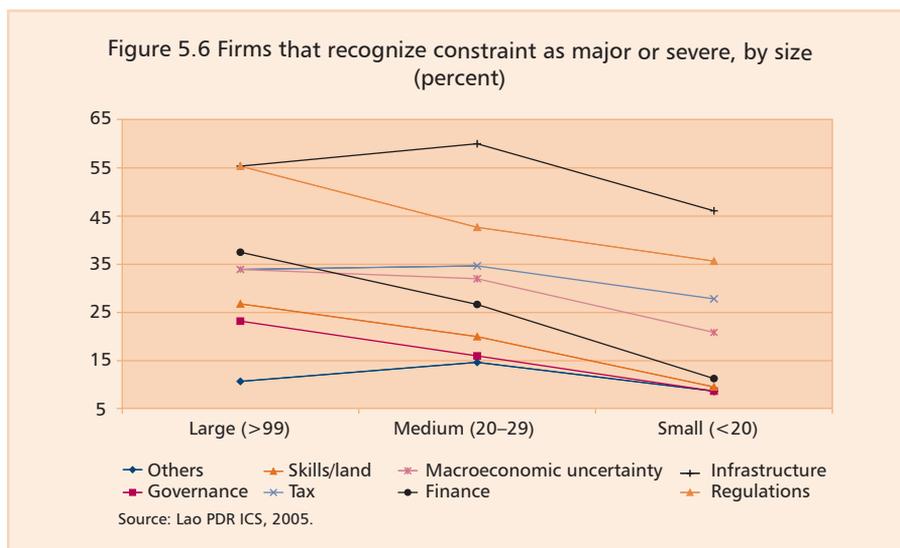
In different provinces, regulation, infrastructure, and taxation feature as the most severe constraints, in different provinces. Infrastructure is the top constraint in Vientiane, Luangprabang, and Oudomxay. In Xayaboury, taxation is the biggest impediment (Figure 5.5). In the South, regulations are considered to be the most important constraint. Customs and trade regulations are also among the top constraints in Oudomxay and Savannakhet. This could be due to the nature of cross-border transactions in these provinces. Transportation is among the top constraints in Champassak, Oudomxay, and Luangprabang—reflecting the poor road conditions, especially in the rainy season, when only 26–52% of the villages in these provinces have passable roads. Information about the most important constraints as perceived by firms in each province can be useful in designing investment strategies for each locality.

Large firms are more critical of investment climate constraints. While the survey reveals that a similar set of factors is severely constraining both large



firms and small and medium enterprises (SMEs), large enterprises have more often raised concerns. Such attitudes (Figure 5.6) appear to hold true in other Asian countries that have conducted investment climate surveys, e.g., Cambodia, Philippines, and Indonesia.²³ Larger firms seem to be more weighed down by business obstacles. This may be because they suffer more significant losses from a poor investment climate, such as infrastructure failures, regulatory red tape, and macroeconomic instability. The most striking difference is in access to finance: large firms consider it a greater constraint than taxation and macroeconomic uncertainty, while small firms do not. Linkage of large firms to international markets, through import/export activities or foreign equity, also makes them more predisposed toward higher and more competitive standards, which are often lacking in developing countries such as the Lao PDR.

²³ A striking difference, however, between the Lao PDR and Cambodia is that in the latter, a greater proportion of small firms compared to large firms consider regulatory policy uncertainty and macroeconomic instability as serious obstacles.

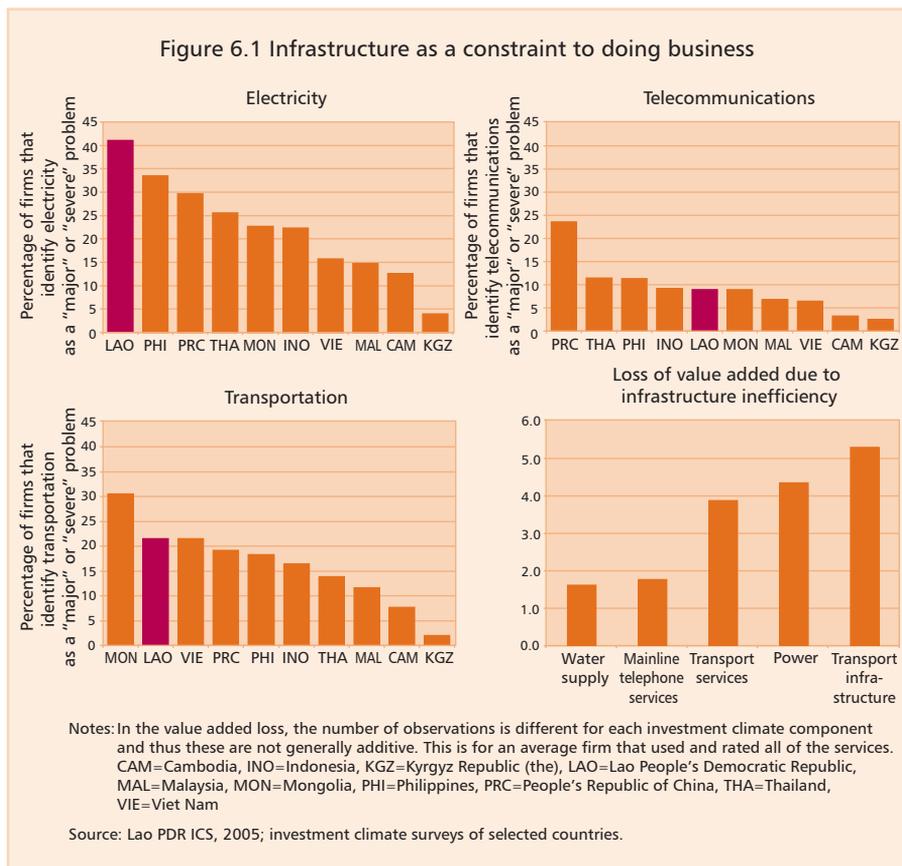


A large gap exists between concerns on taxation of small and large firms. Small firms are more concerned about tax rates than are larger firms, and they are less concerned than larger firms about tax administration and regulatory policy uncertainty. This seems to suggest that many small firms may remain informal for tax reasons, escaping, at the same time, regulatory changes and tax administration ramifications.

Many firms prefer to remain small. The survey revealed that about 70% of small firms that started operating about 5–10 years ago remained small. This may signal some difficulty in moving into a bigger scale of operations, unless most of them have opted to remain small. The choice to remain small can be shaped by the business environment that offers few incentives to expand. Apart from tax rates, the decision to stay small or informal may be due to regulatory red tape, uncertainty, and other investment climate constraints such as inaccessibility or prohibitive costs of finance or unreliable infrastructure. The ranking of business constraints indicates that small firms are more concerned about regulatory and macroeconomic policy uncertainty and taxation than they are about financing issues.

6. Infrastructure

Efficient infrastructure facilities enhance the competitiveness of an economy and improve the quality of life. Good infrastructure connects firms to their customers and suppliers, and enables the use of modern production technologies.

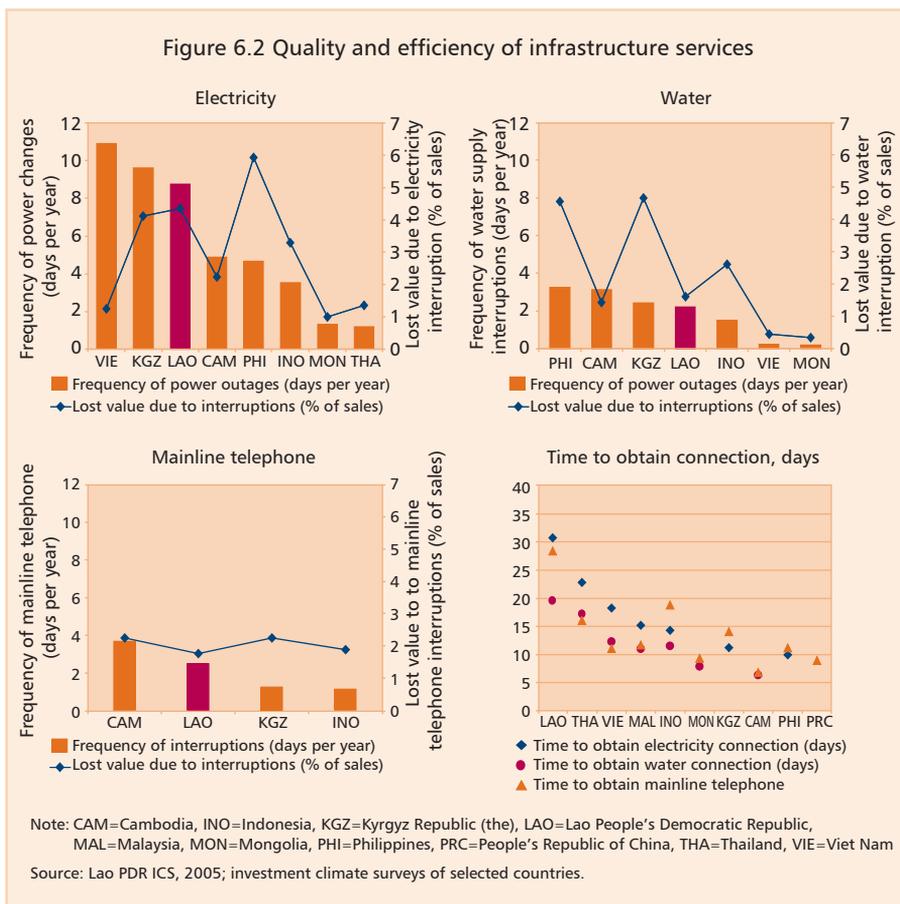


Conversely, deficiencies in infrastructure create barriers to opportunities, increase costs, disrupt production, and result in lower revenue for all firms—from microenterprises to multinational corporations. The ICS captures the dual challenges of providing strong infrastructure: the physical construction of power lines, water systems, and telephone connections; and the development of institutions that can effectively provide and maintain public services.

The ICS provides three sets of indicators to assess infrastructure in the Lao PDR. The first set shows how firms perceive three components of infrastructure as constraints: electricity, telecommunications, and transportation. The second set measures the quality of infrastructure—the number of days when interruptions in electricity, water, and mainline telephone services occurred; and the value of lost sales due to these interruptions. The third set of indicators evaluates the efficiency of infrastructure services by quantifying the delays in obtaining connections to electricity, water, and telephone.

More than half of firms in the Lao PDR cite infrastructure as the main obstacle to doing business. Around 40% of the surveyed firms cited electricity as the main concern. In contrast, only 9% and 22% of firms identified telecommunications and transportation, respectively, as a major or severe investment climate constraint (Figure 6.1).

Frequent power outages increase the actual and opportunity costs to firms in the Lao PDR, and put them at a disadvantage when competing with firms from neighboring countries. The quality of electricity in the Lao PDR is much poorer than in Cambodia, Indonesia, Mongolia, and Thailand. Although power outages occur more often in Viet Nam, production lost due to service interruptions is much lower. In terms of water and mainline telephone service, the Lao PDR performs adequately and on par with other countries (Figure 6.2).



As measured by the number of days required to obtain electricity, water, and mainline telephone connections, the efficiency of public services provision in the Lao PDR is the poorest among comparator countries. Figure 6.2 shows that 34 and 32 days are needed to obtain electricity and mainline telephone connection, respectively, which is by far the longest among the comparator countries. Nineteen days are needed for a water connection, which is also much longer than the time needed in all other countries except Thailand. Faced with long delays in the provision of electricity, water, and mainline telephone connections, firms find expansion difficult and, as a consequence, overall investment will fail to grow.

6.1. Electricity

More than 40% of respondents identified electricity services as a problem for the operation and growth of their business. In light of the perceived strong sector performance of the Lao PDR's electricity sector, it is surprising to see that it is being singled out as the primary constraint to investment (Box 6.1). In response to the somewhat surprising conclusion of the survey, a more detailed study of the perceived quality of the electricity supply was carried out.²⁴

Box 6.1 Strong performance in electrification

The Lao PDR is renowned for its hydrological resources, which have enabled the country not only to meet domestic demands but also to export power to Thailand. Power exports have ranked among the top three export commodities for more than 2 decades. Another impressive sector achievement is the rapid electrification of the country increasing from around 15% of all households in 1995 to almost 50% in 2006. This rate is still in the low end in a regional comparison but places the Lao PDR above Cambodia (17% electrification rate in 2003) and almost on par with Indonesia (55% in 2003). From 2006 to 2010, the Government plans to construct six new hydroelectricity schemes with a capacity of 2,100 megawatt (MW). In addition, an output of 600–800 MW is projected from six to eight smaller hydroelectricity schemes.

Dissatisfaction with electricity services is universal across all sectors although the construction materials sector reports a slightly more positive position (“only” a 30% negative response rate). This deviation might be explained

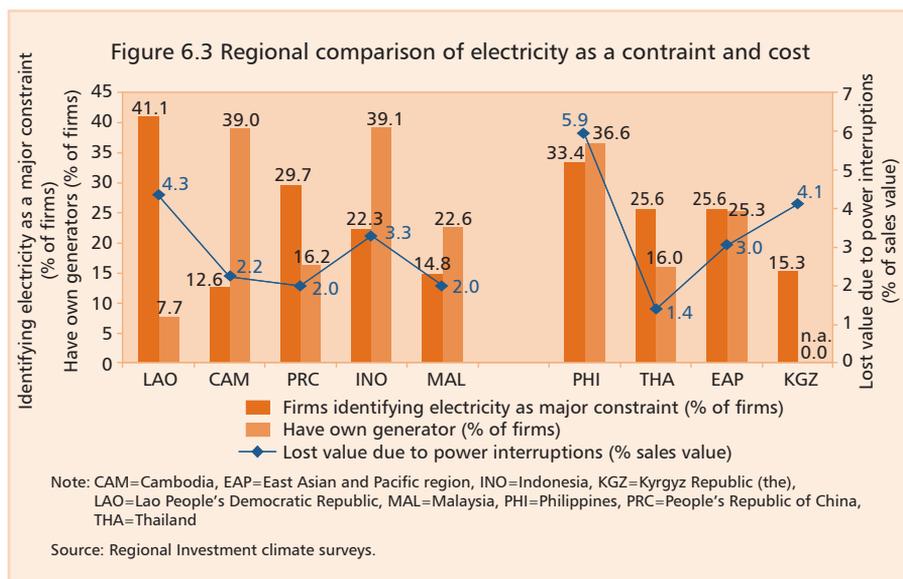
²⁴ See Tokyo Electric Power Company (TEPCO 2006). Structured interviews were conducted with 34 enterprises in Champassak, Savannakhet, and Vientiane, covering all five sectors. The companies were drawn from the ICS survey; however, the principle of anonymity prevented the interviewers from selecting their new sample from among the 40% of the companies that had originally said that electricity is a constraint. Instead, the sample was designed randomly.

by a higher reliance of the sector on automotive and captive power compared with other sectors, which consume more electric power. The comparatively high production value lost due to power interruptions in wood processing and garments/textiles industries confirms that these industries have the highest reliance on uninterrupted electric power supply for production. The lower part of Appendix Table A.6.1 shows that the electricity constraints are most strongly felt by larger enterprises—those having more than 51 workers. This is to be expected, as the number of workers and the degree of mechanization of the factories are correlated.

The geographical differences in electricity service are significant, and the Northern provinces report much stronger dissatisfaction than the Southern provinces. Sixty-seven percent of surveyed firms in Luang Prabang, and 57.1% in Oudomxay were dissatisfied with electricity services, while 24.6% in Savannakhet and 36.8% in Champassak showed dissatisfaction. The higher dissatisfaction in the two northern provinces (Luang Prabang and Oudomxay) appears justified, given the number of days of power interruptions. These provinces suffer significantly more interruptions than do other parts of the country. Two factors can explain this difference. First, the national power system is less developed in the north, with lower electrification rates and a weaker power network, which is more prone to blackouts. On the other hand, Savannakhet and Champassak provinces are both directly linked to the Thai electricity network and receive part of their power from imports. Second, the mountainous northern regions have a higher frequency of thunderstorms, which are the main reason for power interruptions.

While dissatisfaction with electricity as a constraint to business is the highest among GMS countries, losses due to outages are modest by regional standards. Figure 6.3 shows that while the perceived constraints related to the Lao PDR's electricity sector are by far the highest in the region, at 41%, the reported loss of production value caused by electricity sector constraints does not entirely justify the criticism. At 4.3%, the Lao PDR is only one percentage point higher than the average for the East Asian and Pacific region, and lower than the Philippines. This pattern indicates that the perceived dissatisfaction is driven by reasons other than pure economic concerns.

Incidence of generator use in the Lao PDR is low. Three factors could explain the low incidence of self-generation. First, the disproportionate costs of importing generator equipment or fuel could restrain investors in the Lao PDR compared with investors in other countries. However, fuel costs in the Lao PDR are comparable to neighboring countries, and the import duty on mechanical



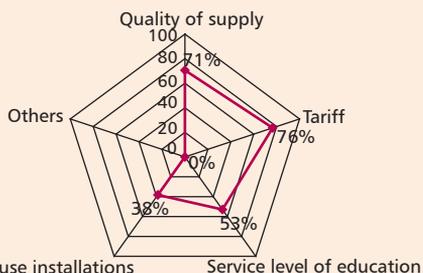
equipment is only 5% or less. Second, the structure of the industry might not require the same level of system reliability as in other countries, which have more sophisticated processing industries. This assumption is refuted by investor responses, which indicate that power interruptions do indeed carry a risk of damaging either the production line or the machinery. Third, lack of skilled labor in the Lao PDR for maintenance and operation of power generators might dissuade investors from procuring generator sets. The average skills and education level of Electricite du Laos (EdL) workers are limited. Nonetheless, these factors do not seem to provide sufficient explanations with regard to the significantly lower numbers of firm-owned generators in the Lao the PDR.

6.1.1. *Tariff considerations*

Seventy-six percent of respondents find tariffs “expensive” or “very expensive” (Figure 6.4).²⁵ Of almost equal importance is the quality of electric supply. Other causes rank lower but are far from negligible. The dissatisfaction with tariff rates is unequivocal, with more than 80% in all sectors reporting that electricity tariffs are “expensive” or “very expensive” (Figure 6.5). Only in construction materials sector that less than 80% (53%) of firms report that rates are high.

²⁵ This finding and the subsequent detailed responses were obtained in the follow-up survey conducted by TEPCO in January 2006, in which 34 companies among the original sample were interviewed.

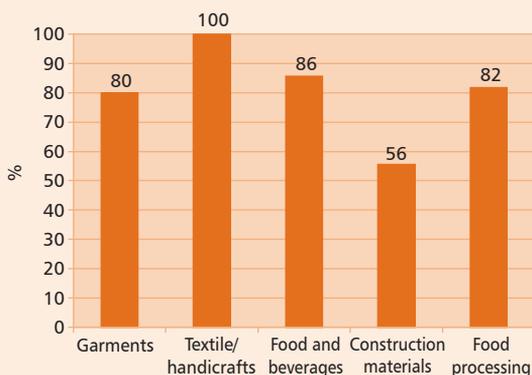
Figure 6.4 Causes of investors' dissatisfaction with electricity supply (%)



Note: The respondents could choose among the following five answers to characterize the electricity tariffs: "very expensive", "expensive" "reasonable", "cheap", or "very cheap".

Source: TEPCO, 2006.

Figure 6.5 Perception of electricity tariffs being "expensive/very expensive" by sector



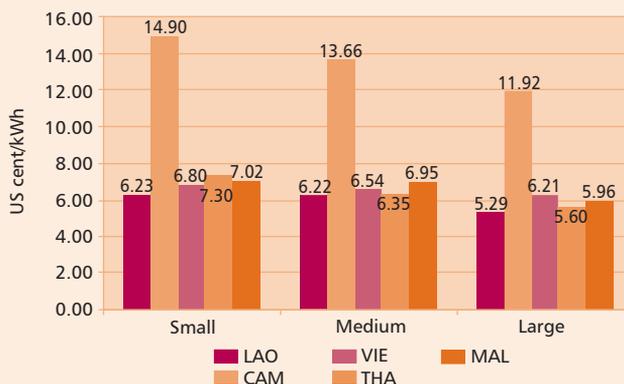
Note: The respondents could choose among the following five answers to characterize the electricity tariffs: "very expensive", "expensive" "reasonable", "cheap", or "very cheap".

Source: TEPCO, 2006.

However, the Lao PDR enjoys the lowest tariffs for industrial consumers in the region for small-scale enterprises and larger operations (Figure 6.6).²⁶ The situation is slightly different for commercial consumers, since the Lao PDR's commercial tariffs rank third in the region, after Viet Nam and Cambodia (Figure 6.7).

²⁶ A direct comparison is distorted by the various types of efficiency incentives which are offered in some countries but are not available in the Lao PDR.

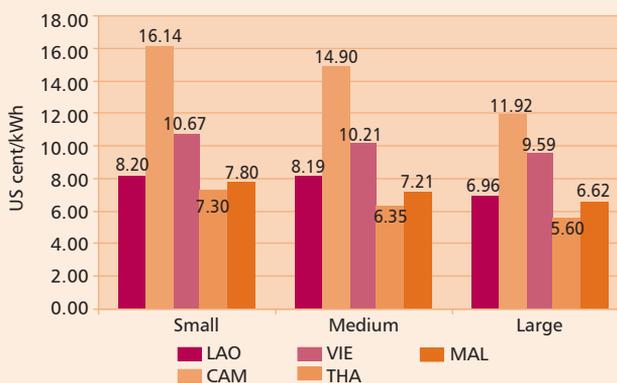
Figure 6.6 Average electricity tariffs for industrial consumers, by consumption size



Note: CAM=Cambodia, LAO=Lao People's Democratic Republic, THA=Thailand, VIE=Viet Nam

Source: TEPCO, 2006.

Figure 6.7 Average electricity tariffs for commercial consumers, by consumption size



Note: CAM=Cambodia, LAO=Lao People's Democratic Republic, THA=Thailand, VIE=Viet Nam

Source: TEPCO, 2006.

The perceived dissatisfaction with tariff levels therefore appears to be rooted in traditionally low tariff rates that have been recently growing at a relatively fast pace. As will be discussed below, power supplies in the Lao PDR are of roughly similar quality to those in neighboring countries, at least in terms of power interruptions. Traditionally, EdL has been hampered by tariff ceilings, which were fixed well below the actual cost of production. This policy has been gradually revised during the past 7 years. Monthly tariff increases were

implemented from 1999 to 2001 at an aggregate annual rate of almost 50%. The tariffs, still below cost recovery, were subsequently subjected to annual increases of some 20–30% in 2002–2004. Tariff adjustments in 2005 and 2006 hover between 5% and 6%. Despite recent relief in tariff adjustments, some consumer groups are still feeling the increases imposed in the past years.

Additional dissatisfaction comes from the fact that commercial consumers are cross-subsidizing residential consumers. As a consequence of the rigorous adjustment program, tariffs for industrial consumers have now reached the point of cost recovery, while commercial consumers are paying tariffs that are significantly higher than the cost recovery level.²⁷ The system seems to punish the potentially most productive sectors and small enterprises by making their fixed costs very high. The discontent is also due to the fact that consumers are not aware of the prices in other countries.

Enterprises with constant or flexible electric capacity requirement are particularly disadvantaged in terms of electricity costs.²⁸ EdL provides no cost incentives to consumers for energy management and efficiency, except for a 10% reduction to consumers who choose to invest in own transformers and receive electricity at medium voltage. This puts highly mechanized the Lao PDR enterprises at a comparative disadvantage to producers in Thailand and the Philippines, where various schemes are available, including rebates at off-peak hours and two-part tariffs with separate charges for peak capacity and total volume. Such initiatives are estimated to yield substantial cost savings. It can therefore be recommended that such energy efficiency (demand-side management activities) be implemented for strategic consumers. This would be advantageous for both EdL and its customers.

²⁷ Electrowatt, 2004.

²⁸ Tariff reforms are ongoing, with the objective of reducing cross-subsidies between residential and corporate consumers. Tariffs for residential consumers will gradually increase until 2011, while industrial consumers will enjoy a reduction of 8% (2005 values).

	2003	2004	2005	2006
Residential consumers				
0–25 kWh/month	99	113	115	133
26–150 kWh/month	231	265	265	276
>150 kWh/month	667	765	765	773
Nonresidential consumers				
Agriculture	257	295	295	313
Government	616	706	706	703
Industry	555	636	636	634
Commercial	721	826	826	835
International organizations	1040	1,066	1,066	1,077
Entertainment	955	1,095	1,095	1,106
Total average	430	514	543	552
Average tariff increase (%)		19.40	5.54	1.76

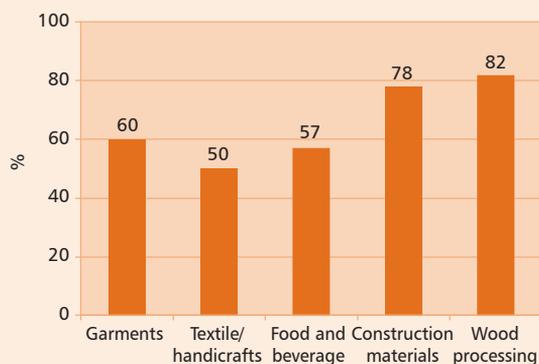
	2007	2008	2009	2010	2011
Residential consumers					
0–25 kWh/month	155	178	204	234	269
26–150 kWh/month	287	296	304	313	322
>150 kWh/month	781	781	781	781	781
Nonresidential consumers					
Agriculture	332	348	366	384	402
Government	701	692	682	673	664
Industry	631	623	614	606	597
Commercial	843	843	843	843	843
International organizations	1,088	1,088	1,088	1,088	1,088
Entertainment	1,118	1,118	1,118	1,118	1,118
Total average	555	558	562	566	571
Average tariff increase (%)					

Note: Rates for 2007–11 are expressed in 2006 values.
Source: EdL.

6.1.2. *Quality of supply considerations*

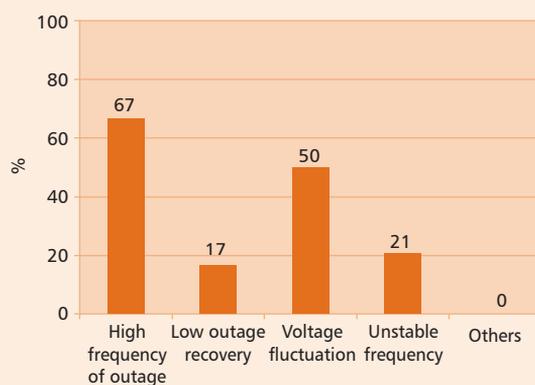
Four of the five sectors reported dissatisfaction with the quality of supply (Figures 6.8 and 6.9).²⁹ The dissatisfaction is predominantly with frequent power interruptions (67%). This is not surprising since a complete outage is often more directly felt than periodic drops in voltage level, frequency instability, etc. The average number of power interruptions is estimated to be slightly less than nine times per year, and the total duration of interruptions is about 60 hours annually (Figure 6.10).

Figure 6.8 Reported dissatisfaction with quality of electricity supply



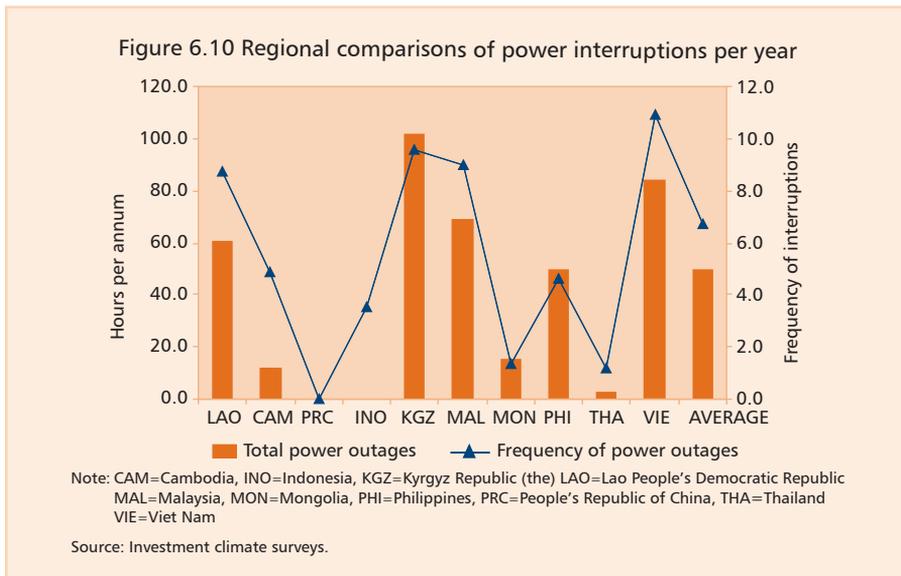
Source: TEPCO, 2006.

Figure 6.9 Reasons of dissatisfaction with quality of electricity supply



Source: TEPCO, 2006.

²⁹ The quality of supply is distinguished from the quality of service.



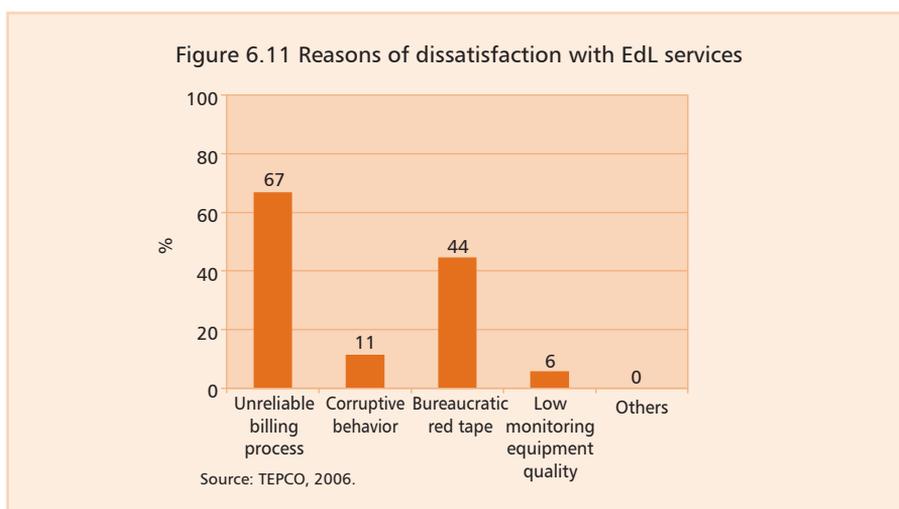
The quality of electricity supply in the Lao PDR is close to the regional average, but large differences persist among regions, sectors, and firms of different size. While there have been service improvements in the capital, Vientiane, installation and supply of electricity to the provinces still face some difficulties and supply disruptions. The average annual duration power interruption, which is 60 hours, is above the commonly used benchmark of 24 hours. Huge differences exist across provinces and sectors. Outage durations were reported as low as 15 hours in Vientiane (averaging around 30 hours), whereas the Northern provinces suffer more than 100 hours of interruptions per year. Reliability of supply is also dependent on customer size; small enterprises experience around 50% longer interruptions per year than larger enterprises. This pattern is not surprising, since large consumers have the option to receive medium voltage (22 kV) supplies, while small consumers normally receive the stepped down 0.4 kV supply, which is more prone to interruptions, given the additional transformation.

The duration of outages has been increasing. Despite the fairly good performance of the EdL network in terms of annual power interruptions, statistics from the utility reveal that the total number of interruptions in Vientiane Province increased by more than 30% from 2001 to 2003. Besides the frequency of power interruptions, the duration of interruptions also received a fairly high response rate, at 17%. Although EdL reportedly recovers from outages faster than the regional average (the majority of interruptions are recovered within 2 hours), a

number of power interruptions have been known to last for 5 hours or more. Such long durations are very disruptive to businesses.

6.1.3. *Service level of EdL*

The dissatisfaction with the service level of EdL’s operations is high among the surveyed firms, with a response rate of 67%. The pattern is fairly consistent across sectors and provinces, thus indicating that the problem is general rather than sector specific. Figure 6.11 provides a breakdown of the main causes of dissatisfaction. Sixty-seven percent of respondents cite the billing process/meter reading; the need to strengthen billing procedures was confirmed in a previous Loss Reduction Study (TEPCO, 2004). Estimates show as much as 5% of EdL’s operating losses (\$3 million a year) could be attributed to nontechnical reasons.



EdL’s billing process relies on manual meter reading, with few controls in place to monitor the readings. The TEPCO study recommended switching to computerized meter reading with handheld devices, increasing inspection frequency, and introducing incentive schemes for meter readers to reduce the large number of incorrect readings. EdL has reported significant success in the Vientiane branch after extensive training and introduction of incentives for meter readers. Similar activities will now spread to other provincial branches. Likewise, the fairly modest reporting of “corruptive behavior” of EdL’s officials is a result of targeted campaigns within EdL, which is expected to further reduce reported incidents.

Bureaucratic constraints and red tape, such as long response time and delayed provision of requested services, are also significant causes of customer discontent. Almost half of the respondents (14 companies) reported a lead time of 30 days or more from their application to actual connection. It should be noted, however, that private electric companies and not EdL undertake almost all of the connection works. The delay is therefore as much a problem of insufficient capacity at the level of private electricians and service companies. The average time to establish connection was reported as high as 34.2 days. Such delays contribute to the poor investment climate.

6.2. Transportation

Raising the productivity of firms in the Lao PDR requires significant improvements in the transport infrastructure. Between 1990 and 2000, the Lao PDR was able to expand its road network by 71%, higher than the 63% increase in the PRC. However, only 15% of all roads in the Lao PDR were paved, compared to Viet Nam's 25%, and the PRC's 79%.³⁰ The draft Sixth National Socio–Economic Development Plan (NSED, 2006–2010) provides for the implementation of priority infrastructure projects in the transport sector to open opportunities for developing all regions. These include easing transport within the country through highway projects between Vientiane capital and other cities and provinces, and through new railway transport connecting key areas. The NSED has also laid down plans to better connect the Lao PDR to other countries through inland roads and bridges, including the upgrade of existing national roads linking the Lao PDR to neighboring countries.

An important issue for firms in the Lao PDR and its neighbors is cross-border transport in the subregion. In 1996, an ADB technical assistance project found that several nonphysical trade barriers prevented the free movement of vehicles, people, goods, across borders within the subregion. Such factors include restrictions on entry of motor vehicles, different vehicle standards, inconsistent and difficult formalities related to customs procedures and guidelines, and restrictive visa requirements.³¹ To reduce these barriers, a GMS Cross-Border Transport Agreement was formulated, with the Lao PDR being one of the signatory countries, along with Cambodia, PRC, Myanmar, Thailand, and Viet Nam.³² The agreement covers several aspects of cross-border transport facilitation,

³⁰ See Asian Development Bank/Japan Bank for International Cooperation/World Bank, 2005.

³¹ Asian Development Bank, 2005c.

³² The Cross-Border Agreement was originally signed by the Lao PDR, Thailand, and Viet Nam on 26 November 1999 in Vientiane.

including single stop/window customs inspection, cross-border movement of persons, transit traffic regimes, requirements for vehicles going across borders, exchange of commercial traffic rights, and infrastructure (road and bridge design standards, road signs and signals). In addition, the Lao PDR stands to benefit from the proposed GMS Transport Sector Strategy, since it would be part of both the North–South Economic Corridor and the East–West Economic Corridor (Box 6.2). Other measures that will be taken to increase efficiency, reduce costs, and maximize the economic benefits of the economic corridors include improving the warehouses; building two new distribution centers; building infrastructure for trucks carrying containers across the border; providing information and communication technology on transportation; and increasing capacity building for the staff at the Lao PDR international checkpoints and at the Ministry of Communication, Transportation, Post, and Construction (MTCPC).

Box 6.2 GMS transport sector strategy

A strategy to develop a comprehensive Greater Mekong Subregion (GMS) transport network is being formulated to link the GMS countries in an efficient and sustainable manner. The network will be established mainly through a GMS-wide multimodal transport systems covering all possible current and future modes; i.e., road, rail, inland, water, sea, and air. The expected outcomes include lower costs to consumers and producers arising from reduced import costs; more competitive exports from lower costs of transporting to local and regional markets and to global market transfer locations; reduced travel times for GMS residents and tourists; and a more attractive environment for inbound investment through high-quality transport links. Three corridors have been identified to facilitate trade, reduce transport costs, make movement of goods and people more efficient, provide employment opportunities, and reduce poverty. These are the North–South Economic Corridor, East–West Economic Corridor, and the Southern Economic Corridor.

Source: Asian Development Bank, 2005f.

A quarter of the surveyed firms cited transportation as a severe obstacle to their operations. Transportation is an important component of the production value chain. The quality and accessibility of transportation affect the time it takes to obtain input goods for production and to gain access to local and international markets. Quality of infrastructure may also impact the loss of value in transportation.

About 3.9% of value added is lost due to poor transport services, and 5.3% is due to transport infrastructure. Moreover, firms that cited infrastructure as a major or severe constraint lost 6.3% of their value added due to infrastructure and access to markets, which is almost double the losses incurred by firms that did not complain. Firms that cited transport as a severe problem also had longer

lead times (27 against 22 days) and higher transportation expenditures (36% higher than those that did not complain).

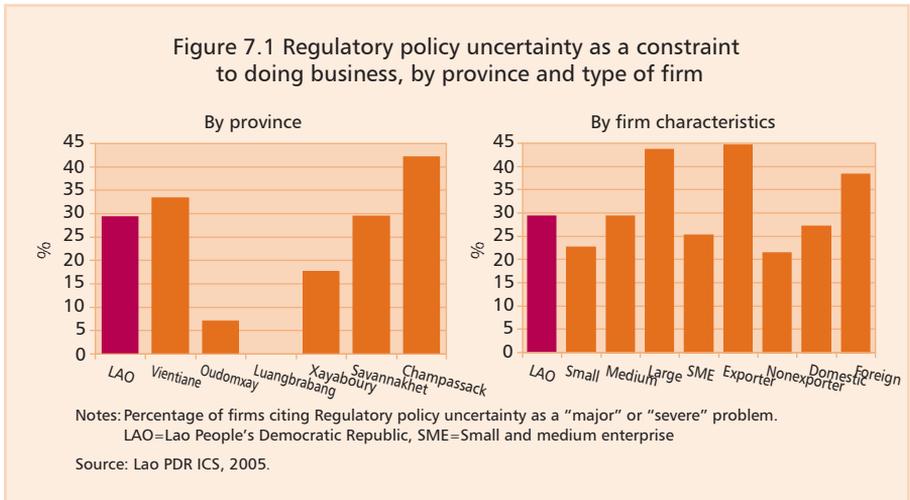
Transportation appears to be a binding constraint to expansion and higher productivity for more productive firms. Firms with higher productivity cited poor transportation as a major or severe problem more often than other firms. These firms also tended to use land transportation more often than air or river routes, and to incur higher transportation costs (12%, on the average).

7. Regulation and regulatory uncertainty

The Government’s regulatory policy plays a significant role in shaping investment decisions and the conduct of business. Effective regulations address market failures that inhibit productive investment and reconcile private and public interests. Poorly designed and inefficiently implemented regulations, however, present major administrative and financial burdens. Often, these burdens are in the form of bribes—“unofficial” payments to public officials to get things done. Weak regulatory quality, poor policy framework, inconsistent regulations, and complex rules and procedures all contribute to an unhealthy business environment and undermine the credibility of the Government. In turn, risk increases, expectations are lowered, and investment is discouraged.

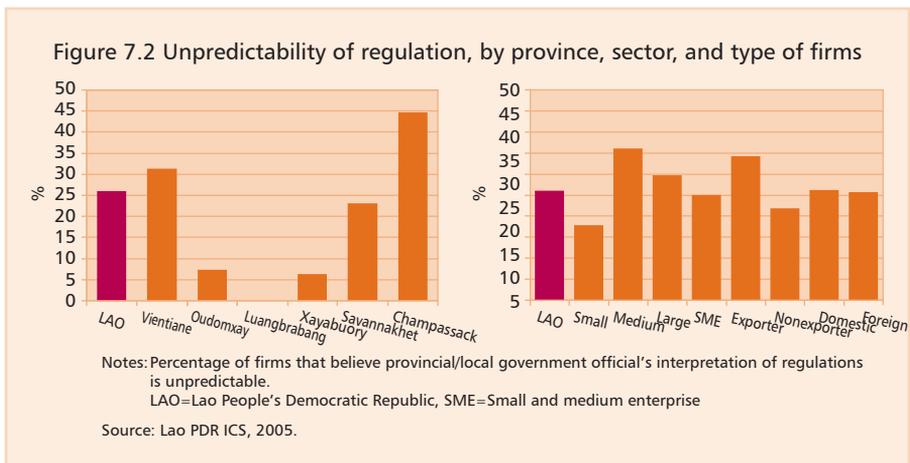
ICS provides three sets of qualitative and quantitative indicators of regulatory burden and corruption. The first set of indicators focuses on the perceptions of firms regarding regulatory policy uncertainty and the predictability of regulations at the national and provincial government levels. The second set presents the perceptions of firms regarding red tape, and measures the amount of unofficial payments; i.e., the “bribe tax” and the extent to which specific administrative and regulatory functions require gifts or informal payments. The third set of indicators captures the “time tax” imposed by regulation.

Nearly one third of surveyed firms rate regulatory policy uncertainty as a major or severe problem. The problem is even more pervasive in Champassak and among large firms, exporters, and foreign-owned firms. Twenty-nine percent of total firms surveyed rate regulatory policy uncertainty as a major or severe problem, while regulatory policy uncertainty was cited as a major or severe by 42% of firms in Champassak (44% of large firms; 45% of exporters, and 38% of foreign-owned firms, see Figure 7.1). The uneven and discretionary application of laws has also generated confusion and uncertainty, discouraging investors. There are indications that a number of laws and legal instruments, including



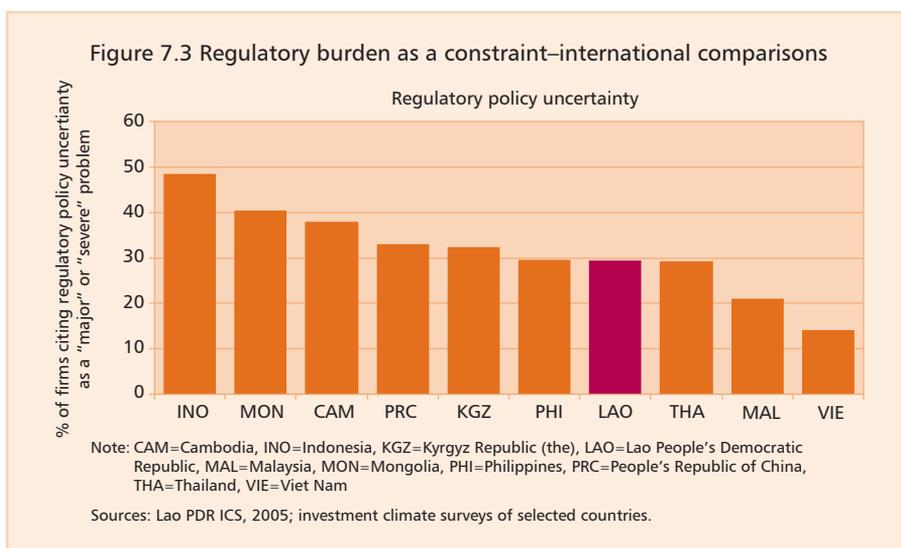
those related to business and investment incentives, lack a clear set of guidelines, or are done on a case-to-case basis, leading to unfair implementation.³³

Many firms in the Lao PDR believe that the interpretation of regulations by government officials at the provincial levels is unpredictable. Unpredictability in Champassak province was particularly noted by local businesses. With regard to local government administration, 26% of firms thought that interpretation of regulations was unpredictable (Figure 7.2). Furthermore, firms located in Champassak were especially affected by the unpredictability of local regulations—42% of firms believe that the interpretation of regulations by local government officials is unpredictable (Figure 7.2).



³³ See Sung, 2005.

The extent of regulatory uncertainty that firms in the Lao PDR perceive is similar to the level found in neighboring countries and other landlocked economies. Figure 7.3 shows that the PRC, Kyrgyz Republic, Philippines, and Thailand have similar percentages of firms that identify regulatory burden as a problem. Viet Nam has the lowest percentage, with 14% of its firms identifying regulatory policy uncertainty as a constraint. Indonesia recorded the highest at 48%. At the same time, the firms in the Lao PDR place both regulation and regulatory uncertainty combined as the second-most important constraint to their business (see Figure 5.1).



Regulation in the Lao PDR appears to be very restrictive by international standards. In the Doing Business Report, the Lao PDR ranked 147th out of 155 countries with respect to ease of doing business in 2005 (Figure 7.4).³⁴

In looking at the Doing Business rankings for a particular country, it is important to understand the specific methodology used to calculate these numbers. The main purpose of the Doing Business methodology is to allow for international comparisons among many countries with different regulation systems in place. Such methodology is bound to miss the specificity of each particular country's regulation system (Box 7.1). It is, therefore, necessary to supplement it with a country-specific review of regulation that is attempted below.

³⁴ These comparisons are based on regulations and laws in place at the beginning of 2005.

Figure 7.4 Lao PDR ranks 147th out of 155 on the ease of doing business in 2005

Source: World Bank, 2006.

Box 7.1 Methodology of the doing business rankings for starting a business

The Doing Business Survey records all generic procedures that are officially required for an entrepreneur to start up and operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications, or inscriptions with relevant authorities. After a study of laws, regulations, and publicly available information on business entry, a detailed list of procedures, time, cost, and paid-in minimum capital requirements is developed. Subsequently, local incorporation lawyers and government officials complete and verify the data on applicable procedures, the time and cost of complying with each procedure under normal circumstances, and the paid-in minimum capital. On average, four law firms participate in each country. Information is also collected on the sequence in which procedures are to be completed and whether procedures may be carried out simultaneously. Any required information is assumed to be readily available and that all government and nongovernment agencies involved in the start-up process function efficiently and without corruption. If answers by local experts differ, inquiries continue until the data are reconciled.

To make the data comparable across countries, several assumptions about the types of businesses are made. The Doing Business report assumes that the firm:

- (i) is a limited liability company operating in the country's most populous city; (ii) is 100% domestically owned and has five owners, none of whom is a legal entity; (iii) has start-up capital of 10 times income per capita at the end of 2004, paid in cash; (iv) performs general industrial or commercial activities, such as the production or sale of products or services to the public; (v) does not perform foreign trade activities and does not handle products subject to a special tax regime; (vi) does not use heavily polluting production processes; (vii) leases the commercial plant and offices and is not a proprietor of real estate; (viii) does not qualify for investment incentives or any special benefits; (ix) has up to 50 employees 1 month after the commencement of

(continued)

Box 7.1 (continued)

operations, all of them nationals; (x) has a turnover at least 100 times income per capita; and has a company deed that is 10 pages long.

Several assumptions about procedures are also used. In particular:

- A procedure is defined as any interaction of the company founder with external parties (government agencies, lawyers, auditors, notaries).
- The founders complete all procedures themselves, without middlemen, facilitators, accountants, or lawyers, unless the law mandates the use of a third party.
- Procedures that are not required by law for starting a business are ignored unless they are necessary to conduct everyday transactions of the company.
- Shortcuts are counted only if they fulfill three criteria: they are legal, available to the general public, and avoiding those causes substantial delays.
- Only procedures required of all businesses are covered. Industry-specific procedures are excluded.
- Procedures that the company undergoes to connect to electricity, water, gas, and waste disposal services are not included unless they entail inspections required before starting operations.

Time is recorded in calendar days. The minimum time required for each procedure is assumed to be 1 day. Time captures the median duration that incorporation lawyers indicate is necessary to complete a procedure. If a procedure can be accelerated for an additional cost, the fastest procedure is chosen. It is assumed that the entrepreneur does not waste time and commits to completing each remaining procedure without delay. The time that the entrepreneur spends on gathering information is ignored. It is assumed that the entrepreneur is aware of all entry regulations and their sequence from the beginning.

Source: World Bank, 2005b. For more detail, see www.doingbusiness.org/Methodology/StartingBusiness.aspx.

While the Lao PDR does not have the largest monetary cost of starting a business, the number of regulatory procedures and the number of days required to start operation are very high (Table 7.1). The Doing Business survey shows that the Lao PDR has the most restrictive procedures for starting a business among the comparator countries and the second most restrictive in the world.

The actual number of days to start a business ranges between 25 days and 180 days, as some provinces have simplified regulations. Although the legal framework for registering a business is uniform across provinces, the provinces implement these procedures differently.³⁵ For example, in all six provinces, each ministerial department requires a separate business license application. However, in Savannakhet, investors can submit the applications to any one of the required departments, which will then act as a one-stop shop

³⁵ See Lao PDR Provincial Business Policy Assessment. World Bank, Washington DC. 2006.

and distribute the applications to other departments. Some provinces also require additional procedures. For example, departments in Vientiane often require in-person interviews. In Oudomxay, an inspection of the proposed business location is required. Because of these and other differences, the average number of days required to complete the first five procedures to register a business varies from less than 25 days in Savannakhet to 90–180 days in Oudomxay.³⁶

Table 7.1 Number of procedures required to start a business

	Procedures (number)	Time (days)	Cost (% of income per capita)	Min. capital (% of income per capita)
Lao PDR	9	198	15.1	23.4
Cambodia	10	86	276.1	80.7
China, People's Rep. of	13	48	13.6	946.7
Kyrgyz Republic	8	21	10.4	0.6
Malaysia	9	30	20.9	0.0
Philippines	11	48	20.3	2.0
Thailand	8	33	6.1	0.0
Viet Nam	11	50	50.6	0.0
AVERAGE	9.9	64.3	51.6	131.7

Source: World Bank, 2005b.

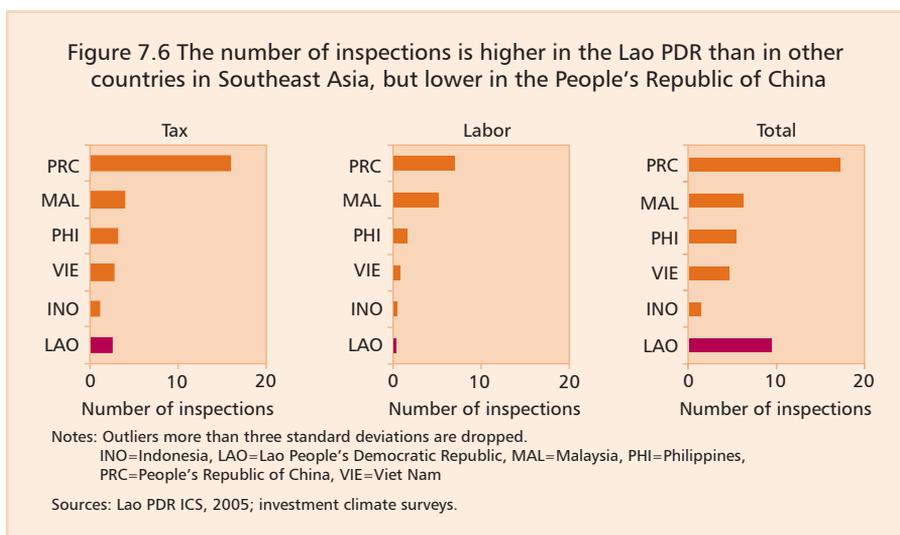
Despite this restrictive regulatory regime, firms in the Lao PDR do not report spending an excessive amount of time dealing with government regulatory requirements. The average firm reports that senior management spends less than 5% of its time dealing with government regulations (Figure 7.5). This is higher than in Indonesia, but lower than in any of the other comparator country. The Lao PDR is also working to improve the regulatory environment by creating a one-stop shop for firm and investment registration, and has recently approved the new Enterprise Law, which will substantially reduce unnecessary regulatory burden.³⁷

³⁶ Data are according to provincial authorities and are reported. See Lao PDR Provincial Business Policy Assessment, World Bank, Washington DC.

³⁷ The new Enterprise Law, approved by the National Assembly in 2005 to replace the old Business Law, is based on international best practices in business regulation. Implementation of the Law is estimated to reduce the number of days required to start a business from 198 to less than 20 days, though this is a preliminary estimation since the implementing decree has not yet been drafted.



Inspections are, however, more common in Lao PDR than in most of the comparator countries. Some of these inspections are more burdensome than others. On average, firms in Lao PDR are inspected close to 19 times per year—higher than in any of the comparator countries except the PRC (Figure 7.6).

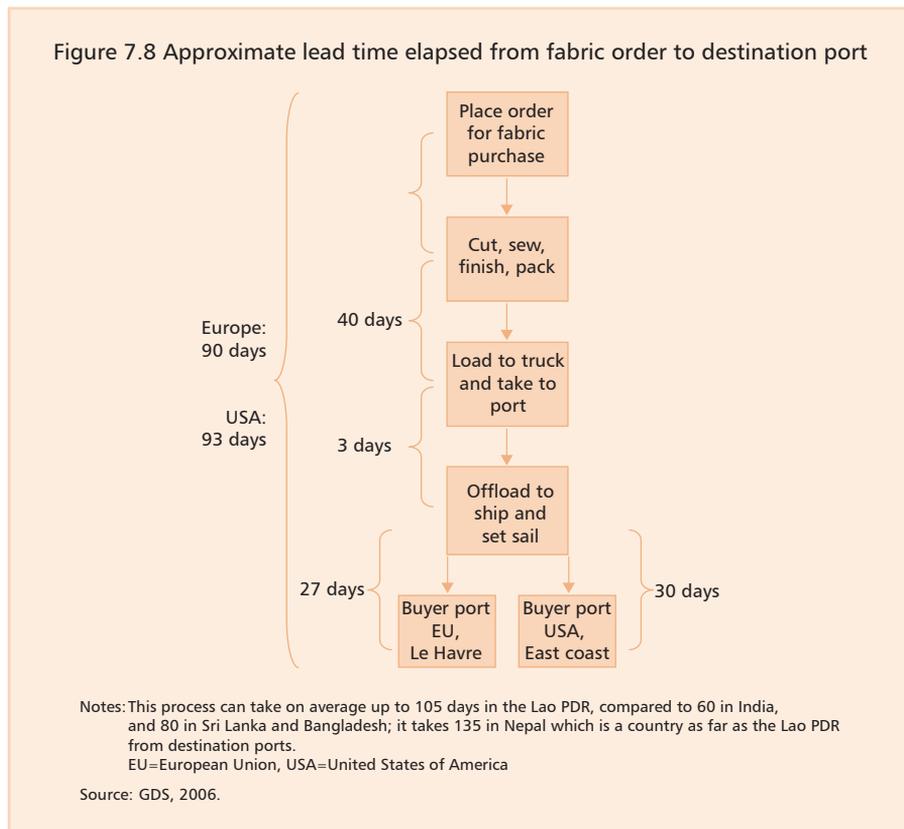


Although the total number of inspections is quite high, the types of inspections are quite different when compared with most other countries. Firms in the Lao PDR were more likely to report that bribes are expected than firms in Indonesia and the Philippines, and less likely than firms in Viet Nam and Cambodia. Section 11 on governance deals with this and related issues.

Uncertainties regarding regulations are also reflected in the difficulties faced by firms in their transactions with clients. In particular, this concerns the enforcement of contracts. On average, about 23% of firm sales were sold on credit (as opposed to prepaid and paid at delivery). However, in some of the transactions, customers did not pay within the agreed time period or never paid at all. On average, about 24–26% of sales of firms, which are sold on credit in the garments, textiles, and construction materials sectors were not repaid on time (Figure 7.7). In the food sector, about 8% of sales on credit were never repaid. This may reflect not only the extent of legal uncertainties facing firms, but also the difficulty of private customers (some of which could be firms themselves) in accessing financing to enable them to better organize their cash flow and meet financial obligations.



Twenty percent of firms in the Lao PDR consider customs and trade regulations a major or severe obstacle. Compared with other landlocked countries, the percentage of firms that identified trade regulation as a major or severe obstacle is lower than in Nepal (45%), but higher than the Kyrgyz Republic (13%) and Bhutan (10%). Among landlocked countries, customs and trade regulations are expected to be critical issues in cross-border transactions. Reports³⁸ that show that customs clearance procedures and cargo processing for import and exports, and an inefficient licensing system, pose barriers to trade barriers in the Lao PDR).³⁹ The supply chain study of the firms in the garment industry shows that cross-border transactions add significantly to the lead times (Figure 7.8).



³⁸ See Martin 2001; Diagnostic Trade Integration Study (DTIS) 2006.

³⁹ The Prime Minister's Export-Imports Agreement No.36/PM9.7.2001 establishes a one-stop service for customs clearances. However, many sectors face difficulties in implementing this type of service.

Easing difficulties in cross-border trade is essential for the Lao PDR businesses, and especially for exporters. Efforts are under way to facilitate cross-border trade between the Lao PDR and other countries in the region through the GMS program and other initiatives. The Second GMS Summit endorsed a Strategic Framework for Action on Trade Facilitation and Investment (SFA-TFI), which provides a comprehensive set of measures to facilitate trade through four priority areas: customs procedures, inspection and quarantine measures, trade logistics, and mobility of business people. Among the important measures identified are simplifying, harmonizing, and making transparent customs procedures; aligning quarantines and inspections; having laws and regulations with commonly agreed international standards; developing greater inter-agency cooperation in the individual countries and at the GMS level regarding inspection and approval procedures, harmonizing cross-border transport regulations and procedures, and pursuing a GMS-wide business visa. A regional cooperation strategy and program takes the GMS program to the next stage through enabling investment and technical assistance, with a comprehensive development matrix to guide the planning of subregional programs.⁴⁰ Complementing this strategy is the Ayeyawaddy–Chao Phraya Mekong Economic Cooperation Strategy (ACMECS), initiated by Thailand to promote greater economic cooperation among four GMS members: Cambodia, the Lao PDR, Myanmar, and Thailand.⁴¹

7.1. Practice of regulations in the Lao PDR

To obtain a business license and start business operations, nine procedures and often up to a hundred documents are required by central and provincial authorities and line ministries. To register a business, an average firm in a typical sector and province needs to get investment licenses from several departments of the central Government, from the line ministries, plus registration licenses from tax departments, the Ministry of Finance, bank, and business seal (Figure 7.9).

Small businesses are allowed to register at the district level, while large businesses need to register at the provincial level. The registration of a business at the district level involves the departments of trade and finance and the line ministry. Capitalization will decide the administrative level of registration of a company. Firms with a turnover of below Kip (KN) 25 million (US\$2,350) are allowed to register at the district level.⁴² Figure 7.10 compares the registration processes at the district and provincial levels.

⁴⁰ Asian Development Bank 2004.

⁴¹ Effort is ongoing to develop a single visa concept for ACMECS members.

⁴² Businesses with less than 1 million kip (\$93) of capital investment follow a separate procedure.

Figure 7.9 A generic business registration procedure

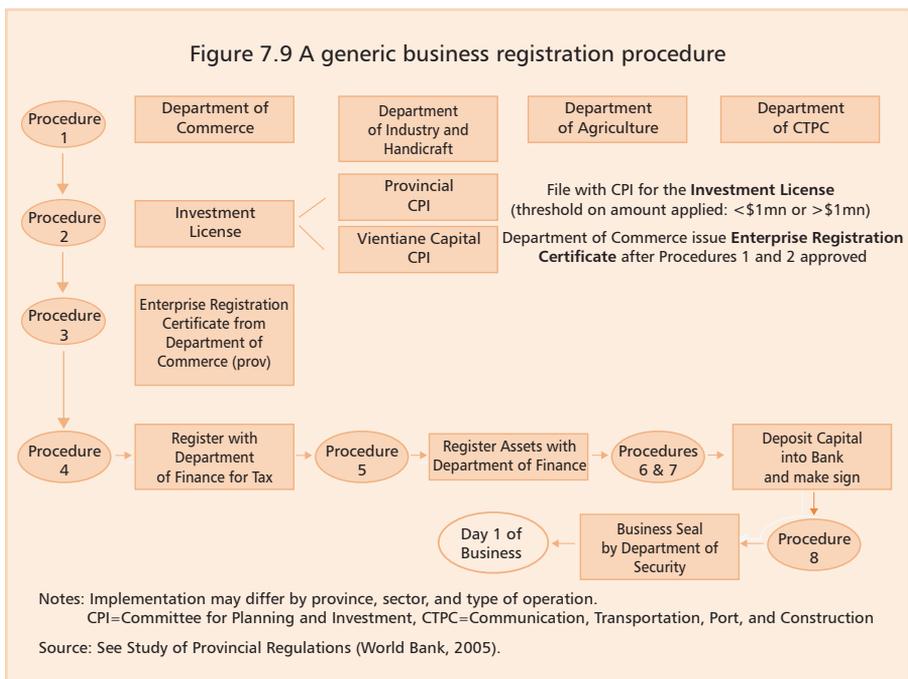
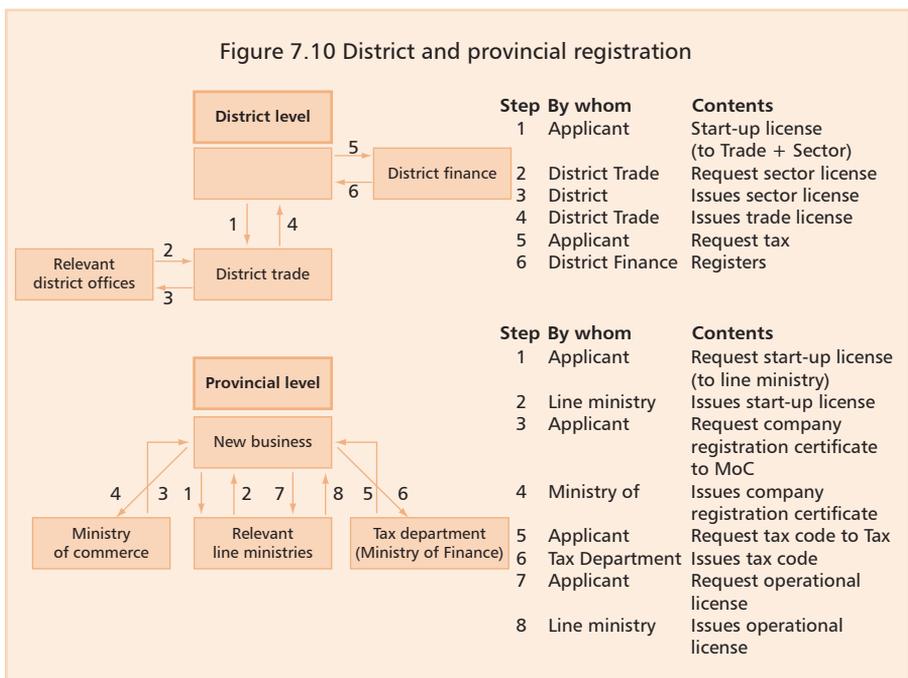


Figure 7.10 District and provincial registration



Registration procedures at the district level are less cumbersome than those at the provincial level. It may require 160 fewer days and 42 fewer required documents to register at the district level. Registration requirements depend on the sector of operation, but large variations persist. Twenty days are enough to complete the registration of a firm in the district office, but the same operation may take 189 days if the provincial administration is involved. While a district-operating entrepreneur has to prepare and attach 24 documents to register a noodle shop, the provincial registration of a food manufacturing company would entail 66 attachments, not including tax registration.⁴³

Large differences in registration procedures were also observed for different sectors. These differences are due mainly to line ministry licenses, possible overlaps in coverage, and the resulting confusion. Trading companies have the easiest registration procedures. For example, it takes 222 days to register a guest house with a total of 59 documents; it takes 189 days to register a food company with 66 documents; and it takes 36 days and 22 documents to reregister a furniture company.⁴⁴

7.2. Perceptions about the burden of regulation

Firms are most concerned about regulatory uncertainty, taxation, and customs and trade regulations. Fewer firms are concerned about other specific areas of regulation. More than one quarter of firms in the sample said that regulatory uncertainty was a serious problem (Figure 7.11). When asked whether officials' interpretations of laws were predictable, 55% of firms agreed that national officials' interpretations were predictable, and only 33% said the same thing about local officials. Thus, the firms' biggest concerns related to regulation appear to be the predictability of enforcement rather than the content of individual laws and regulations.

Permits and requirements related to the construction of operational facilities and company registration were the biggest problems among the operating licenses. The Lao PDR ranks better on this measure of regulation than it does in most areas, as fewer than 10% of firms ranked business licensing as a serious obstacle. However, this may be due to selection bias—existing firms are generally less concerned about the cost of starting a business than are potential entrepreneurs. Although some licensing procedures affect firms'

⁴³ Data from the Survey of Informality in the Lao PDR as background study for the Lao PDR Investment Climate Assessment (2005).

⁴⁴ Mekong Private Sector Development Facility (MPDF) study of registration procedures (2006), presentation at Lao Business Forum, May 2006.



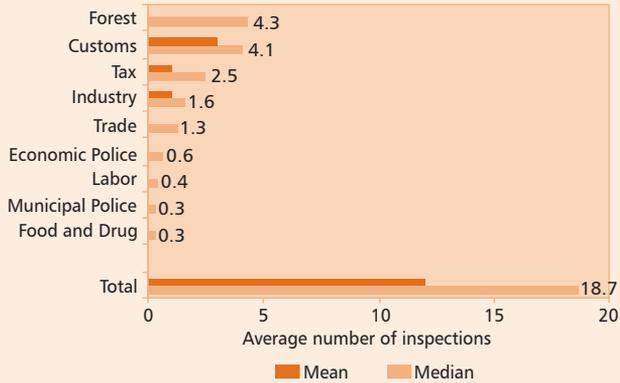
ongoing operations, they are often most burdensome on new firms that have yet to complete them. Existing firms have already completed many required start-up procedures; hence they are less likely to be concerned about them. Firms that rated business licensing as a serious problem were also asked what aspects of business regulation were most troublesome.

The total number of inspections in the Lao PDR is higher than in any comparator country other than the PRC, although the Lao PDR performs better than some of the comparator countries with respect to the time spent dealing with government regulations. As discussed earlier, this does not appear to be due simply to a high number of inspections by the agencies that typically perform the most inspections (e.g., the tax authorities and labor and social security departments, Figure 7.6).

The Forest Department is responsible for most inspections. The average firm reports having 4.3 inspections⁴⁵ from the Forest Department in a year (Figures 7.12 and 7.13). Inspections by this agency are heavily concentrated in a few firms—mostly in the wood-processing sector. In fact, the median firm reports no inspections from the Forest Department.

⁴⁵ This includes firms from sectors other than wood processing.

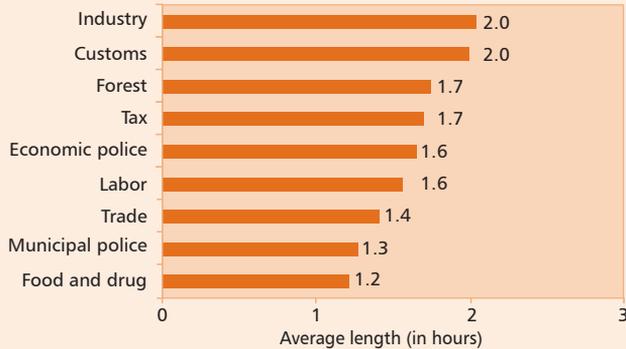
Figure 7.12 Most inspections were from forest, customs, and tax departments



Note: Outliers more than three standard deviations are dropped when calculating averages. Because of this procedure individual averages do not exactly sum to the total average.

Source: Lao PDR ICS, 2005.

Figure 7.13 ...and the same agencies, plus industry, caused the longest time spent dealing with regulators



Note: Outliers more than three standard deviations above or below the mean are dropped when calculating averages.

Source: Lao PDR ICS, 2005.

The Customs Department is responsible for the second greatest number of inspections—4.1 on average, and 3.0 for the median firm. The Tax Department and the Industry Department have the next highest numbers, with 2.5 and 1.6 for the average firm and 1.0 for the median firm. Other agencies inspect fewer than half the firms in the sample (i.e., the median firm is not inspected) and, except for trade, inspect the average firm less than once a year.

Nearly all inspections last less than 8 hours, and most inspections take less than 1 hour.⁴⁶ For all the agencies, the median firm reported that the inspections lasted 1 hour. After discarding the outliers, there is relatively little variation in average length. The longest average length was 2 hours for the industry and customs departments,⁴⁷ and the shortest was 1.2 hours for the Food and Drug Department.⁴⁸

Firms that are inspected more also have a higher “time tax” of dealing with regulators. When we regress the time that management spends dealing with regulations on the total number of inspections, the coefficient on total inspections is positive and statistically significant (Appendix Table 5).

Labor, tax, and industry department inspections appear to be the most time consuming. When we regress management time spent dealing with each type of regulation, the size and statistical significance of the coefficients are different for different types of regulation—although the coefficients are positive in all cases (see column 2 in Appendix Table 5). An additional tax inspection increases total management time spent dealing with regulation by 0.31 percentage points, while an additional Industry Department inspection increases the total time spent dealing with regulation by 0.35 percentage points. Although the coefficients on Labor Department and Forest Department inspections are statistically insignificant at conventional significance levels, the point estimates of the parameters suggest that an additional inspection increases the total time by 0.88 and 0.07 percentage points, respectively.

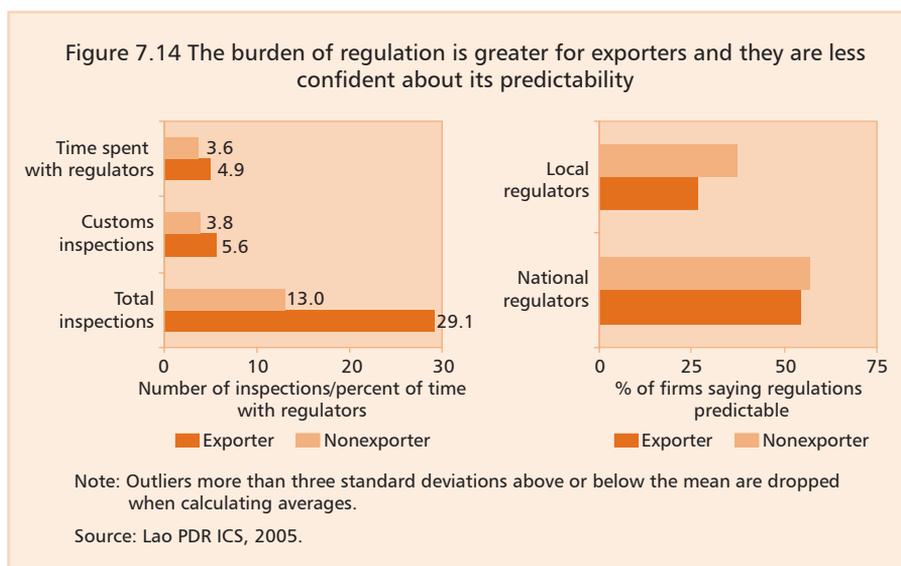
7.3. Differences among firms

By most measures, exporters face a higher regulatory burden than non-exporters (Figure 7.14). Senior management of exporting firms spent a greater portion of their time dealing with government regulation than nonexporters (4.9% of exporters’ time, compared to 3.6% of nonexporter’s time). Exporters also reported a higher number of inspections (29.1 per year for exporters compared to 13.0 per year for nonexporters). Although the average exporter reported more

⁴⁶ Outliers were dropped. One firm reported a customs inspection that took 48 hours (fewer than 1% of the firms reported customs inspections), and three firms reported inspections by the Industry Department that took between 20 and 30 hours (fewer than 1.5% of the firms reporting industry inspections).

⁴⁷ While the Customs Law established the right of authorities to inspect imports and exports, risk management techniques are shown to reduce the time spent and number of inspections, with similar results in terms of discouraging illegal imports and exports.

⁴⁸ As noted previously, we consistently discard outliers that are more than three standard deviations above or below the mean when reporting means.



customs inspections than did nonexporters (5.6 per year compared to 3.8 per year for nonexporters), this is too few to account for the entire difference in the total number of inspections. This suggests that a greater burden is imposed on exporters due to their status. It should not be discounted, however, that some firms, including exporters and foreign direct investors, might tend to spend more time dealing with government regulations for their own vested interests, or to obtain special privileges.

Exporters perceive regulations to be more unpredictable than nonexporters. Fifty-four percent of exporters said that national regulations were predictable, while 57% of nonexporters said the same. Exporters were even more concerned about local regulation—only 26% of exporters said local regulations were predictable, compared to 37% of nonexporters.

Overall, the results of the ICS suggest that the regulatory burden is slightly greater for exporters than for nonexporters. For example, the average exporter is about 10 times the size of the average nonexporter. If large enterprises face a greater regulatory burden than nonexporters, then this might account for the difference between exporters and nonexporters. To control for other differences between exporters and nonexporters, we ran several regressions with time spent dealing with regulations, total number of inspections, and how predictable the firm claimed regulations are (see Appendix 2 on manufacturing).

Textile firms report the greatest “time tax” spent dealing with regulators.

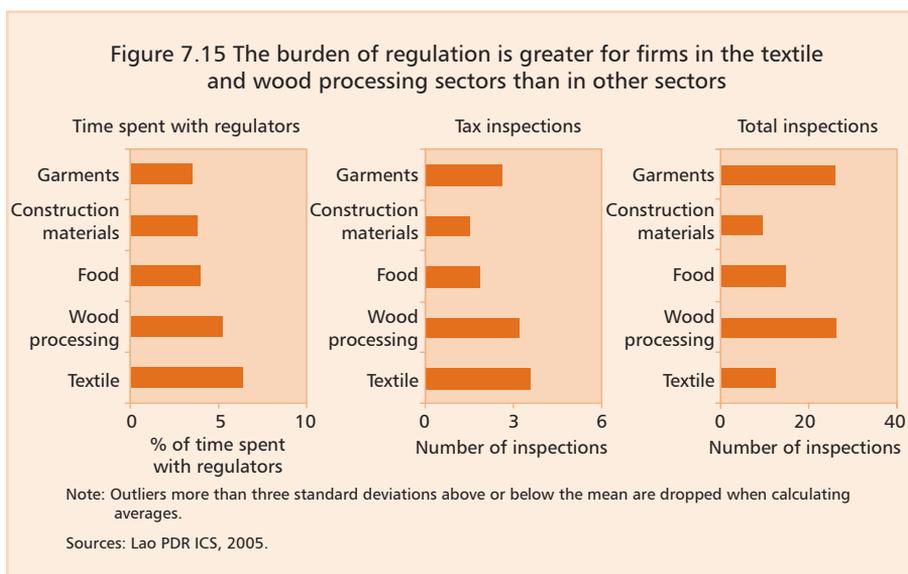
Overall, firms in the textiles sector report that their senior management spends an average of 6.3% of their time dealing with government regulations. The burden is also high for wood processing firms, which spend more than 5% of senior management time dealing with government regulations. Senior management spends less of their time in the three other industries—from 3.5–4.0%.

Wood processing firms report more inspections than other firms.

Most of these inspections are from the Forest Department. The average wood processing firm reports being inspected 26 times per year. These inspections account for a significant share of total inspections—the average wood processing firm is inspected 12 times per year.

Garment firms report that they face a relatively high number of inspections—25 per year, on average (Figure 7.15). Despite the high number of inspections, garment firms report, on average, that their senior management spends only 3.6% of their time dealing with regulations, which is lower than in any other sector.

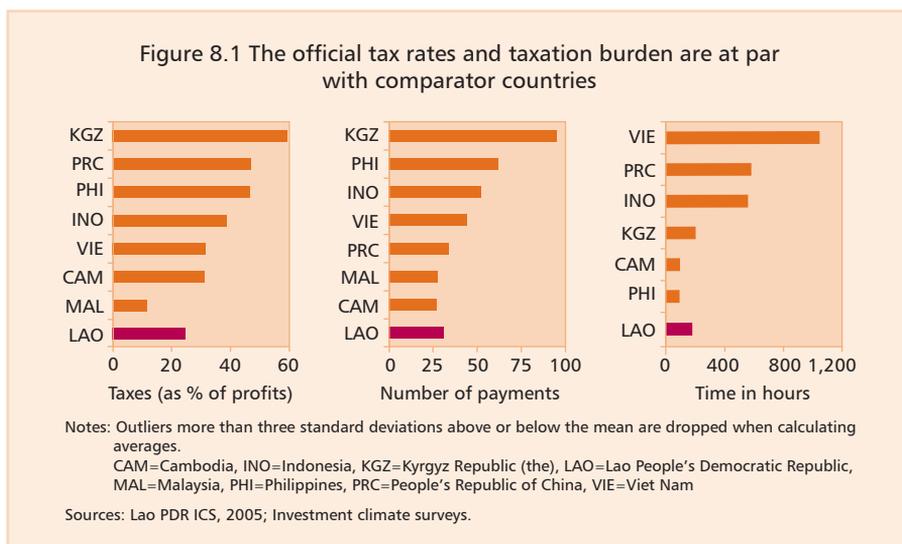
There are several reasons why the number of inspections and time spent with regulators is not perfectly correlated. Inspections are only one part of regulation and different inspections impose a different burden on enterprise managers. At the enterprise level, some types of regulation, i.e., tax inspections and inspections by the industry department, are more highly correlated with



the overall burden of regulation than others. This also appears true at the sector level. Tax inspections, for example, are more highly correlated—although not perfectly correlated—with management time spent with dealing with regulatory requirements. Bribes may also reduce the time spent dealing with regulators (see Section 11 on governance).

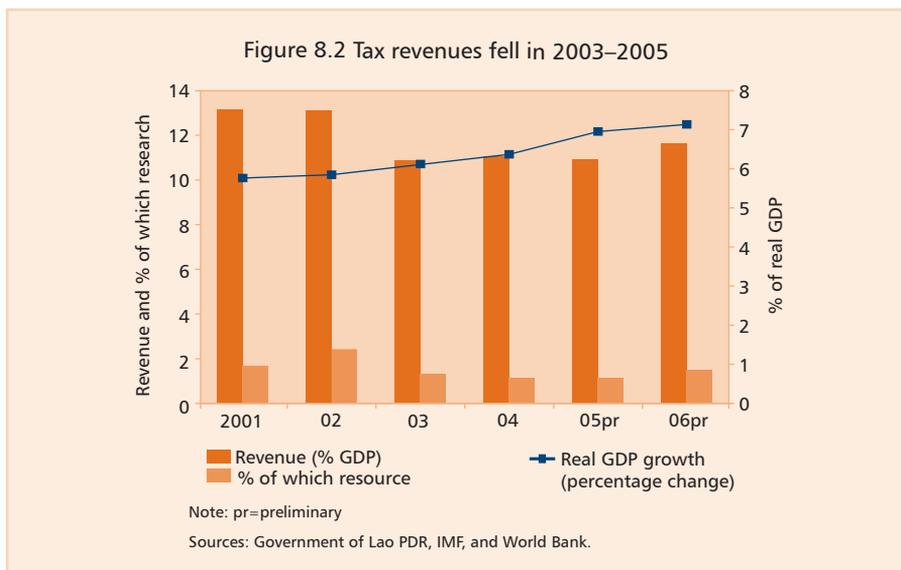
8. Taxation

Tax rates in the Lao PDR are not excessively high by international standards. As Figure 8.1 shows, taxes as percent of profits, number of payments required, and the amount of time it takes in the Lao PDR are below average among the comparator countries. According to the Doing Business Report, firms in the Lao PDR pay fewer taxes than firms in the most comparator countries. Nevertheless, more than 30% of firms said that both taxes and tax administration are severe obstacles to their businesses.



Although tax rates in the Lao PDR are not high by international standards, some evidence suggest that tax collection is inefficient and that too many exemptions have been granted. In comparison with similar countries, the Lao PDR does not lag too far behind in terms of percentage of non-resource taxes collected as percentage of nonagricultural GDP.⁴⁹ However, between 2001 and 2005, tax revenues stagnated and fell as a percentage of GDP

⁴⁹ IMF Article IV, 2004.



(Figure 8.2). Under-collection of customs revenues was wide ranging and often not justified. Losses of revenue due to exemptions⁵⁰ and other legal reasons have been estimated at about 50% of the total revenue. While revenue losses in the rest of the tax system are hard to pin down, some evidence suggests that they are of similar order of magnitude. For example, one analysis by the MOF estimated a tax gap⁵¹ of around 70% under the given rates. Although the statutory taxes on small and medium businesses are 25–35%, calculations using data from the Enterprise Baseline Survey (EBS) suggests that mean value of the effective tax rate for the Lao PDR firms is around 8.6% with a median of 5%, consistent with the results of the tax gap analysis.⁵²

8.1. Perceptions of firms

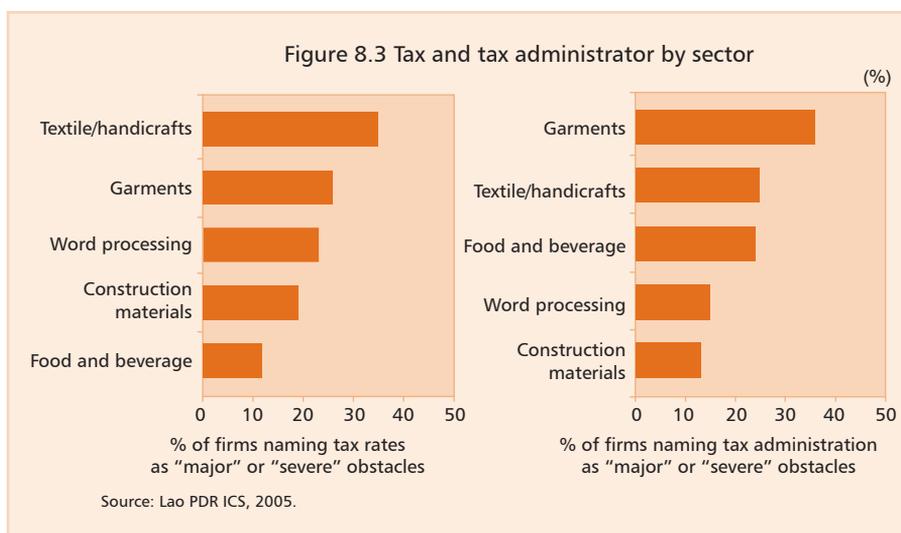
More than 30% of firms cited tax or tax administration as major or severe obstacles. In some sectors, even a higher number of firms found taxation to be a severe constraint. While this is lower than the average for the Asia and

⁵⁰ Customs exemptions in Customs Law are guided by clauses 43 (general), 44 (investment promotions), and 45 (diplomatic and international organizations). Importantly, there are temporary exemptions on raw materials and materials for construction projects. Literature suggests that tax exemptions granted in the past have reduced tax collection in comparison to potential. Poor skills of the tax collectors and low capacity of the tax bodies have also been mentioned among the main reasons for low revenues.

⁵¹ Tax gap is equal to loss of revenues due to poor enforcement of the current tax system.

⁵² See Lord (2006), this tax study has been supported by the European Commission.

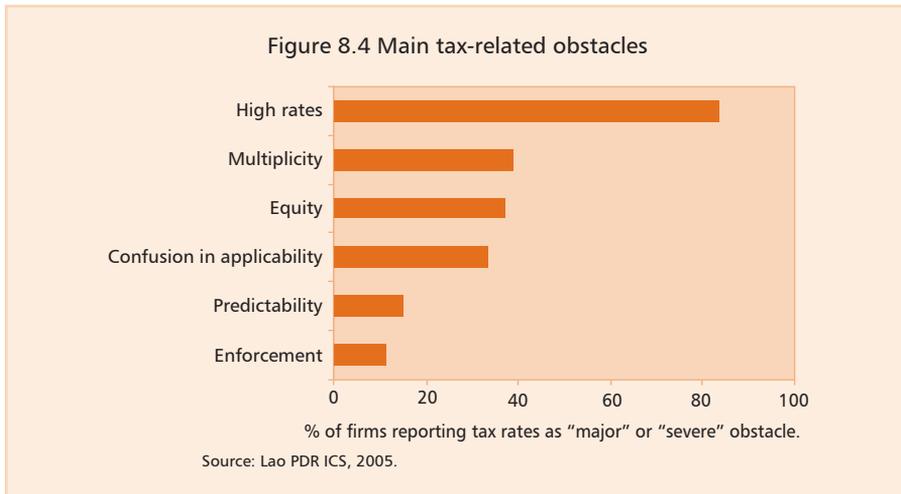
Pacific region, this is higher than the proportion of firms in Viet Nam (14%) and Cambodia (18%). There are also significant differences by sector and types of firms. Thirty-five percent of surveyed firms in the textiles sector perceive tax rates as a serious issue. More than 30% of firms in garments perceive that tax administration is a serious problem (Figure 8.3). The textiles and garments sector are in a worse position as nearly all firms surveyed in these sectors complained gravely over taxes and are bothered by high rates.



Among the surveyed firms that saw tax rates as a serious constraint, 84% were most concerned about high rates (Figure 8.4).⁵³ In the ICS, about 40% said that a multiplicity of local taxes was a serious obstacle; 37% said equity was a problem, and 22% said understanding applicability was a constraint. Fewer firms were concerned about predictability or enforcement.

Foreign-owned firms and exporters are more concerned about tax administration than domestic firms. In particular, exporters were more likely to be concerned about tax administration than nonexporters (29% and 15% of firms respectively), but not about tax rates (23% and 20% respectively). Thirty-six and thirty-four percent of foreign-owned firms respectively said that tax rates and tax

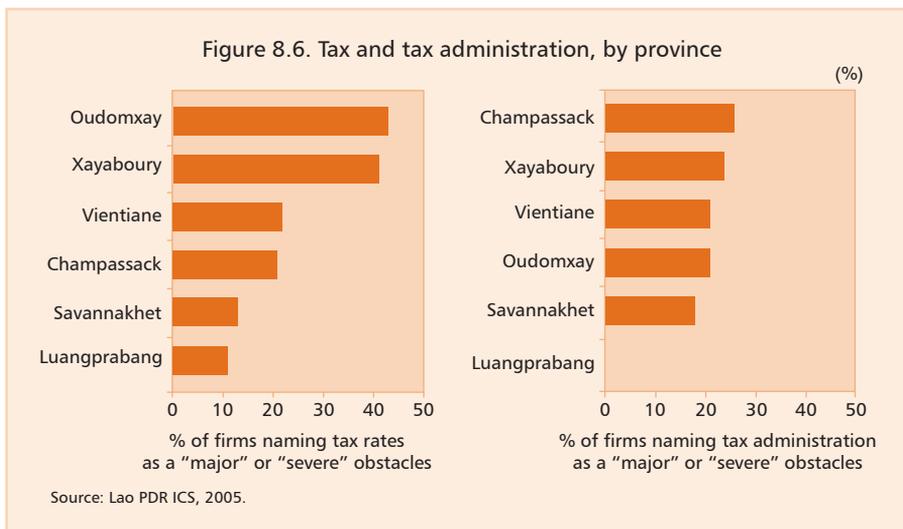
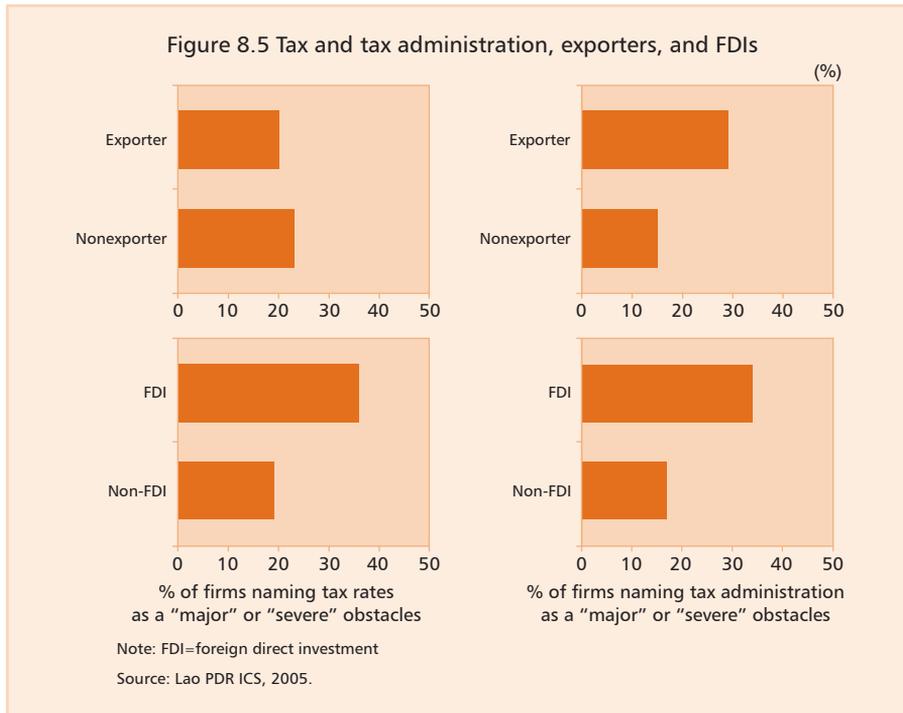
⁵³ It is common for firms to complain about taxation—especially about tax rates. In over half the countries where investment climate surveys have been completed, tax rates are among the top three obstacles and in over four fifths they are among the top five obstacles (World Bank 2004). This result is also consistent with a GTZ study on SMEs in which 43% of the firms interviewed indicated “too high taxes” as one of their major problems. See also Schultze (2003).



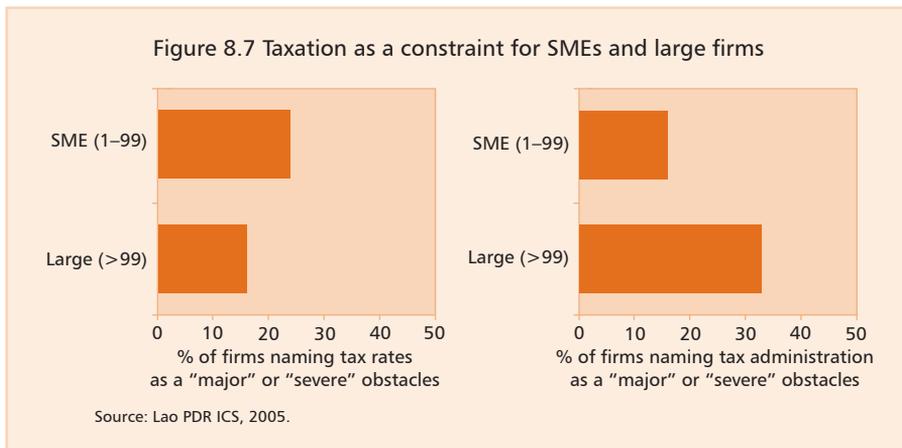
administration were a problem. However, only 19% and 17% of domestic firms said tax rates and tax administration was a problem respectively (Figure 8.5). While both foreign and domestic firms care about high tax rates, foreign-owned firms were more concerned about confusion related to applicability (48% of foreign firms compared to 27% of domestic firms) and were less concerned about equity (18% compared with 45%).

A greater proportion of firms in Oudomxay (43%) and Xayaboury (41%) appear burdened by tax rates than firms in the other provinces (Figure 8.6). A closer look at firms in these provinces reveals that their foremost issue is high tax rates, more so than other issues (e.g., multiplicity of taxes, predictability, confusion in applicability, etc.).

Tax administration is also an important concern, with 20% of firms saying it is a serious problem, but significant differences among firms are present. In the garments sector, 36% of firms find tax administration to be a big obstacle. The issue of tax administration is particularly strong in Champassak. Twenty-six percent of firms in this province viewed tax administration as a major or severe obstacle. Data show that Champassak, Luangprabang, and Savannakhet have the highest frequency of tax inspections, averaging five to six times a year. While inspections may be necessary to monitor compliance and validate tax declaration of firms, a review of such policy to ensure consistency and transparency is needed (see Section 11 on governance).



For large firms, tax administration is perceived to be a more serious issue than tax rates, while for SMEs tax rates appear to be more critical (Figure 8.7). For small firms, the issues of tax rates and administration are interrelated, due to the current system in place (see next section). The difficulties faced by SMEs thus arise from the application of tax rates: determining the amount of tax to be paid opens discretionary opportunities for tax collectors, and thus it is understandable that small firms complain about rates.



8.2. Practice in tax and tax administration

Firms register for tax purposes when they register the business. They pay a registration fee based on turnover estimation. The Tax Department also requires enterprises to reregister with their local tax office at the beginning of each year. There have been complaints from firms that encounter delays in the issuance of renewals of tax license. These were due not so much to arrears in tax payments, but to the inability of tax offices to handle renewals of registration.

A discretionary contract system for tax rates estimation is employed in the Lao PDR. This system is based on negotiation between tax officers and entrepreneurs. It establishes a flat monthly rate based on the assessment of annual turnover. The turnover is based on sales, expenses, location, and others. For large and medium firms, the estimation is done by the firm itself. For small firms or those earning less than KN100 million (about \$9,500), taxes are estimated during the negotiation between the tax officer and taxpayer. Poorly maintained accounting system makes it difficult for tax officers to determine a firm's annual revenues and gives room for discretion (Box 8.1). Such system creates opportunity for firms to underreport earnings and for taxpayers to extract informal payments

(see Chapter 4 and Sung, 2005). The law provides directives to estimate wealth of an entrepreneur, but does not specify the method.⁵⁴ In addition, tax payments are done through cash transactions with the provincial and district tax offices, increasing incentives for informal practices.

Box 8.1 A Negotiation under the contract system

A service provider is helping a restaurant in the negotiation with the District Tax Office. First they agree on bringing the estimation of the annual turnover below the KN200 million threshold (less than \$19,000). Because of this, the owner will no longer have to keep accounting books. The real turnover of the firm is actually estimated to be at least twice the threshold figure. The tax inspector makes a first estimation of \$100 monthly fee, or \$1,200 per annum. The final fee is set at \$25 per month, plus a single payment of \$100 to the tax inspector. The total annual payment will then be \$400 (with only \$300 actually being collected by the Finance Office). In the next fiscal year, the Tax Office will try to renegotiate a higher tax fee.

Source: Interviews during the survey of informal firms.

The new tax law expands the coverage of small enterprises eligible for the contract regime. The new law enacted in October 2005 includes all enterprises having an annual turnover of less than, KN200 million. The previous law only covered those with annual turnover of KN100 million. Small businesses pay taxes following basic elementary accounting system, but micro businesses that do not apply standard accounting practices are subject to arbitrary assessments. In the EBS survey, about 60% of small businesses and 96% of all microenterprises do not maintain bookkeeping accounts. For those who do, there may be some doubts on the quality of records they keep.⁵⁵

The contract system and the two-tier accounting system stimulate businesses to register the company as small business at the district level. Going above the legal turnover ceiling of KN200 million (less than \$19,000 per annum) involves a much tighter set of accounting requirements. The potential tax reduction derived from the negotiation in the contract system and the complexity of the accounting system create incentives to register at the district level. Some estimates suggest that as many as 40% of companies are unregistered for tax purposes, see Chapter 4.

⁵⁴ Examples of misuse of the vagueness of the laws on both sides abound. For instance, tax officials would use visible items, such as cars, houses, and bank deposits in possession of an entrepreneur to estimate the turnover, while these may not be necessarily acquired from operation of the firm. The resulting disagreement is resolved during negotiations between the parties.

⁵⁵ See Lord, 2006.

On the Government's side, the misclassification of firms produces significant revenue losses. Over the last 3 years, the Tax Office has reported a decrease in the number of firms registered as medium sized for tax purposes (from 5,500 firms to 2,700 firms). This rapid reduction must be, at least in part, caused by the mere reclassification of companies from medium to small size. Small enterprises now account for 90% of total registered businesses. Of this figure, about 54% pays taxes under the contract system. The remaining 46% pay taxes through cards or tickets (Lord 2006; Quintana 2006). Anecdotal evidence shows that the tax unit operating at Vientiane's Morning Market is probably collecting less than 20% of its potential revenues, due mostly to such misclassification. A survey on tax registration⁵⁶ showed the existence of a parallel collection system under which 20% of the businesses in the sample were paying taxes under a scheme of unofficial tickets/cards. The percentage of unofficially collected taxes that actually reaches the Tax Office remains unclear.⁵⁷

The weak tax administration system creates possibilities and incentives for tax evasion and corrupt practices. Weak tax administration, low capacity of officials, and vague laws and regulations all contribute to informal practices and reduced revenues. The contract system thus leaves opportunities for abuse, which are exacerbated by the current system of tax administration. Low salaries of tax collectors are likely to drive them to accept irregular payments from firms negotiating for lower than the mandated tax payments.

9. Macroeconomic uncertainty

As ICS indicates, macroeconomic uncertainty is regarded as one of the top four constraints. Among the firms that rated macroeconomic uncertainty as a major or severe obstacle, about 80% considers exchange rates as a big constraint. This is despite the stable exchange rate in the last 2 years. In the past, a major issue discouraging the flow of investments into the Lao PDR has been the weak macroeconomic management and the impact of the Asian financial crisis. The incidence of double-digit inflation and sharp exchange rate depreciation were at its worse in the late 1990s, when the Bank of Lao PDR resorted to monetizing the budget deficit. The past events may be the reasons for the current concerns of firms, which point out the importance of continuing the successful efforts in maintaining a stable macroeconomic environment in the future.

⁵⁶ SIDA Tax Team at the National Tax Office, Ministry of Finance—February 2005, 105 businesses in Chantabouly district, Vientiane capital.

⁵⁷ Other forms of tax evasion undoubtedly have an impact as well. For example, textile-exporting firms are known to avoid taxes by under-declaring their export prices.

As in the experience of other countries in the region, the Lao PDR's kip has only gradually depreciated in recent years. After the financial crisis, FDI inflows in the Lao PDR deteriorated; this was largely due to its heavy regional dependence for FDIs and as a potential market for electricity exports (the energy sector has been the largest recipient of FDI), foreign savings, and trade tax receipts.⁵⁸ In 1997–1998, East and Southeast Asia accounted for about 80% of the Lao PDR's exports and imports. Given poor economic conditions in the region in the aftermath of the Asian financial crisis, exports of the Lao PDR fell by about 11% in 1999. It may still take some time before a number of firms take some comfort on the business environment and pursue more aggressive investment decisions. This also highlights the importance of maintaining macroeconomic stability in the long and medium term.

The Lao PDR Business Forum is a good beginning for improving the credibility of the Government's policy toward the private sector. As shown by Business Forum processes in other transition countries, the Lao PDR Business Forum will foster dialogue between private sector and government and is expected to instill greater confidence among private sector businesses. The Government of the Lao PDR prepared for the first semi-annual business forum by conducting central and provincial private sector focus groups. With support from the Mekong Private Sector Development Facility working group meetings have been conducted with the representatives of the private sector in three of the four sectors (tourism, manufacturing, service and trading), and discussions on energy and mining will be held starting from the next Forum.

10. Finance

The financial sector in the Lao PDR remains underdeveloped, with banks accounting for more than 97% of total assets.⁵⁹ On one common macroeconomic measure of financial sector, development (namely, the ratio of money and quasi-money [M2] to GDP) the financial sector is smaller than in any of the comparator countries (with a value of 18%). It is almost equal to 20% in Cambodia, 42% in Mongolia, 96% in Malaysia, and 175% in PRC. The economy is widely dollarized and about 70% of monetary payments are made in foreign cash. The entire banking system has only about \$500 million (23% of GDP) of assets and \$250 million (11% of GDP) of loans. Two state-owned banks, Banque pour le Commerce Extérieur Lao (BCEL) and Lao Development Bank (LDB) hold half of the financial system assets. A third state-owned bank, the Agricultural

⁵⁸ See Okonjo-Iweala et al., 1999.

⁵⁹ This section draws heavily upon Fratzscher, Rose, and Vongviriyatham, 2005.

Promotion Bank (APB), is a policy bank that focuses on rural and agricultural development, but which also engages in some commercial banking activities.

Credit at state-owned banks is highly concentrated, even though about 70% of all loans outstanding are to the private sector. BCEL, the largest bank by assets and loans, carries only a small number of loans on its books. However, 10 of its customers account for almost three quarters of its loan flow, with one client accounting for more than 30%. LDB seems to have a lower credit concentration and a more even spread of loan value across various loan sizes. BCEL has traditionally been more deeply involved in lending to the state sector, with 40% of its total portfolio devoted to that sector, while LDB's state-sector loans have always been low.

Non-state commercial banks hold over 40% of the system's assets. Microfinance and all non-bank intermediaries hold just over 2.5% of total assets. Among the non-state banks, three private domestic banks account for about 31% of loans and six small foreign banks account for the remaining 14%. The Lao PDR currently has no framework to allow companies to raise capital through public offerings of either equity or debt. Private banks are also weak and rely upon fee-based activities, rather than lending, for most of their income. The private banks that have adopted the most aggressive stances toward lending have nonperforming loan portfolios similar to those of the state-owned banks. The microfinance industry is also underdeveloped. It is constrained by public interventions, lack of a regulatory framework and the prevalence of short-term, subsidized development projects. There is also a general lack of awareness of microfinance principles, international best practice, and a lack of understanding and practice of sustainable interest rates, methodologies and controls and systems.

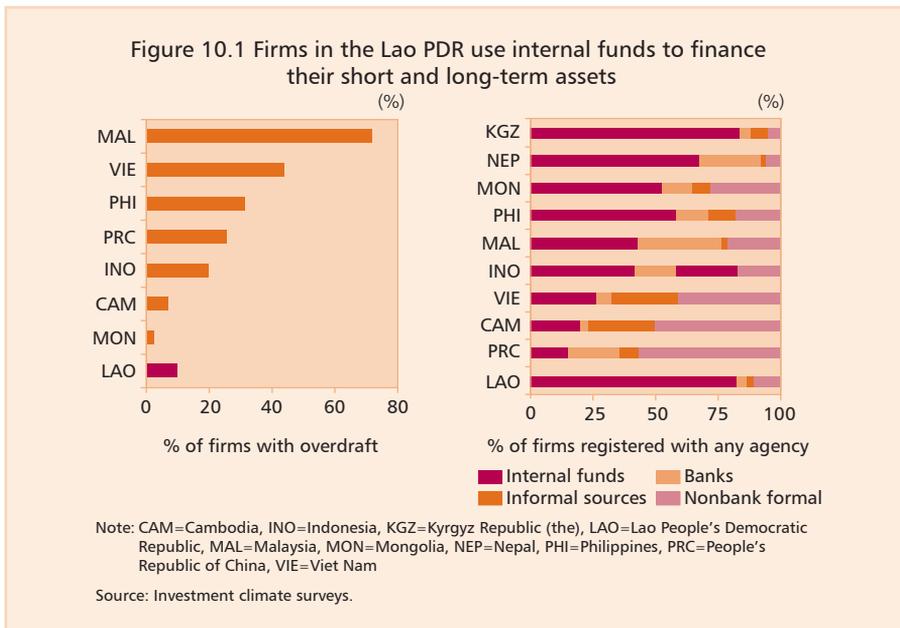
Effective exclusion from the formal and semiformal financial systems drives up the cost of financing for small enterprises. Informal moneylenders provide an additional source of capital. Because of the high risk involved and the lack of legal recourse in this sector, interest rates tend to be very high, ranging from 5–10% per month to as much as 50% per day. The high cost of borrowing from the informal sector makes it very difficult for small firms in the Lao PDR to invest.

10.1. International comparison

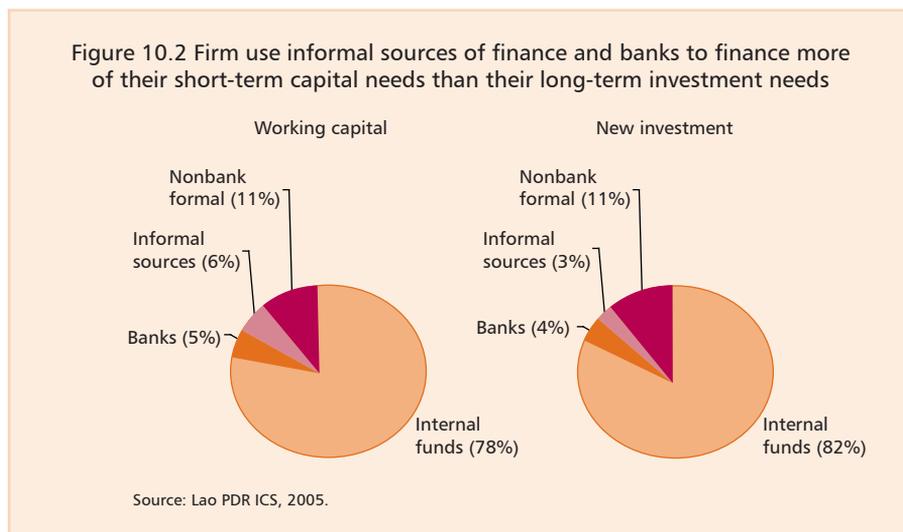
Firms in the Lao PDR do not rely heavily on bank financing for their short-term, long-term, or new investments. This is not surprising, given the

underdeveloped banking sector in the Lao PDR; the near insolvency of the state-owned banks; and the importance of the state-owned banks relative to the banking sector. Only about 10% of firms in the Lao PDR have overdraft facilities (Figure 10.1). Only firms in Mongolia and Cambodia are less likely to have overdraft facilities. On the average, firms reported financing only about 4% of their new investment through bank financing. In comparison, firms in Viet Nam reported financing about 26%.

Firms in the Lao PDR rely heavily on retained earnings and internal funds to finance both new investment and working capital (Figure 10.2). Given the relatively modest amounts of new investment financed through the formal banking sector, this is not surprising. Firms also reported that they financed about 11% of their new investment and working capital through non-bank formal financial sector. Based on ICS results, the most important way of finance is through equity financing and sales of shares. Given that no active market allows firms to raise capital through public offerings either of equity or debt in the Lao PDR, these sales are presumably private offerings.⁶⁰



⁶⁰ Research Committee on Developing Bond Market in the Lao PDR.



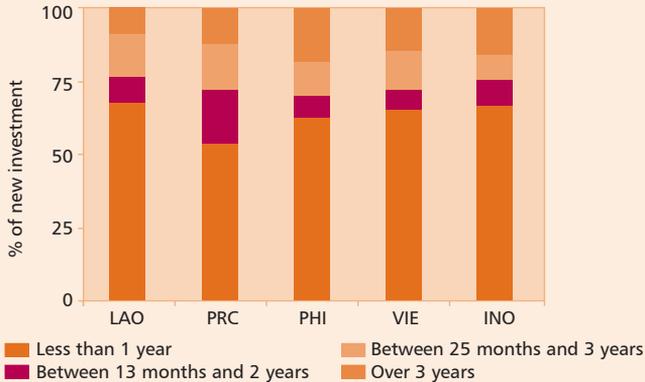
Financing of short-term assets is done via informal sources. Firms only report financing about 3% of new investment and 6% of working capital through informal sources such as moneylenders and family and friends. This suggests that informal financing is more commonly used to finance short-term assets. In part, the difference reflects that firms were more likely to use moneylenders to finance short-term rather than long-term assets—something that might not be surprising given that loans from informal moneylenders are often relatively expensive. However, during informal interviews with firms in the country, many indicated that informal moneylenders were an important source of financing. To an extent, firms might be unwilling to mention informal borrowing in formal interviews due to concerns about the legality of the activity (see Chapter 4).

Few firms reported having long-term loans. Firms were more likely to use banks to finance their short-term working capital needs than they were to finance new investment (Figure 10.2). Only about 9% of loans had maturities of more than 3 years and 68% reported maturities of less than 1 year (Figure 10.3).

The few firms with bank loans—about one quarter of the sample—report paying high nominal interest rates, which are, however, low in real terms (Figure 10.4). The median firm reported an annual interest rate of about 12% in the Lao PDR, compared to about 6% in PRC, 10% in Viet Nam and Cambodia, and 11% in the Philippines. Real rates, however, appear to be quite modest and even negative. Between 2000 and 2004, inflation averaged about 13% in the Lao PDR. This indicates that those who saved in local currency were

being penalized with losses in real purchasing power, which may have then made it quite difficult for banks to pool more savings to finance their lending operations.

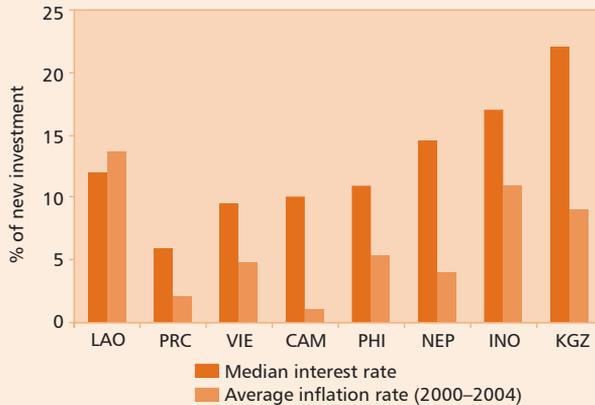
Figure 10.3 Few Firms in the Lao PDR report having loans with terms of greater than 3 years



Note: INO=Indonesia, LAO=Lao People’s Democratic Republic, PHI=Philippines, PRC=People’s Republic of China, VIE=Viet Nam

Source: Investment climate surveys.

Figure 10.4 Nominal interest rates are relatively high in the Lao PDR— but inflation is also high meaning that real interest rates are relatively low



Note: CAM=Cambodia, INO=Indonesia, KGZ=Kyrgyz Republic (the), Lao=Lao People’s Democratic Republic, NEP=Nepal, PHI=Philippines, PRC=People’s Republic of China, VIE=Viet Nam

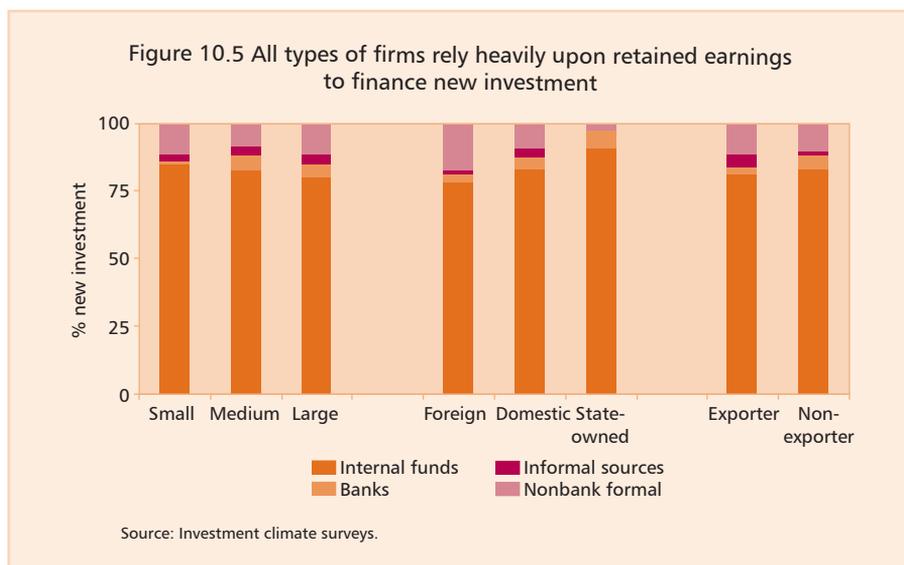
Source: Investment climate surveys.

10.2. Differences between large and small firms

Access to finance is significantly better for larger firms. Larger firms in the Lao PDR are more likely to have a loan, an overdraft facility, finance more new investment and working capital through bank financing, and have longer-term loans than other enterprises. For the average firm in the sample, expanding the firm size by 10 workers increases the likelihood that the firm has a bank loan by about 5 percentage points, the likelihood of having an overdraft facility by 2 percentage points, the share of working capital financed through bank financing by 1.2 percentage points, the share of new investment financed through bank financing by 1.1 percentage points, and an average loan duration of 2 months.

Small firms appear to use internal funds more than medium or large firms, even though such funds were the most important source of financing for all types of firms. For financing of working capital and new investment through internal funds, the coefficients on the number of workers is negative and statistically significant in both regressions (see also Appendix Table 7).

Small firms do not appear to rely heavily upon informal sources of finance either—presumably, due to their high cost. All groups use informal sources of financing for about 2–3% of their investment needs (Figure 10.5). Most of this was money from family and friends. None of small enterprises and only



three mid-sized and one large enterprise used informal moneylenders to finance either new investment or working capital. During field interviews, managers often said that informal financing was available; however, a few appear to use it. The high cost of borrowing from moneylenders discourages firms from using this source of financing very heavily.

Firms of all sizes rely on nonbank formal sources of financing such as equity to finance new investment. About 10% of small, 15% of mid-sized, and 12% of large enterprises reported using equity financing. Other sources of formal financing were less common. Only one mid-sized firm and one large firm reported using credit from suppliers or customers.

Exporters rely less heavily on the banking sector than non-exporters. After controlling for other factors (e.g., size, ownership, sector of operations, and location), exporters are 31 percentage points less likely to have a loan, 18 percentage points less likely to have an overdraft facility, finance 11 percentage points less of their working capital, and fund 10% less of their new investment through bank loans. The average duration of exporters' loans is about 19 months shorter than similar nonexporters (Figure 10.6). Many studies in both developed and developing countries have shown that exporters tend to be more efficient than other firms—something that would presumably make them relatively better candidates for loans.⁶¹ There is also little evidence that exporters have less demand for loans than non-exporters—exporters were less likely to say that they did not want a loan. Exporters were more likely to have had loans rejected than non-exporters, and were less likely to say that interest rates were too high.

SOEs do not enjoy preferential treatment with respect to bank loans. This does not appear to be due to low demand. Among firms without loans, SOEs were less likely to say that they did not want a loan than other firms and were more likely to have had a loan rejected. Partially state-owned firms are unable to rely upon informal sources of credit to finance new investment and rely only marginally on financing from other formal sources. As a result, state-owned firms are especially reliant upon retained earnings to finance both new investment and working capital (Figure 10.5).

Foreign-owned firms are less likely to have loans or overdraft facilities than other firms and finance less of their working capital and new investment needs through the banking sector than other firms. One issue seems to be the

⁶¹ The large literature on the relative efficiency of exporters and non-exporters is summarized in Tybout, 2003.

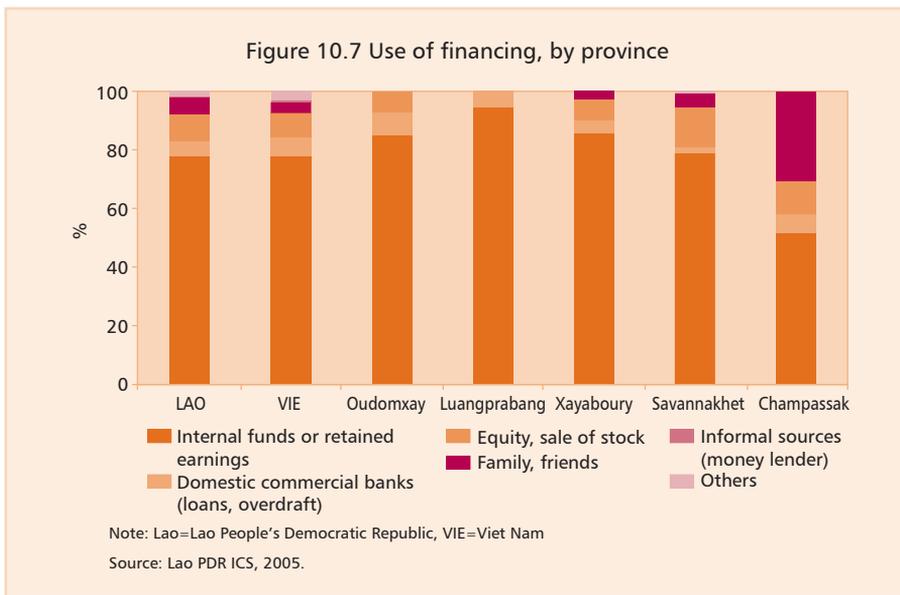


difficulty of foreign-owned enterprises in getting loans from local banks. However, foreign-owned firms (FOFs) are less likely to need loans because they can get financing from other sources such as international banks or from their parent companies. Consistent with this, FOFs were less likely to say that the loan application was rejected; were less likely to say they did not have a loan because the loan process was too difficult; were less likely to say interest rates were too high; and were more likely to say that they did not want a loan.

Having an educated manager does not seem to help when getting loans.

Given that one of the major complaints of firms without loans was that the loan process was too complicated, it seems plausible that firms with better-educated managers might be able to negotiate the loan process more easily. This does not seem to be the case. Managers with vocational education appear to get slightly longer-term loans—about 9 months longer than managers with only a secondary education. Managers with university education were less likely to say that the loan application process was too difficult. However, university-educated managers were also more likely to have their loan applications rejected and were more likely to need a loan. Although better-educated managers were less concerned about complicated application procedures, there is little evidence that they found access to finance easier.

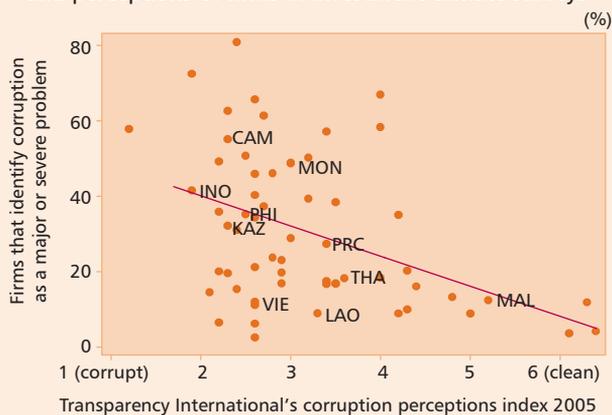
Despite Vientiane’s favorable location, only modest differences in access to credit are detected across regions. Firms located in the North were more likely to use retained earnings and firms located in the South were more likely to use family or equity sale to finance their investment (Figure 10.7). The regression analysis of the coefficients on a Vientiane dummy variable are however statistically insignificant (Appendix Table 7). In fact, the point estimates were negative in all cases, suggesting that firms in Vientiane were less likely to have a loan or overdraft facility, used less bank financing, and had shorter-term loans than firms in the North of the country. Overall, this suggests only modest differences in access to credit across regions.



11. Governance

Only around 10% of firms named any issue related to governance as a major or severe constraint to their business. The combined governance indicators in Figure 5.2 include corruption, crime, theft and disorder, anti-competitive practices, legal system, and conflict resolution. The response to each issue among these was even lower than 10%. While Transparency International ranked the Lao PDR to be as corrupt as the PRC in its corruption perception index, the perceptions of firms in the Lao PDR differ from perceptions of the respondents to Transparency International’s survey, as well as from the perceptions of firms in the PRC (Figure 11.1).

Figure 11.1 Transparency international corruption perception index and perceptions of firms in investment climate surveys



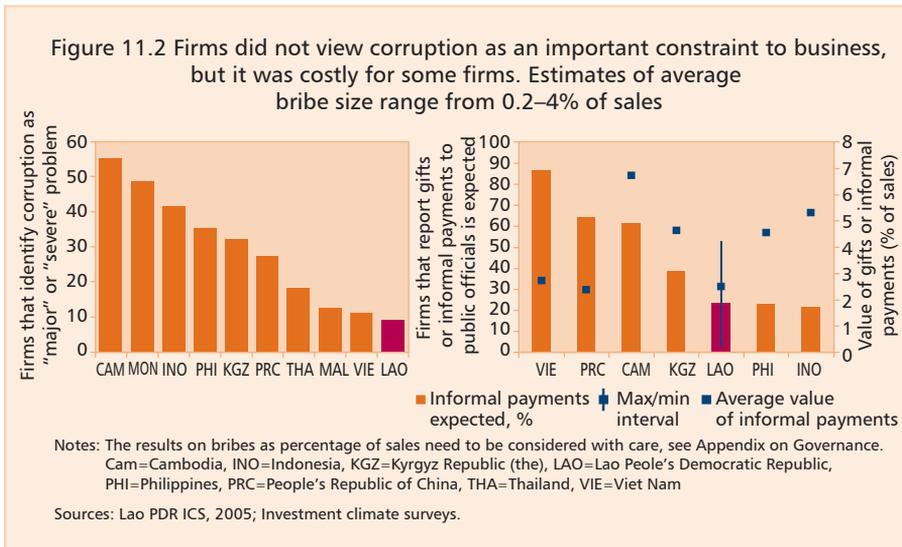
Notes: The line corresponds to the predicted investment climate survey corruption score (i.e., percentage of firms that identify corruption as a major or severe problem) from a regression on Transparency International's Corruption Perception Index 2005 and a constant for a sample of 61 countries, where the slope is equal to -8.0 with standard error equal to 2.3 . CAM=Cambodia, INO=Indonesia, KAZ=Kazakhstan, LAO=Lao People's Democratic Republic, MAL=Malaysia, MON=Mongolia, PHI=Philippines, PRC=People's Republic of China, THA=Thailand, VIE=Viet Nam

Sources: Investment climate surveys, various years; Transparency International, Corruption Perception Index 2005.

Corruption is not considered a binding constraint by the firms at this stage. It is less important than infrastructure, regulation, or taxation issues. Perceptions of corruption in the Lao PDR compares very favorably with neighboring countries and firms do not perceive corruption as a problem (Figure 11.2). Only 9% of firms in the Lao PDR identify corruption as a constraint. Some indicators, however, point to the possibility of corruption becoming a problem once the other constraints are eliminated or cease to be binding. For example, while 50% of firms said that bribes were never expected, the other 50% said that bribes were always (24%) or sometimes expected (26%).

ICS provides somewhat contradicting evidence on the size of an average bribe paid to officials. Depending on the question and units of measurement, the average bribe to a government official as percentage of sales varied between 0.2% and 4% of sales (see Appendix 3 on Governance for more detailed calculations, and Figure 11.2).

These contradictions may be a direct consequence of measurement problems or an indication of corruption being created by cumbersome regulations and legalized discretion. For example, bribes “to get things done”



may help firms navigate through the unnecessarily cumbersome regulations or to deal with discretionary taxation. Their incidence and size would then go down with simplification of regulation, increased predictability of regulations, and elimination of discretion in tax administration. However if this is not the case, corruption may become a problem after other constraints have been eliminated or mitigated. More research is, therefore, needed to conclude on the relative importance of corruption as a constraint to investment climate. The results that ICS gives are presented as follows.

Firms in the Lao PDR were less likely to report that bribes were expected during inspections of different agencies than firms in Viet Nam or Cambodia, but more likely than firms in Indonesia or the Philippines. Firms were asked whether bribes or gifts were expected during inspections by different agencies. Figure 11.3 shows the percentage of firms that said bribes were at least sometimes expected during inspections by three agencies: the tax authorities, Labor Department, and municipal police.

Import and export licenses are especially burdensome when informal payments are expected "to get things done." Supply chain study in the garment industry indicates that informal payments are also expected at about 3% of value added, from both cut-make-trim (CMT) and free-on-board (FOB) producers (see GDS 2006 and Box 13.1). Champassak and Savannakhet also have the highest proportions of firms that experience making informal payments to tax inspectors based on the responses of around 50% of the surveyed firms. Even beyond

inspections, firms are expected to pay for infrastructure connections (electricity, water, and mainline telephone), construction-related permits, import licenses and main operating licenses, as shown in Table 11.1. These additional hidden and unpredictable costs may impose comparatively high fixed costs on small firms.

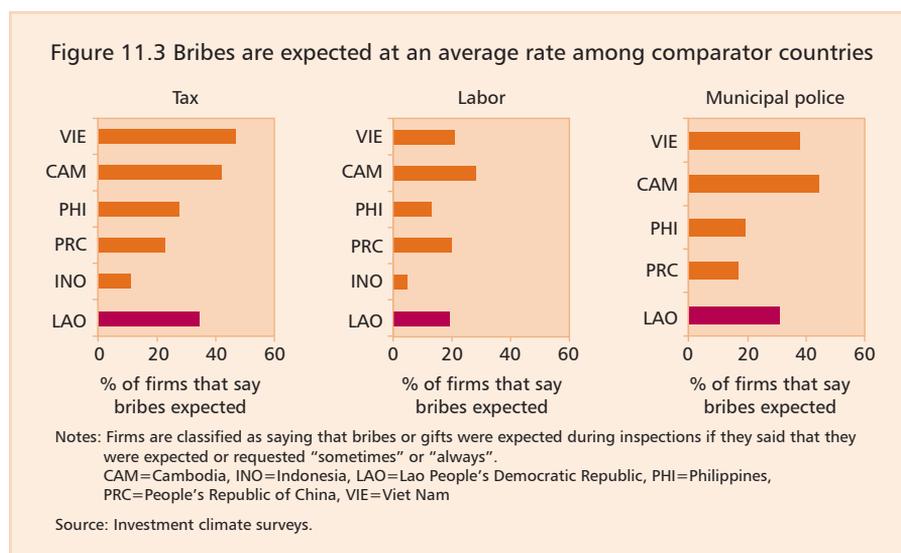


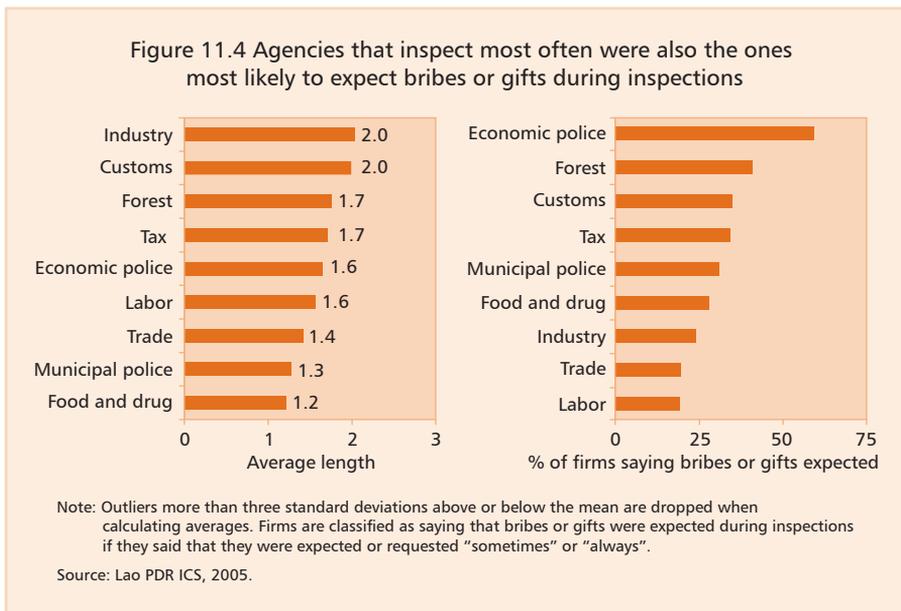
Table 11.1 Bribe tax in public services among comparator countries

	Percentage of firms that report gifts or informal payment are expected						
	LAO	CAM	PRC	INO	MON	PHI	VIE
Always/Yes							
Electrical connection	14.8	7.4	5.6	4.0	–	4.0	17.9
Water connection	23.1	5.4	–	2.7	–	–	12.3
Mainline telephone connection	11.8	3.2	5.5	4.3	–	2.4	8.3
Construction-related permit	19.2	–	–	6.9	31.6	16.0	38.1
Import license	56.5	91.8	16.9	4.7	40.0	19.9	24.3
Main operating license	24.4	–	1.7	8.4	–	15.0	23.7
Tax department	34.5	42.0	38.7	11.2	–	27.6	48.4
Labor and social security	19.2	28.0	28.0	4.6	–	12.9	20.0
Municipal police	31.0	44.5	44.5	–	–	19.2	43.4

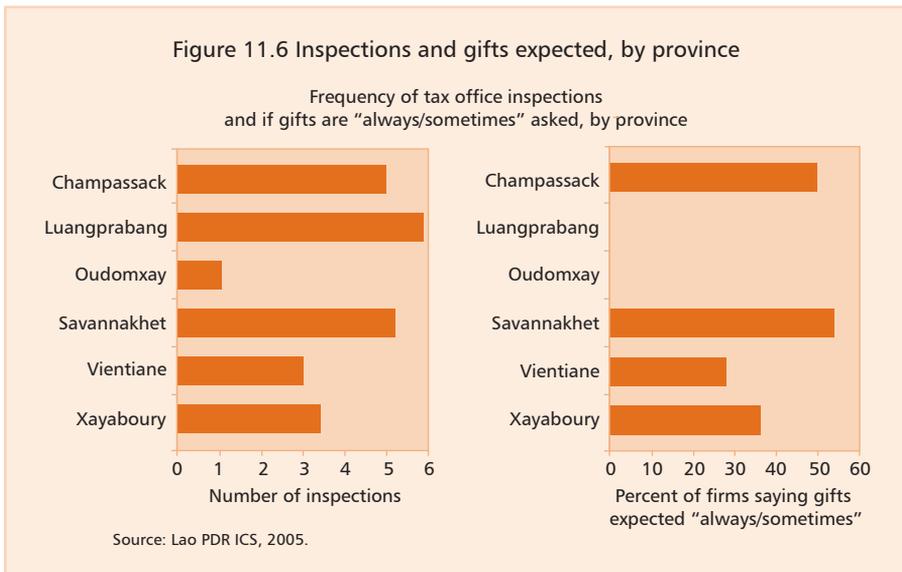
Notes: CAM=Cambodia, INO=Indonesia, LAO=Lao People’s Democratic Republic, MON=Mongolia,
 PHI=Philippines, PRC=People’s Republic of China, VIE=Viet Nam
 – not available.

Sources: Lao PDR ICS, 2005; Investment climate surveys.

Informal payments or gifts are either expected or requested during many of the non-tax inspections as well. The agency that was most likely to expect informal payments or gifts was the economic police—close to two thirds of firms reported that bribes or gifts are expected during inspections by this agency (Figure 11.4). Other than the economic police, the agencies that were most likely to expect informal payments or gifts are the agencies responsible for most of the inspections—the tax authorities, Customs Department, and Forestry Department. About one quarter of the surveyed firms reported that gifts are sometimes or always expected during industry department inspections. The simple correlation between the average number of inspections and the percentage of firms reporting that bribes are expected is 0.19.



Informal payments come along with tax inspections. About 34% of firms, which have been inspected by the tax department, say that informal payments are always or sometimes expected during inspections. Six out of nine large firms and 26% of SMEs, which have undergone inspections, reported making some informal payments. Within each sector, the gap on frequency of inspections between firms saying tax inspectors “always/sometimes” expected and those saying that gifts were “never” expected was most pronounced in the garments and food and beverages sectors (Figures 11.5 and 11.6).



More frequently inspected firms are likelier to pay bribes and have higher “time tax” when dealing with regulators. For example, with respect to tax inspections, firms reporting that gifts are “always” expected were inspected an average of 10 times in the previous year, compared to only 5 times for firms that reported that gifts were “never” expected. Together, these results suggest a

correlation between the burden of regulation and the prevalence of bribes. The point estimate of the coefficient suggests that increasing the number of inspections by one would increase the percentage of time that senior management spends dealing with regulations by 0.1 percentage point (see column 1 in Appendix Table A.4.1).

12. Land

Only about 6.9% of firms in ICS mentioned land as a major or severe constraint to their business. Among these, the main concern was the cost of land, followed by difficulties in the procurement process (see Figure 12.1). Nearly half of firms that identified access to land as an issue considered land cost as a major or severe obstacle. In 2004, only 11–21% of firms acquired new lands, although around 70% of firms had new investments of some kind (see Table 12.1). About 40% of firm with issues on land found the procurement process to be a major or severe constraint. Provincial governments provide land rights, and anecdotal evidence suggests that the process takes several months, but the duration may vary at the discretion of authorities. This process is faster in districts where the Land Titling Project⁶² is operational.

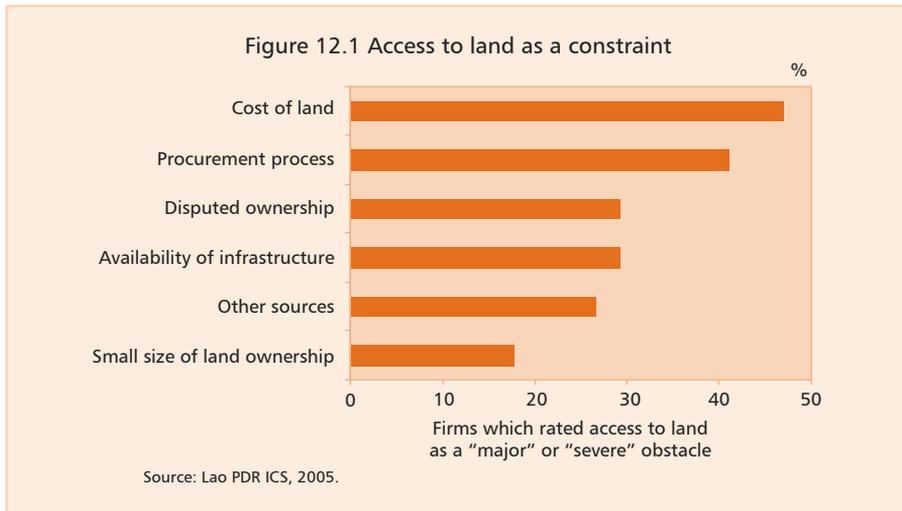
The Land Law and related ministerial decrees specify a method for issuing of a land title—that is, a formal document recognizing land use rights.⁶³ Obtaining a land title by a Lao national is either for a long term or perpetually; land can also be leased for a term up to 90 years. There are restriction on foreigners in acquiring land but long-term leases and concessions⁶⁴ are available to them. Land titles and leases can be used as collateral; in case of lease, registering a mortgage on the lease may be done.⁶⁵

⁶² The Land Titling Project is a joint project by the World Bank and AusAID, with GTZ participation in one component. The project is working in nine provinces, issuing titles village by village applying systematic adjudication processes. To date, 720 villages have been titled and the project will work in over 300 villages in the next year. About 400,000 land titles have been issued of a projected 1.6–2 million land parcels.

⁶³ The 2003 Land Law provided for the creation of a National Land Management Agency (NLMA), bringing together in one organization the Department of Lands, the Department of National Land Use Planning and urban Development, parts of the Department of State Assets. The transition to NLMA is underway.

⁶⁴ Concessions are used for plantations, mining exploration, etc. and are usually concerned with large tracts of land.

⁶⁵ The issue of leases and concessions is overseen by the Department of State Assets and other government agencies at the central and provincial level. There are shortcomings in the investment/concession process, and the Government is working to overcome them. For example, a state company on land development and services was established as a type of one-stop shop for major investors, charged with reducing red tape and simplifying processes.



To provide land ownership records, land titles are provided in the areas under the Land Titling Project and survey certificates are provided in other areas. The Land Titling Project issues a land title which is readily accepted by the public as an authoritative statement of the ownership. It is also accepted by banks and lenders as collateral for loans. Land titles are the strongest form of security of tenure. The titling process generally takes 3–4 months from first inspection of the land. The adjudication process includes an administrative rather than judicial process for resolving land disputes. In areas where the project is not yet operational, land offices at the province and district level issue survey certificates. Survey certificates are lesser forms of title with less certain legislative basis, but they are readily accepted as a temporary form of title. Because the lending market is expanding, lenders are encouraging borrowers to apply for survey certificates and are accepting these as a form of collateral as well. When the project moves to an area where survey certificates already exist, the land will be included in a new cadastral map of the area and the survey certificate will be upgraded to a land title.

To support the effective operation of the land market, the Government is working on strengthening the provincial land offices in their role of registering transfers, mortgages, and subdivisions of registered land. For example, lenders can readily search registered land to check current ownership and can register a mortgage over registered land taken as a security. This process is underway in the nine provinces. Villagers are still reluctant in some cases to register transfers, but where finance is required, banks and other lenders encourage registration so that the mortgage can also be recorded on the title.

The project includes setting up a valuation information system (VIS) to provide a simple valuation methodology for calculating registration fees on transfers and mortgages in a transparent way. VIS is progressively being expanded into districts where land titling has been completed. Recent field activity to upgrade rate tables indeed indicates that increases in the value of land have indeed recently taken place.

Table 12.1 Percentage of firms with new investment

	Firms in %
With new investments	69.5
Land	11.0
Land/building	21.1
Machinery	58.1
Vehicle	22.8

Source: Lao PDR ICS, 2005.

13. Firm performance in manufacturing

To promote rapid growth, it is important to understand how the investment climate impacts on productivity and which aspects of the investment climate matter most for different types of firms. Managers who must deal with unpredictable regulations from local governments face difficulties in planning the operation and growth of their business. Poor roads lead to the breakage or spoilage of goods in transit or block access to markets. Frequent power outages lead to costly interruptions in production. This section will investigate the relationship between firm characteristics, productivity, and the investment climate in the Lao PDR using econometric analysis based on data from ICS (Appendix A.2) and on other evidence.

There are significant labor productivity (defined as value added per worker) differences across provinces, sectors, sizes of firms, and exporting status. Large firms are more productive than SMEs. Exporters have significantly higher value added than nonexporters. Foreign and domestic firms have roughly the same productivity, which suggests that investment climate constraints are similarly constraining for both types. Firms with the highest value added are located in Luangprabang, Xayaboury, and Savannakhet (by different measures), while the lowest productivity is observed in Oudomxay. Firms in Oudomxay and Champassak are also the least capital intensive. Value added per worker is

highest in garments and wood processing firms, while total sales per worker are highest in construction materials and wood processing (Appendix Table A.3).

Even within industries, productivity of firms may differ significantly. For example, in garments, productivity between CMT producers and producers that export directly differs by a factor of 10. The agent cost is the main reason for this difference, and therefore indicates the huge impact of exports infrastructure on productivity (Box 13.1).

**Box 13.1 Productivity between exporters and nonexporters
in the garment industry differs significantly**

Over 90% of garment exporters are involved in either cut and make or cut, make, and trim (CMT) production, which has a low value added and has no backward or forward linkages. The Lao PDR garment industry is comprised of 110 companies, 58 of which are exporting. Only about six companies are free-on-board (FOB) producers—which produce a specialty—or niche market product that is not subject to fashion trends, can enjoy long production runs, and have higher in-country value added.

Value added per trouser is 54% higher for the FOB manufacturer than CMT producer, even after deducting material and port charges. In addition to lower value added, CMT manufacturers are required to pay agent fees equal to about 10% of the total value added, while no such burden is incurred by the FOB manufacturer. Agent fees are very high for CMT producers, and erode the margins significantly—that is, ranging from 7.5–30% of the export factory price. As a consequence, profit margins between the two types of producers differ by a factor of 10. While profits are higher for FOB manufacturer, this must be tempered against the fact that such manufacturing enterprises must have the financial means and willingness to take the upfront financial risk to purchase material, which can be as much as \$27,632/container load. But as evident from the following table, these risks are rewarded with higher returns. Profit margin between FOB and CMT manufacturers differs by a factor of 10.

CMT versus FOB value chain costs

	CMT		FOB	
	Costs	Total cost	Costs	Total cost
Ex-works	\$1.00	\$1.00	\$4.68	\$4.68
Less material and port charges	\$0.00	\$1.00	\$3.14	\$1.54
Less agent fees	\$0.09	\$0.92	\$0.00	\$1.54
Less profits	\$0.07	\$0.85	\$0.78	\$0.76

Source: Global Development Solutions, 2006.

Approximately 60–75% of sampled firms invest. The incidence of investment (percentage of firms with positive investment) also varies depending on firms' location, type, and sector of operation. Large firms invest more often than do small firms. Exporters invest more often than non-exporters. FOFs invest more often than domestic firms. However, the investment rate (ratio of investment to current capital) is higher in small, non-exporting, and domestic firms. Domestic firms indicate low levels of current capital's high propensity to make new investment and desire to expand (Appendix Table 4).

Power outages are costly for production, especially in construction materials and food and beverages. In food and beverages, every 10 hours of power outages is associated with an average 3% lower value added, and every percentage of shipment loss due to breakage or spoilage in transit is associated with an average 8% lower value added. In construction materials, every 10 hours of power outages is associated with an average 7% lower value added. In addition, estimating the value added lost due to various investments climate constraints shows that infrastructure might cut significant chunks of the value added, especially for a small firm.

Firms that complained about governance or taxation issues had no significant differences in value added, suggesting that these constraints impact on all firms equally, or do not have an impact on labor productivity, or impose only fixed costs.

Firms that complained about infrastructure, regulation, regulatory or macro uncertainty, and electricity have higher productivity than those which did not complain. This suggests that these constraints become binding as the firms approach the production frontier. Firms that cited finance as a major or severe obstacle have significantly higher productivity than those that did not complain. This suggests that access to finance becomes a binding constraint at higher levels of value added. Similar conclusions are reached by the supply chain analysis. Firms' productivity in garments and textiles was strongly correlated with the unpredictability of local government officials' interpretation of regulation.

III. INVESTMENT CLIMATE AND FIRM PERFORMANCE IN SERVICES

The services sector has grown at par with real GDP and now contributes about 25% of GDP, 8% of which is from tourism. The growth was faster in hotel and restaurant businesses than in an average service firm. Undoubtedly, a high potential for increasing growth is still uncovered in the Lao PDR's tourism sector due to the country's location and natural beauty.

Tourism is a critical part of the services sector that can contribute to the economic development of the Lao PDR. According to the Lao PDR National Tourism Administration (LNTA), tourism generated revenue of almost \$120 million in 2004. Endowed with a rich culture and interesting scenic spots, the country has benefited from an increasing number of tourists in recent years. More than half of the tourist arrivals each year are Thai citizens, who usually come on day trips across the Mekong River, return without taking accommodation, and spend only a small amount of money while in the country. If the Lao PDR can attract more international tourists who will stay longer and infuse more money into the local economy, the sector has considerable scope for growth.

The tourism industry faces critical supply-side challenges in its efforts to take advantage of regional tourism opportunities. Outside of the main urban areas, the country's physical infrastructure—electricity, telecommunications, and road networks—is insufficient to meet the needs of both the local and large projected influx of mid- and high-end tourists. Low education and training levels of tourism personnel make it difficult for tourism companies to find and retain qualified employees. Further complicating the operations of tourism firms are uncertainties regarding the macroeconomic and regulatory environment. This chapter explores those constraints, and identifies the key challenges the country faces in its efforts to develop the tourism sector.

14. The tourism industry

The Greater Mekong Subregion (GMS)⁶⁶, has enjoyed significant benefits from the growth in tourism. Approximately 18.7 million tourists visited the subregion in 2004. According to ADB estimates, the industry accounted for roughly \$22.2 billion in output, \$18.6 billion in income, \$2.3 billion in government revenue, and sustained 3.8 million jobs. However, the majority of this activity is in one country—Thailand—and substantial development of the other markets is required to spread the benefits more evenly among these six countries.

A number of factors can make the Lao PDR a promising tourist destination. The country has great natural beauty, including a system of Natural Protected Areas and two properties designated as World Heritage Sites by the United Nations Educational, Scientific and Cultural Organisation (UNESCO).⁶⁷ It is a multi-ethnic society, with many of the cultures maintaining traditional dress and customs. Lao PDR's attractions remain relatively unexplored, fostering an aura of novelty that is of particular value to international tourists seeking unique experiences.

Because of these attractions, tourist arrivals have shown a generally positive growth trend. In accordance with the Law on Investment Promotion and Tourism, the Government of the Lao PDR has promoted investment in tourism by catering to both local and foreign investors. Because of this and other reform actions, the tourism sector is estimated to contribute about 8% to GDP and provide direct and indirect employment of about 22,000 jobs. Starting from a base of 38,000 visitors in 1991, shortly after the country's borders were opened to tourists, the Lao PDR surpassed the one-million-visitor mark in 2005. Between 1998 and 2004, arrivals increased by almost 80% (Appendix Table A.7.1).

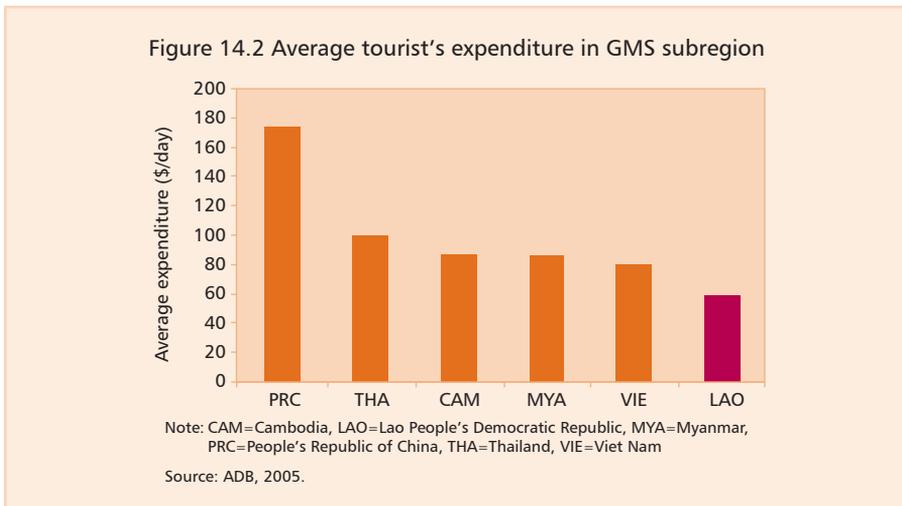
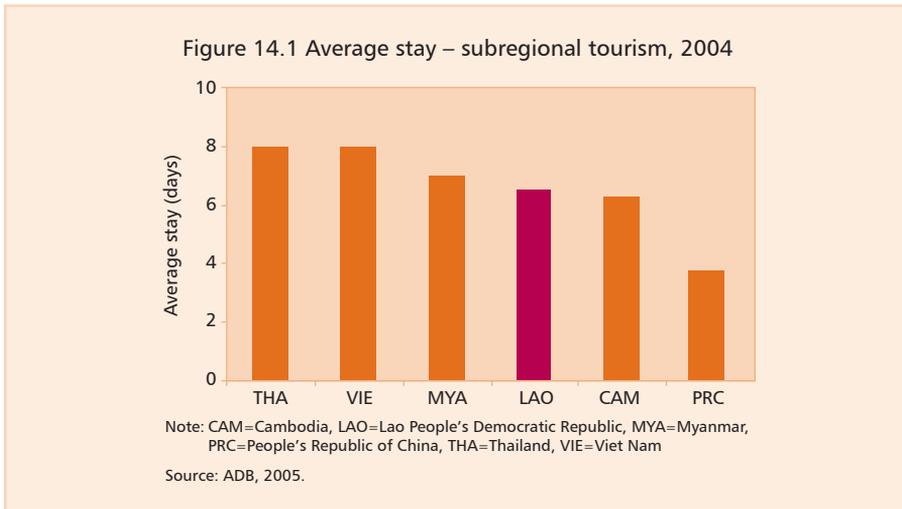
Despite this overall growth trend, the majority of tourist activity is concentrated in a small number of locations. On the average, tourists stay in the Lao PDR for less than 3 days, and spend a relatively small amount per day during their visits. Only four destinations attracted more than 5% of the country's tourist arrivals in 2004: Vientiane municipality, Luangprabang, Vientiane Province (Vang Vieng), and Champassak.⁶⁸ More than 73% of arrivals

⁶⁶ GMS encompasses Cambodia, the Chinese provinces of Yunnan and Guangxi, Lao PDR, Myanmar, Thailand, and Viet Nam.

⁶⁷ The two World Heritage Sites are the ancient town of Luangprabang and the Vat Phou temple complex in Champassak province. The Government of Lao PDR has proposed a third site—the Plain of Jars—added to the list, and hopes to have it inscribed in 2006.

⁶⁸ Lao National Tourism Administration Planning and Cooperation Department, 2005.

in 2004 came from the neighboring countries of Thailand, Viet Nam, and PRC, often on day trips or border passes; and spent an average of less than \$27 per day (Appendix Table A.7.2). The remaining 27%, coming from all other countries stayed in the Lao PDR for 6.5 days on the average, and spent about \$59 per day. The average stay in the Lao PDR for international tourists is shorter than in most other countries in the region, and the average daily expenditure is lower (Figures 14.1 and 14.2).

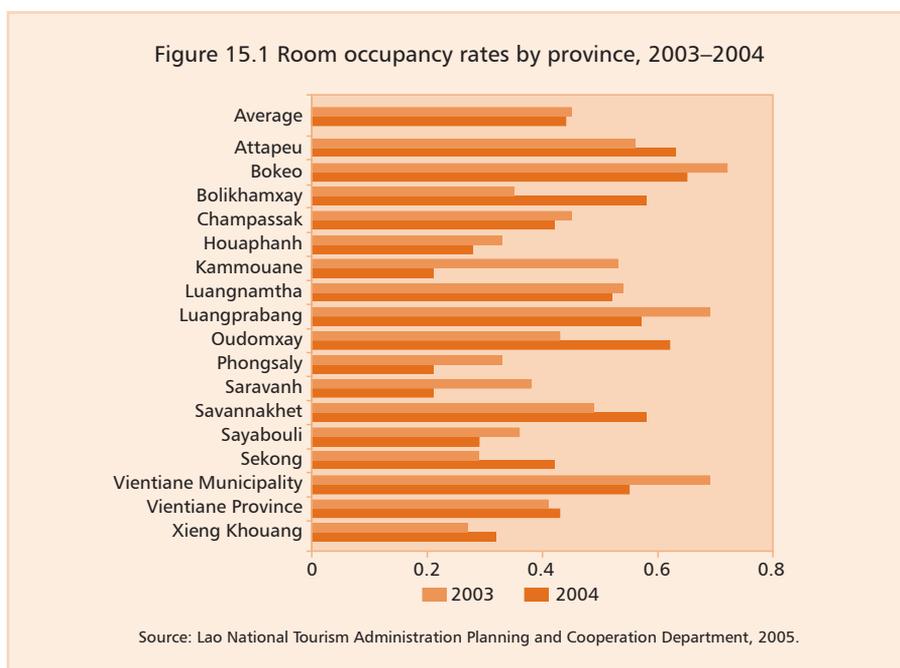


A quick overview of the tourism sector indicates that while the industry shows considerable promise, there remains room for growth. The tourism sector can further grow not just by attracting more tourists but also by improving the quality of tourists' experience to promote longer stays and higher spending. For instance, using the 2004 arrival figures and assuming no change in the travel and spending patterns of visitors from neighboring countries, the Lao PDR could double its tourism revenue (with just a 1% across-the-board increase in the total number of arrivals), if international tourists stay in the Lao PDR for as long as they do in Viet Nam (8 days), and spent as much as they do there (\$80/day).

15. Supply constraints

The hotel sector in the Lao PDR operates at moderate occupancy rates. The national average room occupancy rates were 45% and 44% in 2003 and 2004, respectively. Despite a 41% increase in tourist arrivals between 2003 and 2004, occupancy rates increased in just six provinces, and no province had an occupancy rate of more than 65% in 2004 (Figure 15.1).

There is no evidence now that the tourism sector has been unable to generate sufficient supply of hotel and guesthouse rooms to meet current demand. The total number of hotel and guesthouse rooms almost doubled



between 2000 and 2004,⁶⁹ reaching a total of 13,666 rooms and 20,480 beds in 2004. Even with the unrealistically conservative assumption of only one guest per room, this means that each hotel and guesthouse room in the country was occupied for an average of 190 days out of the year.

The quality of rooms is more important than the number of available rooms. To accommodate strong growth in the tourism sector, many rooms will have to be replaced or upgraded. Either way, substantial investment will be required. Many industry analysts feel that much of the newly established hotels are poorly designed, lack amenities, and are therefore ill suited for mid-and high-end tourists.

The Government of the Lao PDR projects that tourist arrivals will continue to grow between 1.5 million and 5 million by 2014. Under this aggressive growth scenario, tourism would be a billion-dollar industry by 2014. Lao PDR even projected that tourist arrivals could reach 1.7 million in 2010. Under the current growth projection, coupled with improvements in infrastructure and tourism climate, the industry is expected to bring in more than \$500 million per annum. To achieve those arrival numbers and visitor receipts, however, the industry should ensure that infrastructure exists to support the growth. The sector also has to ensure that the ensuing social and environmental effects of increased exposure to international tourism do not undermine the country's essential advantages as a tourist destination. To address these, the Lao PDR has developed a National Tourism Development Strategy (NTDS). It has also been an active participant in the GMS Tourism Sector Strategy, which brings together the Governments of Cambodia, PRC, the Lao PDR, Myanmar, Thailand, and Viet Nam to develop and promote Mekong as a single tourism destination and help distribute the benefits of tourism more widely.

To realize large increases in the number of international tourism arrivals, the tourism strategy of the Lao PDR must pay careful attention to the country's growing reputation as a destination for backpackers. Growth of the tourism industry will require an expansion of focus to promising new market segments. In general, the Lao PDR lacks the infrastructure and facilities that will be needed to accommodate substantially higher tourist arrival levels and to diversify the market away from the backpacker segment. The strategy of evolving into higher-end tourism will have to deal with these capacity constraints. The Government and a variety of industry analysts agree that the Lao PDR entrepreneurs lack the exposure and expertise to understand what kind of tourism products are attractive to the international market.

⁶⁹ Lao National Tourism Administration Planning and Cooperation Department, 2005.

To attract greater numbers of international tourists, the Lao PDR will also have to distill its strategy into a tourism brand to promote the sector overseas. The firms interviewed suggest that to compete more effectively with neighboring countries, the Lao PDR needs to develop a strong tourism brand, along the lines of Thailand’s “Land of Smiles” campaign or Malaysia’s “Truly Asia” campaign. If the Lao PDR cannot establish its own tourism brand, it may benefit from the promotion of a single brand image for the Mekong subregion, as proposed in the GMS tourism strategy.

16. Private sector constraints in the tourism industry

Successful development of the Lao PDR’s tourism industry will depend on the private sector’s ability to take advantage of opportunities arising from the Government’s strategic focus on the industry. Tourism has been targeted as a key sector for the country’s economic development. However, to realize the sector’s full potential, there is a need to examine and address the various constraints to the operation and growth of tourism firms.

ICS intends to determine the key constraints faced by private firms in the tourism sector. For tourism, the survey collected data from 57 firms in two sectors—hotels and guesthouses (42), and tour operators and travel agencies (15)—including information about their perceptions of the severity of the various constraints they face. The sample included firms located in three provinces of the Lao PDR—Vientiane, Luangprabang, and Luangnamtha—and represented a cross-section of firm sizes.

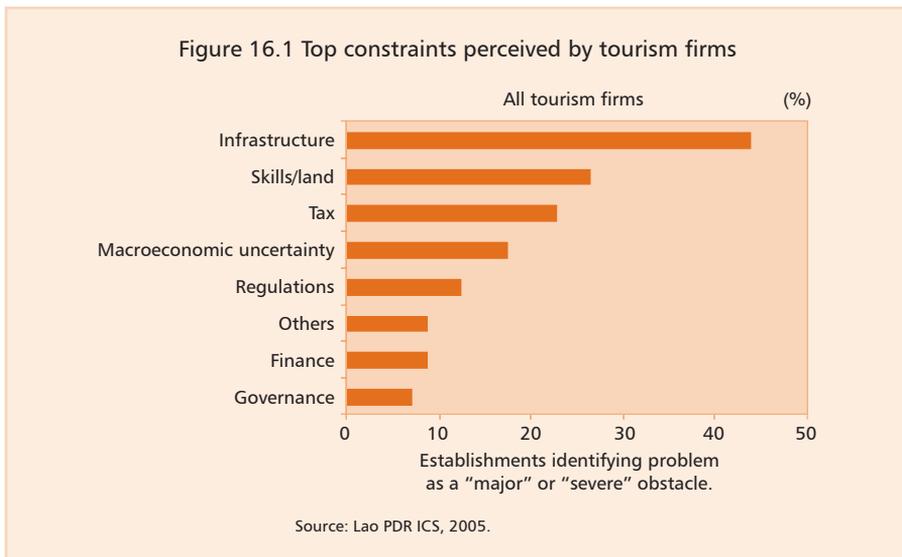
Based on the perceptions of the firms surveyed, the most important constraints in the tourism sector are infrastructure and resources⁷⁰ (Figure 16.1). The serious concern over infrastructure is primarily due to electricity, while the main issue related to resources is the skills and education of workers. By a two-to-one margin, infrastructure is the most commonly cited constraint in the hotel sector, while resources enjoy an even larger margin as the most important constraint in the tour operator and travel agent sector (Figure 16.2). Taxation, maintaining macroeconomic stability, and addressing

⁷⁰ Considering the limitations of drawing statistical inferences from a relatively small sample size, key informant interviews were conducted to flesh out the relevant issues qualitatively, and to characterize the nature of the key constraints facing tourism firms. In general, the respondents appeared to have been hesitant to discuss the constraints they faced frankly during the survey, perhaps because of cultural factors, or perhaps because of concerns about their anonymity, particularly with regard to constraints related to their interaction with government officials.

regulatory impediments are also important among tourism firms. This section will examine how these and other important factors are constraining the tourism sector, based on the survey, additional interviews, and a review of information generated by the Mekong Private Sector Development Facility Lao Business Forum’s Tourism Working Group (BFTWG).

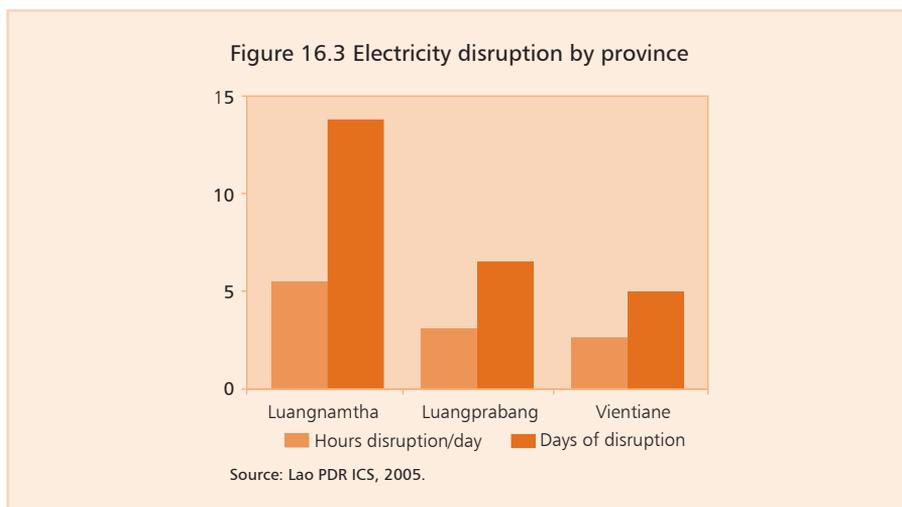
16.1. Infrastructure

Electricity was cited as a major or severe obstacle by more than half of the hotel firms surveyed. Tour operators and travel agencies placed a lower importance on electricity, considering that a greater part of their interaction



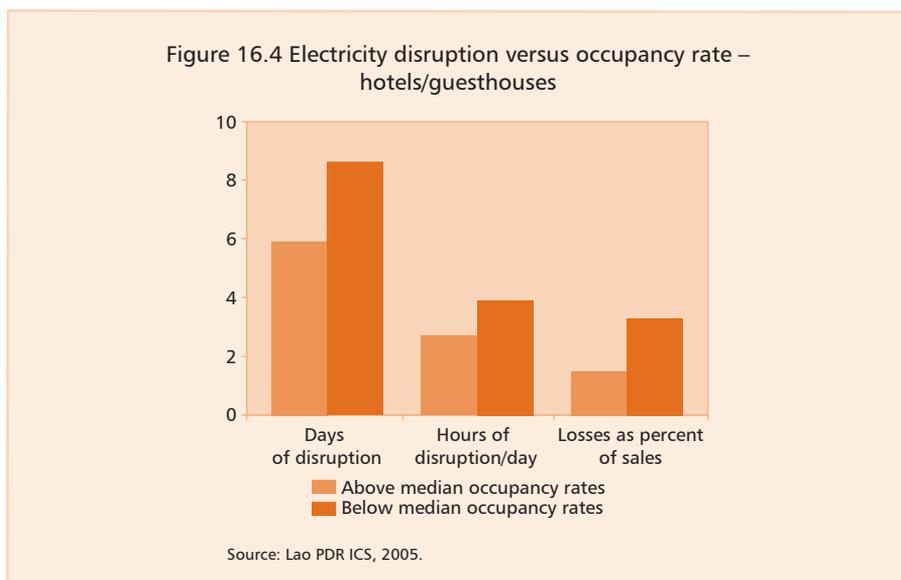
with customers is independent of their electricity supply. For instance, a guided walking tour through the temples of Luangprabang will not be impacted by a power outage in the tour operator’s office, whereas hotel guests are aware of the availability of fans, airconditioning unit, television, and light whenever they are in their rooms. Nonetheless, electricity was, overall, the most frequently cited constraint on business during the survey.

Access to electricity is particularly difficult outside Vientiane and Luangprabang. Hotel firms surveyed in Luangnamtha reported an average of 13.8 power disruptions per year (with one firm reporting as many as 40), compared to 6.5 in Luangprabang and 5 in Vientiane (Figure 16.3). The power disruptions in Luangnamtha also lasted longer—5.5 hours on the average, compared to 3.1 hours in Luangprabang and 2.6 hours in Vientiane. Among hotels, lower occupancy rates are more likely seen among those with more power disruptions (Figure 16.4). Some of the travel agencies interviewed said that inconsistent electricity supply outside the main centers increases the difficulty of their jobs, as they have to be particularly sensitive about their clients’ needs. They also do not want to send tourists to areas where they will be uncomfortable and unhappy with their visit. The current focus on building ecotourism packages to remote rural locations exacerbates this problem.



The key informants interviewed in Vientiane repeatedly mentioned electricity as a constraint, but expressed greater concern about cost than about access. Electricité du Laos (EdL) has a multi-tiered tariff system that allows residential customers to be cross-subsidized by certain businesses paying higher rates. Hotels are classified as entertainment establishments, the highest

rate-paying category. As a result, tariffs paid by firms in the hotel sector are almost 10 times as high as those paid by small residential users, and about 72% higher than those paid by industrial and agricultural users. Hotel owners feel they are being asked to pay an unfairly high rate for electricity. Since their rate has been rising sharply in recent years, hotel owners also believe electricity is becoming an increasingly important cost driver for their businesses.



The companies participating in the Lao PDR Business Forum’s Tourism Working Group list transportation policy as the most important high-priority issue facing the tourism industry. Their argument is simple: tourism cannot succeed if tourists cannot get to their destinations. No flights currently link the Lao PDR to Europe, Japan, or the United States (US). Therefore, all inbound and outbound air traffic is routed through neighboring countries (mostly Thailand and Viet Nam), reinforcing the Lao PDR’s status as a side-trip destination. According to one local tourism expert, routing a group tour to the Lao PDR through Thailand can add as much as 30–40% to the costs compared with a similar group tour to Thailand. Many international travel agencies have therefore dropped the country from their list of pre-packaged tour destinations, and will only arrange tours on a customized basis when there is a special demand. Direct international flights, even if it were only one or two, would improve this dynamic. To that end, the tourism working group has called for the Government of the Lao PDR to adopt an “open-skies policy” (Box 16.1).

Box 16.1 Open-skies policy

An open-skies policy has been adopted by a number of countries for passenger traffic and/or cargo carriers through bilateral or multilateral aviation agreements. This liberal aviation policy allows the airlines of participating countries to determine routes, capacity, and pricing. For example, the “Multilateral Agreement on the Liberalization of International Air Transportation,” signed by Brunei, Darussalam, Chile, New Zealand, Singapore, and the US in May 2001, grants airlines of each party the right to fly across other countries’ territories, to operate flights and establish sales and promotion offices in other countries, and to independently set prices. Regardless of the form of the open-skies policy, there is a need for support infrastructure such as sufficient runways and airports to accommodate more traffic with the expected entry of other airlines.

At the First Lao Business Forum in April 2006, the Private Sector Working Group for Tourism proposed that the Government of the Lao PDR adopt an open-skies policy to help boost tourism in the country. The policy is expected to promote competition in the aviation industry which, in turn, can raise the level of efficiency and satisfaction of air travelers by enabling better quality and lower-priced services. It can expand opportunities not only for tourism but also for other industries, through facilitating trade and transportation. To appreciate the merits of this policy, the Government of the Lao PDR may undertake an assessment of its costs and benefits.

Source: Author’s summary from Private Sector Utility Group tourism report.

Domestic air transportation is also considered a high-priority issue. Lao Airlines, a state-owned enterprise (SOE), holds a 100% monopoly on domestic air travel. The airline operates a small fleet made up of mid-sized European aircraft for its international routes and the well-traveled domestic routes (between Vientiane and Luangprabang, and between Vientiane and Pakse), and small Chinese aircraft for more remote destinations. The age and condition of the fleet, and the relatively low level of airport security—by international standards—give rise to safety concerns. The airline has also earned a bad reputation for unreliable schedules and frequent mechanical failures. Moreover, the route map is organized according to a hub and spokes model. This means tourists wishing to travel by air—for instance from Luangprabang to Oudomxay—both of which are in northern part of the Lao PDR have to transit through Vientiane en route.

On land transportation, the Lao PDR has no railroad and has a poorly developed highway system. Although a number of road-building projects are underway, with ADB spearheading the process in line with the GMS Tourism Sector Strategy, many potential tourist destinations can only be reached via one-lane, unpaved roads. Long travel times, combined with restrictions on the length of visas upon arrival, often mean that tourists can visit only a limited number of areas.

The tourism sector faces similar infrastructure challenges in telecommunications. Outside of the major centers, landlines are scarce and many tourist destinations in remote areas are serviced only by cell phones or satellite phones. One tour operator commented that the scarcity and lack of reliability of telephone and fax contacts with some of these destinations make it difficult to confirm reservations or to arrange last-minute itinerary changes. It is sometimes impossible to contact a property where the operator has customers, which creates anxiety about their safety and security.

16.2. Skills and education

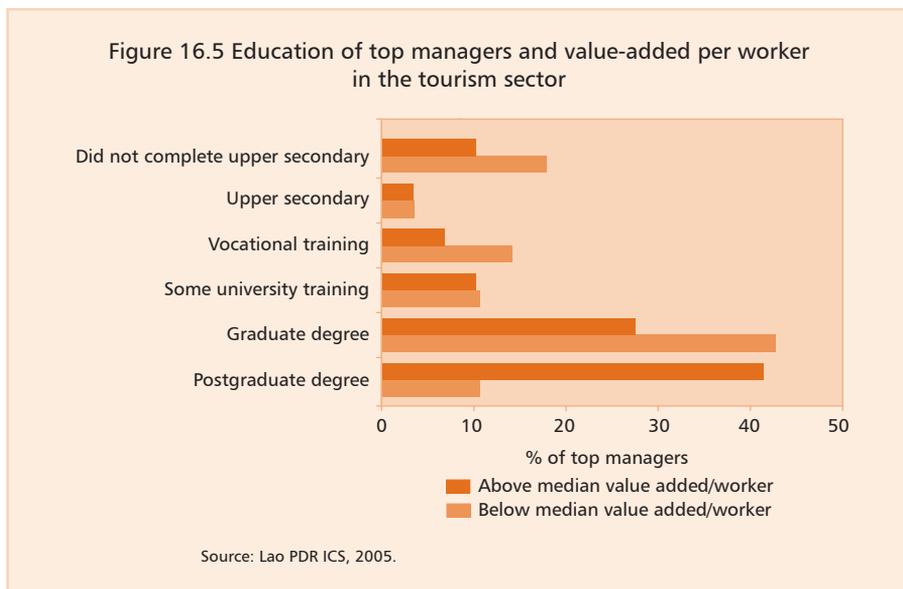
After electricity, skills and education are the next most frequently cited obstacles among companies surveyed. Concerns about skills and education were far more apparent among tourism firms than among firms in the manufacturing sector. Among tour operators and travel agencies, the incidence was particularly high, with 53% identifying this as a major or severe obstacle. The depth and scope of this challenge were reinforced in the findings of the Lao PDR BFTWG, as well as in a number of key informant interviews.

The skills constraint in the Lao PDR cuts across all strata of workers, from the least skilled positions to senior management. At the highest level, the key informants interviewed admitted their firms lacked the essential entrepreneurial and management skills required to operate professional businesses. Many new entrants into the tourism sector, especially outside of the main centers, do not have the international exposure and expertise required to develop tourism products that appeal to an international market.

Among the firms surveyed, the education level of the top managers seem to be related to the firm's success. Almost 80% of those firms with value added per worker above the median value have a top manager who attended at least some university, while only 10% have top managers who have not completed upper secondary school. By comparison, only 64% of those firms with value added per worker below the median value have a top manager who attended at least some university, while 18% have top managers who have not completed upper secondary school (Figure 16.5).

Employees in the tourism sector have high educational levels relative to the general population, but employee education does not seem to be related to a firm's success. On the average, 64% of employees in the firms surveyed have completed secondary school or received vocational training. This reflects a high level of education by the Lao PDR's standards, given that only 68% of

Lao PDR children between the ages of 6 and 14 are enrolled in school, and only half of those who begin reach the Grade 5 level (World Bank 2004c). The average percentage of workers with at least secondary or vocational education is similar among firms with below median value added per worker and among those with above median value added per worker (nearly 70%). The principal concern is the quality of education, especially since it pertains to the various skills required in the tourism sector.



Language skills are also frequently cited as a concern among firms in the tourism industry. Many firms interviewed with more than about 10 employees have sent some of their staff for supplementary language training to help them interact with clients. One tour operator described the difficulty of finding specialized tour guides to handle groups from European countries such as Germany, Italy, and Spain.

However, most firms interviewed said that the largest skills challenge they face is with regard to vocational skills for their nonmanagerial employees. The key informants did not consider the vocational schools to be helpful in producing qualified employees, and pointed to the need for a tourism school. In September 2003, the Stichting Nederlandse Vrijwilligers (SNV) proposed a tourism training institute as part of a study it undertook for the LNTA on training needs in the industry (Eshoo et al. 2003). According to the key informants interviewed in January 2006, little has changed since SNV's

assessment in 2003. Although training programs have recently been initiated by various stakeholder groups in the industry, these programs are all small scale and have not provided a comprehensive framework for meeting industry-wide training needs. Like the Lao PDR, other countries within GMS also experience problems with weak training systems, insufficient private sector participation in vocational and management training, and insufficient investment in training by the tourism industry. In addition, insufficient training of public sector officials in sustainable tourism planning, development, and management are further barriers to tourism development within the region.

16.3. Tax

One of the key constraints identified by tourism firms is the tax rates. More than 20% of all companies surveyed listed this as a major or severe obstacle, including almost 30% of the companies with fewer than 10 employees. Only 1 of 57 firms surveyed listed tax administration as a major or severe obstacle. Key informants, however, revealed that firms' specific concerns with tax rates focus on the structure of the system and the non-transparent way in which rates are determined for individual firms.

Like many other aspects of firms' interactions with the Government of the Lao PDR, tax rates are essentially negotiable for most companies. Below a predetermined amount of tax liability, the tax authorities arrive at a fixed-sum tax payment for the company, based on the information provided by the investor in the application to establish the company. Though no specific criteria are published, the authorities take into account a variety of factors, such as the company's projected assets and the scope of its business. For a hotel, this could be the number of beds and the size of any related food and beverage business. For a tour operator, this could be the number of vehicles, distinct tour offerings, or the number of destinations covered.

Since the fixed-sum tax system is not based on actual business results, a company's effective tax rate increases in periods when business is slow. The size-based criterion for application of this system helps explain the greater perception among small companies that tax rates are an obstacle. In addition, this system places the company's tax situation at the discretion of the district tax inspector, which opens room for the firm to negotiate its tax rate with the inspector. In general, this system of negotiated tax rates creates significant opportunities for rent seeking and reduces the predictability of future earnings, thus discouraging medium- and long-term planning.

16.4. Macroeconomic uncertainty

Private firms in the Lao PDR are concerned about the future of the economy. These concerns take two forms. First, they are concerned about risks arising directly out of macroeconomic events. Second, tourism firms are concerned about the Lao PDR's policy response to external economic events.

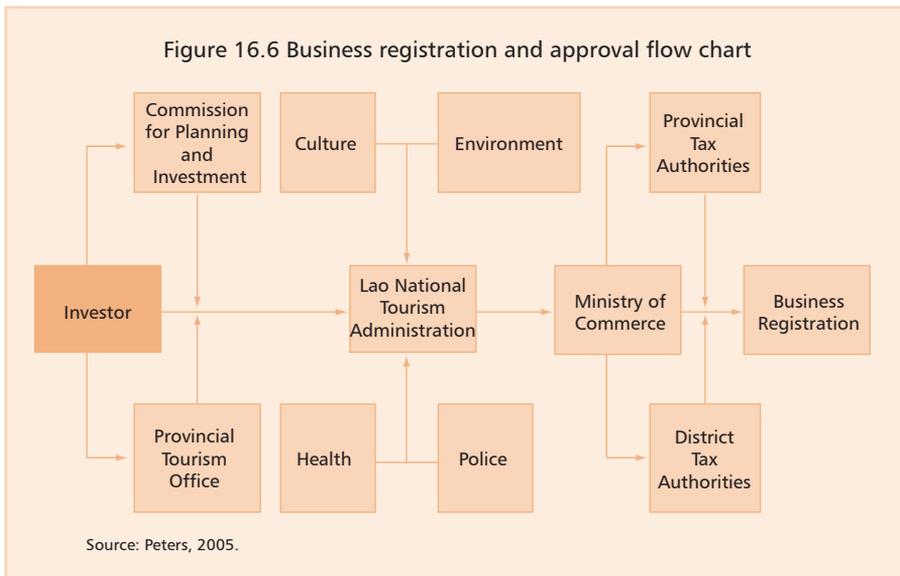
Firms are sensitive to exchange rate fluctuations and other macroeconomic volatility. Firms in the tourism sector are likely to receive at least part of their revenue in foreign currency, and their expenses can also be in a variety of currencies. As a result, they are particularly sensitive to changes in the exchange rates. The Lao PDR kip had generally been stable against the US dollar since 2000. In April 2005, however, it was devalued by about 20%. The kip's devaluation was good for firms that received income in dollars, but was bad for firms that received a substantial amount of their income in kip, thus increasing inflationary pressures in some sectors. The only means these companies have to hedge against currency risk is to keep their operations denominated in foreign currency. Until recently, however, this was not permitted.

Firms are concerned about the Government's policy response to external shocks. When the Government of the Lao PDR decides on important matters, such as the devaluation of the kip, hotel firms often feel they are caught by surprise. In addition, the Government's policy toward businesses' use of foreign currency has changed over time. In 2005, the Government liberalized firms' ability to receive revenue in foreign currency. Given the Government's historical track record of decision making, the firms interviewed were not confident that this measure represented a commitment to liberalization. They feel that this program is just a temporary measure that could be reversed when warranted by external circumstances. This feeds into a broader concern that despite its public commitment to development of the tourism sector, Government policymaking remains opaque and unpredictable.

16.5. Regulation

Regulatory uncertainty is commonly cited as a constraint to doing business in the Lao PDR. This is shown in the results of the survey, the Lao BFTWG, and key informant interviews. Within the survey, only about 10% of respondents listed this as a major or severe obstacle, but almost all firms surveyed mentioned it as an obstacle of some kind.

Opening a business in the Lao PDR remains a difficult and time-consuming process, involving a variety of government authorities and veto points. Although none of the survey participants cited this as a major or severe obstacle, the key informants interviewed unanimously mentioned their frustration with this process. A simple, indicative flow chart (Figure 16.6) demonstrates the complexity of this process. The chart should be considered illustrative, rather than definitive. In practice, it is rarely clear to the applicant at the time of submission what specific approvals will be required and which government agency will approve the registration. One official at the LNTA's Hotel and Tourism Management Department, which is responsible for business registration, estimates that the approval process, from beginning to end, should take about 3 months.⁷¹ According to investors who have recently opened tourism businesses, however, the process can take up to a year. Their frustration with this process centers on its unpredictability.⁷²



Firms cite a number of areas in which they believe the Government's policy toward the tourism industry hinders growth. Among these is the visa

⁷¹ The official explains though that this is not a guaranteed time frame, and that much depends on the nature of the application and on the applicant's ability to fulfill the administration's requirements.

⁷² Lack of information on the registration process is also part of the problem. For example, investments in hotels and plantations are not covered by the Industry Department, though they are often believed to be under the jurisdiction of this department, thus resulting in more delays.

policy regarding fees, durations, and extensions. All international tourists require a visa to enter the Lao PDR. In the past few years, the Government has introduced a \$30, 15-day visa on arrival, and has continued to increase the number of entry points where these visas can be issued. On the other hand, Lao PDR embassies abroad issue 1-month tourist visas for the same price. Given the fact that visits to the Lao PDR tend to be side trips on larger Southeast Asian itineraries, and the importance of encouraging international tourists to stay for longer periods in the country, many firms believe that visas on arrival should either cost less than \$30 or carry longer durations. Extensions of tourist visas can be obtained only in Vientiane. Thus, to get a visa extension, tourists in the provinces must either travel back to the capital or surrender their passports to a third party—such as a travel agent—for several days, which many tourists refuse to do.

A large number of government agencies involve themselves in every aspect of a firm's business through frequent official inspections.⁷³ Given the large number of inspecting bodies, it is not surprising that tourism firms are forced to devote a large amount of time and resources to handling ongoing inspections. In all three provinces where the survey was conducted, hotel and guesthouse firms have an average of more than 10 inspections per year, and there is a large variation in the number of inspections across provinces (Figure 16.7).



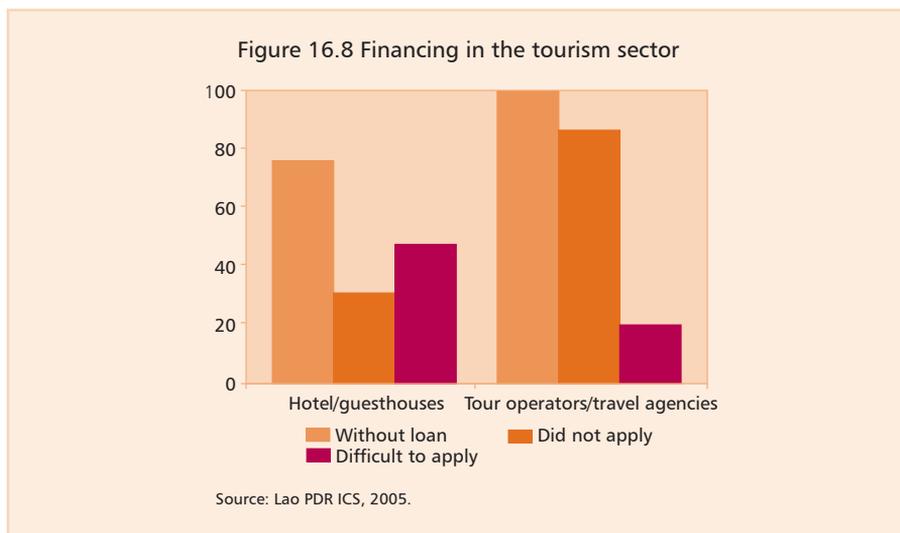
⁷³ Tour operators and travel agencies are inspected by the Tax Department, Customs Department, Labor and Social Security, Economic Police, Municipal Police, Tourist Police, and Trade Department. Hotels and guesthouses receive inspections from the Tax Department, Labor and Social Security, Fire and Building Safety, Municipal Office, Environmental, Sanitation and Epidemiology, Food and Drug Department, and Tourist Police.

At the same time, several firms interviewed believe that the Government is not doing enough to protect and maintain the standards and image of the tourism industry overseas. Two aspects of this task are of particular concern to the interviewees. First, almost every hotel owner interviewed expressed support for an independent system of hotel classification. Any property now can describe itself as four or five-star, regardless of the actual condition of the hotels and the amenities provided. The second area is in international promotion. All firms interviewed welcome the advent of a Tourism Promotion and Marketing Board under the new Tourism Law. Despite assurances that substantial representation from the private sector will be included, however, the level of public-private dialogue is generally so low that most firms are doubtful that they will have any real input to the marketing process. The limited private sector participation in tourism development and marketing appears to be a common problem in the GMS area, and thus, measures have been proposed to address this issue through subregional cooperation.

16.6. Finance

The companies surveyed in the tourism industry seem to have little access to finance. For instance, not a single tour operator or travel agency surveyed had a bank loan or short-term credit, such as an overdraft facility. Among the hotels surveyed, only 20% had bank loans and just one reported having an overdraft facility. Despite the presence of some bank financing in the hotel sector, the firms reported that they financed an average of almost 95% of their new investments from retained earnings. The banks that reported having loans used them to finance an average of about 16% of their new investments. More than 85% of the tour operators and travel agents and almost 30% of hotels had not applied for a loan. Almost 50% of hotels reported that the process of applying for a loan was too complicated and difficult (Figure 16.8).

Other aspects of the Lao PDR's financial system also serve as constraints on firms' operations. Several interviewees cited their inability to clear credit card payments through the Internet or other means without the physical presence of the card. Some tour operators and travel agencies attempt to receive payments in advance through electronic fund transfers; however, these transactions are slow and costly. For hotels, the situation is more serious. They take reservations over the Internet, but cannot take guarantees. Thus, hotel owners report that their level of no-shows has been growing since the development of the MPDF-LHRA joint marketing website for Lao PDR hotels.

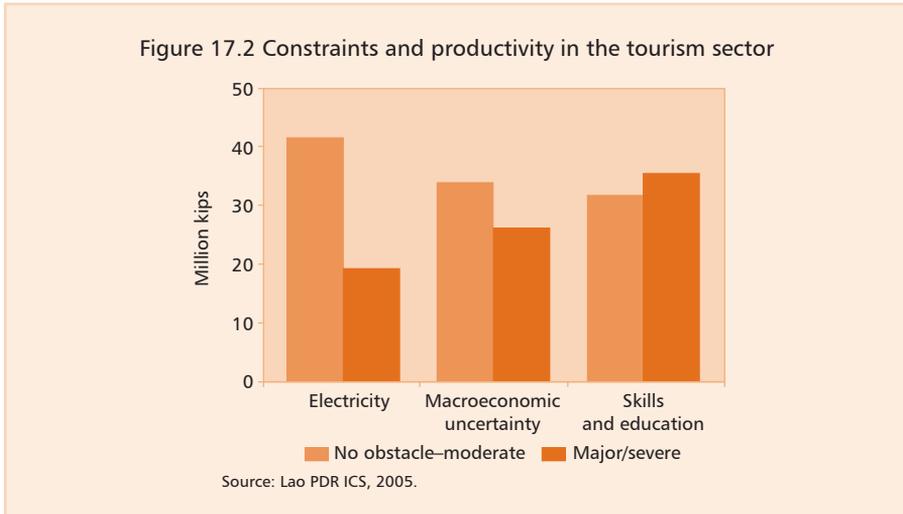


17. Productivity in the tourism sector

The structural and operating constraints have impacted productivity in the tourism sector, especially among locally owned firms. Among the firms surveyed, the overall value added per worker was kip (KN) 32.5 million (about \$3,070), with hotels and travel agencies reporting more than KN60 million per worker, and guesthouses and tour operators just over KN20 million (Figure 17.1). These overall figures, however, are distorted by a small number of large, foreign-owned firms (FOFs) (four hotels and one travel agency—that reported substantially above-average value added per worker (almost KN95 million). In particular, value added per worker seems substantially higher in Luangprabang than in the other provinces surveyed because of one establishment, which reported a very high value added kip per worker. The median result in Luangprabang was KN26 million per worker, in line with the other provinces. Among firms with no foreign ownership, the average value added per worker was just KN27 million, and the median was KN21 million.

Value added per worker among the firms surveyed was substantially lower than the figure for neighboring Thailand—the regional competitive benchmark for tourism. Because of the small sample size and the large variation between firms, the median survey result is a more representative descriptive statistic to describe productivity in the tourism sector than the mean figure. The median productivity of the Lao PDR’s tourism firms was KN21 million or \$2,003, less than 60% of the baht (B) 140,000 per worker (around \$3,900)

reported in Thailand.⁷⁴ Using purchasing power parity conversion factors, the ratio of the Lao PDR price levels to Thai price levels is about 67%,⁷⁵ giving Thailand’s tourism sector a 10% competitive advantage over its counterpart in the Lao PDR. Lao firms trying to attract tourists for longer stays in the country are, therefore, hindered by poor productivity (Figure 17.2).



⁷⁴ The productivity figure for Thailand was computed using tourism gross value-added estimates by the Bank of Thailand (2005) and employment data from Thailand’s National Statistics Office.

⁷⁵ World Development Indicators Online, 11 January 2006.

The survey also reveals substantial productivity differences between firms that perceived electricity or macroeconomic uncertainty as constraints and those that did not. The average value added per worker of firms that cited electricity as a major or severe obstacle was just KN19 million, compared to 41 million for firms that said it was a moderate obstacle or no obstacle (see Appendix on Tourism). Similarly, value added per worker among firms that cited macroeconomic uncertainty as a major or severe obstacle was KN26 million, compared to KN34 million for firms that said it was a moderate obstacle or not an obstacle at all. The median figures were substantially lower than the mean figures for all categories measured. Nonetheless, it appears that for these constraints, firms' perception of the severity of the obstacle corresponds to lower productivity.

Interestingly, firms' perception of skills and education as an obstacle has no significant impact on productivity. The average value added per worker of firms that cited skills and education as a major or severe obstacle was KN32 million kip, compared to KN35 million for firms that said it was a moderate obstacle or not an obstacle. Given the size and variance of the sample, this difference is not statistically significant. The skills and education of Lao workers, therefore, appear to affect the productivity of companies equally across the entire spectrum of companies surveyed, whereas other constraints—such as electricity and macroeconomic uncertainty—seem to affect certain companies more than others. This suggests that while improvements in skills and education will positively impact all Lao tourism firms, addressing the electricity constraint will have a much stronger positive impact on the group of companies most affected by it.

A number of the issues affecting tourism firms in the Lao PDR are the same issues confronting other GMS countries. GMS countries have agreed to adopt a joint strategy of addressing these constraints to promote tourism development within the region. It is advantageous for the Lao PDR to continue participating and even taking a more active role in the GMS tourism strategy to better address the issues affecting its tourism industry and reap more benefits from the program (Box 17.1).

Box 17.1 The GMS tourism sector strategy

The objectives for the tourism sector in the subregion are to (i) develop and promote the Mekong as a single destination, offering a diversity of good quality and high-yielding subregional products that help distribute the benefits of tourism more widely; (ii) add to the tourism development of each GMS country; and (iii) contribute primarily to poverty reduction, gender equity, and sustainable development, while minimizing any adverse social impacts. To achieve its objectives, the strategy will be implemented through seven program areas:

- *Marketing and product development*: foster the development of multi-country tourism in GMS by stimulating demand from appropriate high-yield markets through joint promotional activities;
- *Human resource development*: upgrade the skills of tourism leaders and tourism trainers of GMS;
- *Heritage conservation and social impact management*: promote higher standards in the management of natural and cultural resources for conservation and tourism purposes;
- *Pro-poor tourism development*: help reduce the incidence of poverty and increase rural incomes;
- *Private sector participation*: encourage private sector participation and partnerships in planning, investment, and marketing of GMS' tourism sector;
- *Facilitating the movement of tourists*: identify and address impediments to travel to and within GMS; and
- *Tourism-related infrastructure development*: jointly plan and develop tourism infrastructure in GMS with a view to ensuring a wider distribution of tourism benefits and supporting pro-poor tourism development in designated priority zones.

Source: Asian Development Bank, 2005e.

IV. INFORMAL ECONOMY

This chapter explores the barriers to growth of microfirms and household-based enterprises (HBEs) and to their move from informality to formality.⁷⁶

A separate section attempts to establish the link between the investment climate and the rise of household businesses, as well as studies their impact on poverty.

Two types of surveys were employed to study the informal sector in the Lao PDR, which was not covered by investment climate surveys (ICS). First were the Lao Expenditure and Consumptions Surveys (LECS) 2 and 3 (1998 and 2002), which have data on household businesses. Second was a mini-survey of informal firms conducted alongside the ICS. The samples and methodology of these surveys are presented hereafter and in Appendices 8 and 9. Due to a very limited coverage and representativeness of the mini-informal survey, the report also relies on the German Agency for Technical Cooperation (GTZ) report on small and medium enterprises (SMEs) (HRDME Survey 2005).

Informal firms have been growing alongside the formal economy. Informal firms are those engaged in nonfarm activities employing two or fewer, and microenterprises employing mostly family labor. They are either registered or unregistered. ICS only covered firms that employ five or more workers, which left a large part of the economy unexamined. Estimates show that as many as 70% of all firms in manufacturing employ fewer than two workers and provide employment to approximately 2% of the labor force (more than 30,000 people). However, the majority of informal firms are in the services sector. Household businesses have rapidly grown during the last years and are providing employment to 16% of the labor force (460,000 people), mostly in the services sector.

The number of HBEs increased by almost 50% between 1998 and 2002/2003, as indicated in LECs 2 and 3. Informal economy provides significant employment opportunities, mostly self-employment, for the poor. While a number of microfirms and HBEs have grown and become part of the formal sector, a number of factors continue to deter the remaining enterprises, as well as new microfirms, from becoming formal.

⁷⁶ While a number of countries use a combination of criteria in their official definition of informality, an official definition of informality has not yet been established in the Lao PDR.

The growth of the informal sector has been made possible by improvements in the investment climate over the last decade. Significant improvements in rural infrastructure, opening up to cross-border trade, and the rise in domestic and regional demand for the Lao PDR products have contributed to the growth. As this report shows, the number of household business is positively correlated with improvements in investment climate where the households are located.

While household firms grew in numbers, they have also hired more labor, and some of them eventually moved to the formal economy. In the past years, the number of household businesses had grown by half, but the majority have been operating for less than 5 years, indicating high entry and turnover rates. Some of these firms went to the formal sector while others did not. It is important to understand why.

Evidence suggests that lack of financial resources and arbitrary taxation are important constraints to the growth of informal firms.⁷⁷ Registration procedures have been perceived as particularly burdensome; and the benefits of registering do not seem to offset the costs of moving to the formal sector, as suggested by some surveyed firms. Following the general pattern found in the Lao PDR, the lack of skills hampers the opportunities of these firms to form production linkages with the formal sector. Where such linkages exist, these are mostly in the form of raw materials and unskilled labor.

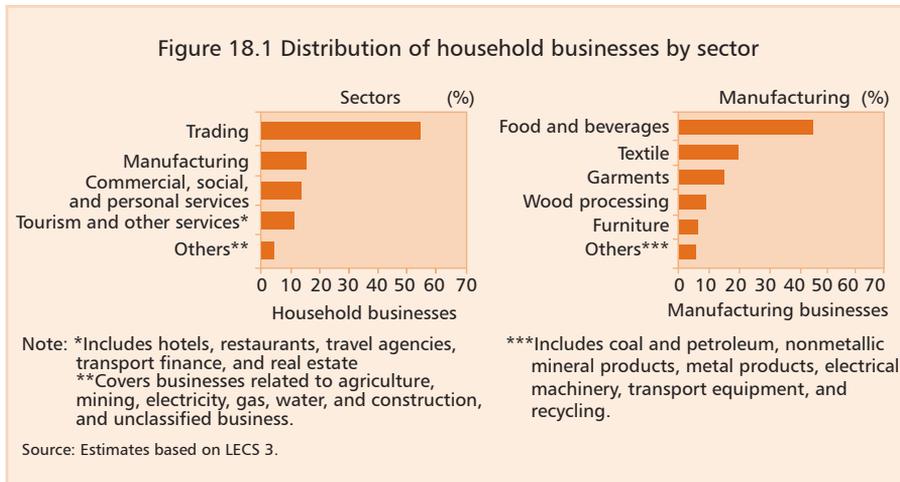
18. Profile of the informal sector

18.1. Nonfarm household businesses

Between 1998 and 2002, households have been increasingly involved in nonfarm business activities, and have increasingly hired non-family labor. Some significant changes have occurred between LECS 2 and 3. First, the share of households in urban areas that engages in nonfarming activities rose from 40–60%. Nationwide, this increase was from 21–28% of the households. Households also seem to be hiring more paid employees. About 20% of these businesses had at least one employee in 2002, up from 7% in 1998. However, the geographical dispersion has not changed, 60% of the activity is still located in the central part of the country.

⁷⁷ These conclusions are based on a very small sample of surveyed informal firms (28 firms) conducted alongside ICS and described in Quintana (2005). More research and surveys on the informal economy are needed; the results presented here should be interpreted with care.

The majority of the household businesses are in the service sector. About 55% of household businesses are in wholesale or retail trade; 14% are in community, social, and personal services; and 11% are in tourism and other services (Figure 18.1). While HBEs in developing countries are often associated with businesses conducted by small traders and peddlers, the Lao PDR is different: a good proportion of household businesses are in manufacturing (16%).



Although the average HBE is 7 years old, 60% of all these enterprises have been operating for fewer than 5 years. Among the sectors, tourism businesses are generally the youngest, with a mean age of 5 years. This suggests some turnover and the recent emergence of new businesses.

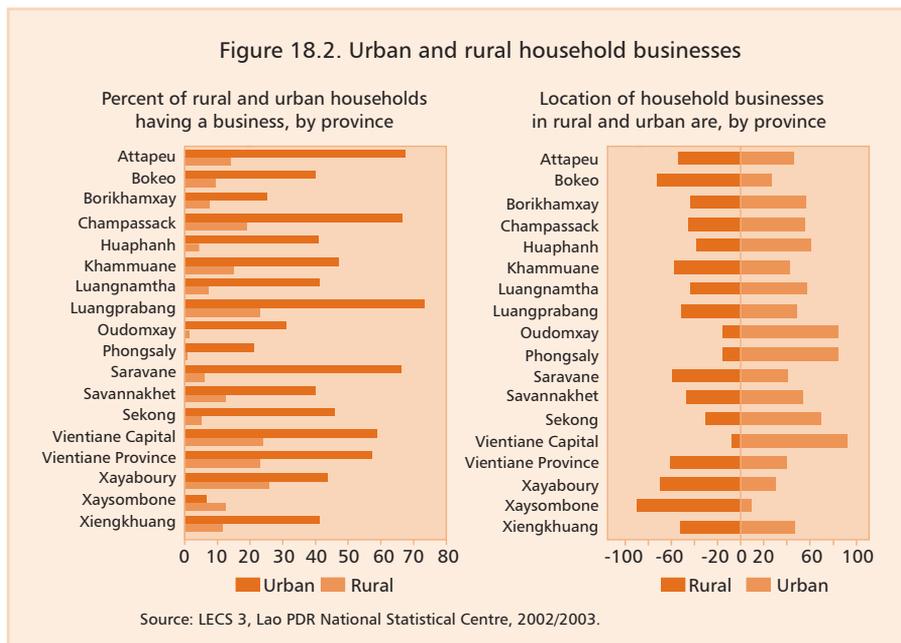
Geographical concentration of formal and informal businesses suggests that many formal firms have sprung from informal household enterprises. Close to 60% of household businesses are located in the Central Region (mostly Vientiane capital), and only 17% operate in the South (Appendix 8). Overall, 80% of all household businesses are concentrated in just six provinces, namely, Vientiane Capital, Luangprabang, Xayaboury, Vientiane Province, Savannakhet, and Champassack (Table 18.1), despite these provinces accounting for only 60% of the total household population. These provinces also accounted for 72% of all firms with 5 or more employees in the National Statistical Centre's (NSC) list of establishments in 2003. HBEs therefore appear to have thrived in areas with more formal sector firms. This indicates that formal or registered firms may have been mainly an offshoot of small HBEs that had grown and eventually became part of the formal sector.

Table 18.1 Geographical distribution of household businesses

Provinces	Total businesses, in %
Vientiane Capital	28.1
Luangprabang	10.9
Xayaboury	7.9
Vientiane Province	8.3
Savannakhet	11.5
Champassack	13.0
Other provinces	20.3
Total	100.0

Source: Estimates based on LECS 3.

Urban households are more likely to start a business compared to their rural counterparts. Sixty percent of all household businesses are in urban areas. In almost all provinces, more than 30% of the urban household population has a nonfarm enterprise, with Luangprabang having the biggest percentage, at 70% (Figure 18.2). In Luangprabang, Vientiane Capital, Vientiane Province, and Xayaboury, more than 20% of the rural household population have a household business.



Slightly more than half of households conduct business at home. More of the female-headed households engage in business activities than male-headed households. Only 18% of household businesses are located in industrial sites or markets, while the majority are mobile (along roadsides and similar places). While female-headed households account for only 5% of households, nonfarm enterprises appear to be an important source of their livelihood. About 38% of female-headed households are engaged in business, compared to only 24% of male-headed households.

Only 20% of household businesses hire paid labor, but only 10% have hired more than two employees. Rather than hiring labor, most HBEs—including manufacturing household businesses—are operated by household members. Thus, these businesses mainly generate self-employment. However, they have a significant collective impact; total employment generated by all HBEs is estimated at 460,000 or equal to 16% of the labor force.⁷⁸

Households operate small-scale labor-intensive businesses, which are significantly more productive than their farming activities. Although the average turnover of a business is less than KN3 million per month,⁷⁹ the productivity of a nonfarm household business is still considerably higher than agricultural activities. An average household business generates KN13,700 per hour of work, as compared to KN1,390/hour in its agricultural activities.⁸⁰ In total, household businesses generate almost three times more revenues than households engaged solely in agriculture, while investing only a fourth as much time.

18.2. Survey of microfirms

A small survey of microfirms was carried out alongside ICS to complement the findings of the survey of manufacturing firms. Twenty-four firms were interviewed in Vientiane capital. Because the manufacturing survey covers firms with five or more workers, the mini-survey of microfirms was limited only to establishments with fewer than five workers, including family members. The sample was very diverse in terms of sectors of activity. Manufacturing firms

⁷⁸ This is close to the estimates of Leidholm and Mead (1999) on the proportion of working age population employed by microenterprises in other developing countries, including Botswana, Dominican Republic, Kenya, and Lesotho.

⁷⁹ With an important difference between urban (over KN5 million) and rural areas (KN1 million).

⁸⁰ Indicative data: net revenues in the agriculture sector are compared with high gross revenue in household businesses.

represent 37% of the total (garments, 20%; food processing 13%, others 4%). A quarter of the surveyed firms were in the hotel/restaurant sector. Retail (food and motor) accounted for 16% of the sample. Services and construction represented 13% and 8%, respectively. The survey was undertaken in December 2005.

The profile of surveyed microfirms is similar to the standard urban firm in LECS 3. These firms have been operating for an average of 6.8 years. Eighty-seven percent of them operate 12 months a year and are the sole income-generating activity of the owner. The other 13% are also the main income source for entrepreneurs, but do not run all year due to lack of customers. Apart from the owner, the surveyed firms employ an average of 1.6 workers, half of whom were full-time workers. More than 50% of the firms' workforce are family members.

Surveyed microfirms were only half as productive as small firms in the ICS sample. Only 60% of the businesses were able or willing to estimate their daily sales turnover, or to provide data. Businesses that responded employed the equivalent of 1.8 workers per firm, and their average daily turnover per worker was around KN50,000 (\$1,900 per annum in sales per worker). More than 90% of the sales of these microfirms were to individual customers, while the rest were sales to small and medium firms.

19. Links between the informal and formal sectors

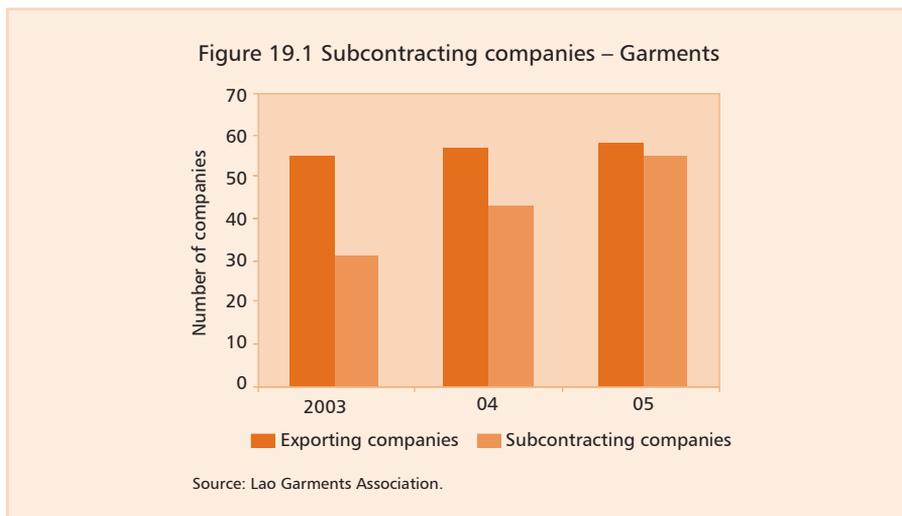
There are two main types of linkages between the informal and formal sectors—backward–forward linkages (informal sector firms supply factor inputs to the formal sector, and serve as retail and distribution networks for formal sector firms); and the transition of microfirms from the informal to the formal sector.

19.1. Backward–forward linkages

Informal firms mostly provide unskilled labor and input materials to formal firms. Backward linkages from the informal to the formal sector are common. In the case of raw materials, medium and large firms try to maximize their national sourcing of inputs to avoid transportation costs, when inputs are available locally. It seems, however, that inputs provided by the informal sector cannot satisfy the demand for more complex products. In these cases, the sourcing is sought abroad. Along the same lines, the informal sector provides the formal sector with a supply of cheap unskilled labor.

Private formal sector firms feel that the Lao PDR labor market cannot meet their demand for semi-skilled and skilled workers. Furniture factories employ local labor for loading, painting, varnishing, and distribution of materials, but seek foreign workers to do semi-skilled tasks such as woodcutting. Big garment companies employ and train local workers for most production tasks (cutting, sewing, etc.), but have difficulty finding a pool of local staff for middle management positions.⁸¹ Those positions are often filled with workers from the region that provide a blend of sufficient skills and low salaries.

Informal firms play a role as retailers and distributors of formal firms. The distribution channels for formal companies are often based on small-scale transportation businesses, especially in the rural areas. More sophisticated linkages are rare. For example, subcontracting is a growing practice in furniture and garment industries (Figure 19.1); however, these operations are limited to members of professional associations that are usually large formal firms. The Lao Garments Association bans its members from providing inputs or outsourcing any part of their production processes to nonmembers.⁸² Similarly, subcontracting of specific orders in the furniture industry is carried out among registered members.



⁸¹ Venture Garments—the second biggest factory in Vientiane—launched a program of recruitment among management students in Lao universities, but the program was dropped after a few years due to unsatisfactory results.

⁸² Members of the association are required to be fully registered at the provincial level. In 2007, they will also be required to register their workers for social security.

Outsourcing operations are also hampered by the lack of capacity of microfirms and by unfavorable regulatory arrangements. Key informants reported a number of unsuccessful subcontracting experiences. Smaller firms commissioned for large orders often failed to meet the quality requirements due to lack of equipment and skilled labor. They also experienced difficulties meeting delivery deadlines. On the regulatory side, movement of goods between companies for outsourcing purposes are often taxed as final output, adding extra cost to the process.

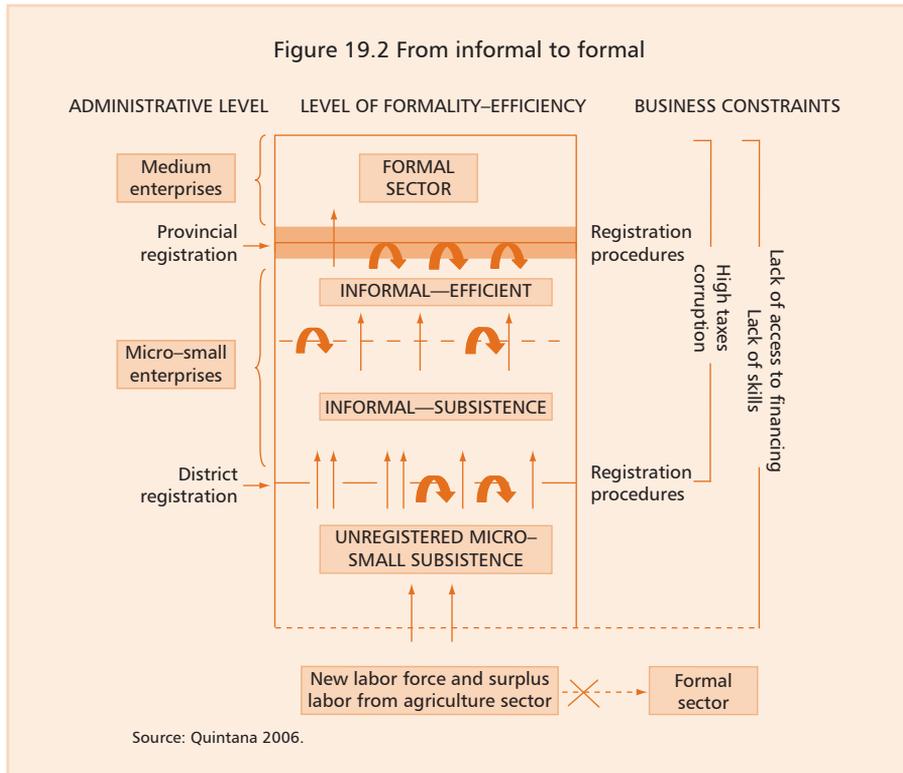
As a result, the transfer of skills and know-how between the two sectors is minimal. The analysis of furniture and garment value chains⁸³ confirms the limited capacity of microfirms to play a relevant role in their production processes. They remain outside the value added processes, and no significant transfer of technology or skills occurs. A host of other factors prevent microfirms from joining the ranks of the formal sector firms.

19.2. From informal to formal

Both the agriculture sector and the formal economy have limited capacity to absorb surplus labor. Self-employment seems to be the only alternative for a growing number of job seekers. The World Bank's Country Economic Memorandum (2004) finds that 94% of households in the agriculture sector produce only for self-consumption. Although there is potential to expand employment and output in the sector, deep structural reforms are needed to realize such potential. Records of the Tax Office show contraction by around 20% in the number of formal medium-sized firms in the last 4 years. Medium and large firms now account for 5% of the total number of enterprises, and 95% of the revenue collection by the tax administration.

Figure 19.2 shows the step-by-step process of becoming formal and obstacles along the way. In the first stage of informality, microfirms do not have to deal with registration procedures or the taxation system. Operations of very small firms can easily escape the control of local authorities, especially in rural areas. The second step involves registration at the district level, which exposes them to regulation and taxes. At this stage, operating outside the system becomes costlier. Registration and taxation at this level are not very cumbersome, and a number of informal practices ease the procedures. For most businesses, however, going into this first degree of formality does not imply improved access to the formal financial sector.

⁸³ See Global Development Solutions, 2006.



20. Key constraints to growth of micro-firms

Findings of several small surveys suggest that access to financing, fear of registration procedures, and taxation are the fundamental constraints to micro and small firms. In addition, microfirms have identified electricity and governance as secondary constraints imposing fixed costs.

20.1. Access to financing

The microfirms surveyed for ICS consider lack of access to sources of financing the most important constraint to operating their business. About 30% of the firms emphasized that the lack of affordable credit supply prevents them from expanding or simply running their business properly. The HRDME Survey found that 68% of microfirms would like to apply for loans.

Only 11% of the rural population have access to the formal financial sector and only 1% of the population have saving deposits.⁸⁴ In urban areas, the

⁸⁴ Fukui and Llanto, 2003.

access rate might be higher but no data is available. The Agricultural Promotion Bank (APB) has been running microfinance schemes for the last 10 years. Despite the cost of formality—APB’s procedures to obtain loans remain long and cumbersome when compared to informal sources—it has reached around 40,000 households in rural areas with subsidized interest rates.

Surveys show that there is demand for microfinance services. In the microfirms’ survey, more than 50% of entrepreneurs mentioned that a village credit fund for business development would improve their capacity to sustain and expand their business. In 2002, the Bank of Lao estimated the size of the potential microfinance market at around 270,000 borrowers and 560,000 depositors. It also states that only 25% of this market is being served by microfinance providers including moneylenders.

The majority of microfirms in the Lao PDR have access only to very basic financial systems. Major reasons to explain the problem of access are lack of information on financial possibilities and lack of experience in dealing with the formal financial sector. Other surveys dealing with medium enterprises found other major constraints such as failure to meet the requirements of commercial banks in terms of collateral (mostly land certificates) and cumbersome and time-consuming procedures and paperwork. As a result, the only available sources of financing for the vast majority of the Lao entrepreneurs are suppliers, members of their community, and informal moneylenders.

Unlike in the formal sector, suppliers constitute a major source of credit for operating microfirms, mostly in the form of factor inputs. Based on the estimates of national surveys, a quarter of microfirms have outstanding debts with their suppliers.⁸⁵ Traders and equipment suppliers often supply their goods on credit. The supplier would then have strong interest in ensuring that the purchaser succeeds financially so they can repay loans. To ensure success, some equipment suppliers provide a package of equipment, training, and follow-up services to support purchasers.

Retained earnings and family and friends are the main sources of financing to start up a business. HRDME survey by GTZ (2006) found that 15% of the microfirms have outstanding loans with friends or relatives, with zero interest rates and no collateral required. Normally, no specific amortization period is fixed. The repayment of the principal stretches over an undetermined period, depending on the success of the activity, until the loan is paid off. The amount

⁸⁵ HRDME Enterprise Baseline Survey 2005, GTZ 2006.

of resources available from these sources is small, and very often alternative financial sources are required.

Box 20.1 An experience with money lenders

At 5:30 am, a woman borrows KN40,000 from a private moneylender known to her family at Vientiane's Morning Market. She will use the money to buy oranges and limes from a neighbor on the outskirts of Vientiane, keeping KN2,000 aside to pay the market tax daily fee. Two hours later she starts selling. Before 5 pm, the moneylender will arrive to have the money repaid with 20% interest for the day: KN48,000. If she fails to reimburse the money, she will have to pay 40% on the outstanding debt the day after. If sales are appropriate, in a couple of weeks she should be able to do without borrowing. She would again request the services of the moneylender if she needs to expand her business or if she considers paying for a license to rent one of the market stalls.

Source: Interviews during the survey of informal firms, 2006.

20.2. Taxes

High taxes are perceived by microenterprises as an important constraint to business.⁸⁶ In the survey of microfirms carried out for this report, the second most important constraint identified by firms is the high taxes. Taxation has also been identified by microfirms as a major issue in the HRDME Enterprise Baseline Survey (GTZ 2006).⁸⁷

Despite the perceived high taxes, about 75% of the microfirms surveyed are actually paying taxes. While half of them considered the level of taxes appropriate, about half of them found taxes too high for their income. Sixteen percent acknowledged that they should and could be paying more taxes.

Most Lao PDR microfirms operate under district jurisdiction. The District Tax Office (DTO) is in charge of calculating and collecting taxes for businesses operating at the district level. Given that microfirms usually operate with a small amount of turnover or below KN200 million, their annual tax fee is fixed through the contract system by DTO. Most entrepreneurs operating at the district level engage in negotiation with tax officers, where no actual turnover estimation is made and the tax payment is settled at officers' discretion. Very often, the tax payment is negotiated at a very low level, following an unofficial payment from the owner to the inspector.

⁸⁶ Informality survey (Investment Climate Assessment, World Bank 2006); HRDME Survey on Microfirms (GTZ 2005).

⁸⁷ This is based on a sample of 83 establishments with fewer than three employees.

The level of compliance with accounting requirements is very low. Even in the case of the simplified system, most small firms do not keep records of their transactions. Transparency in the accounting records at this level is rare. In Vientiane, firms are said to keep three sets of books: one for the tax office; one for the tax office when it says it wants to see the real set of books; and the real set of books.⁸⁸

Thus, firms seek to operate at the district level where regulation avoidance is easier. Businesses seeking to comply with the accounting and taxation regulations find themselves at a disadvantageous position to compete with firms that negotiate their taxes. Businesses that remain small (or at least “officially” small) have a number of means to avoid tax regulations. Under the actual system, entrepreneurs at the district level seem to be the biggest beneficiaries in monetary terms of irregularities in the system. The results of small surveys carried out by the National Tax Office (NTO) suggest that most micro and small firms are paying taxes below theoretical level and many are also paying below their real capacity.⁸⁹ The determination of the level of taxes that microenterprises could afford to pay and how close it is to the current legal and real levels is difficult to estimate, and no comparable studies have been carried out in neighboring countries. Tax officers also take a share of the gains, at the expense of the national Treasury.

20.3. Registration procedures

Estimates based on registered firms’ records from the NTO suggest that a big majority of registered firms are micro or small businesses that are required to register only at the district level. Indeed, 96% of registered firms in the Tax Office are classified as a small business according to their annual turnovers. It is beneficial to register as a small firm since registration procedures at the district level are simpler than those at the provincial level.

Virtually all microfirms at the district level start operating without formal registration, and 30% continue to operate unregistered. A considerable percentage of them manage to operate unregistered over the long term. Practices in identifying such firms and encouraging them to register vary across regions and at the discretion of tax officials. A survey conducted by the Swedish International Development Association (SIDA) project in the Tax Department found that approximately 30% of businesses in Chantabouly District were unregistered

⁸⁸ Stuart-Fox, 2006.

⁸⁹ SIDA Tax Team at the National Tax Office, Ministry of Finance.

with the tax administration⁹⁰ (25% of the companies surveyed for the microfirms survey were in the same situation).

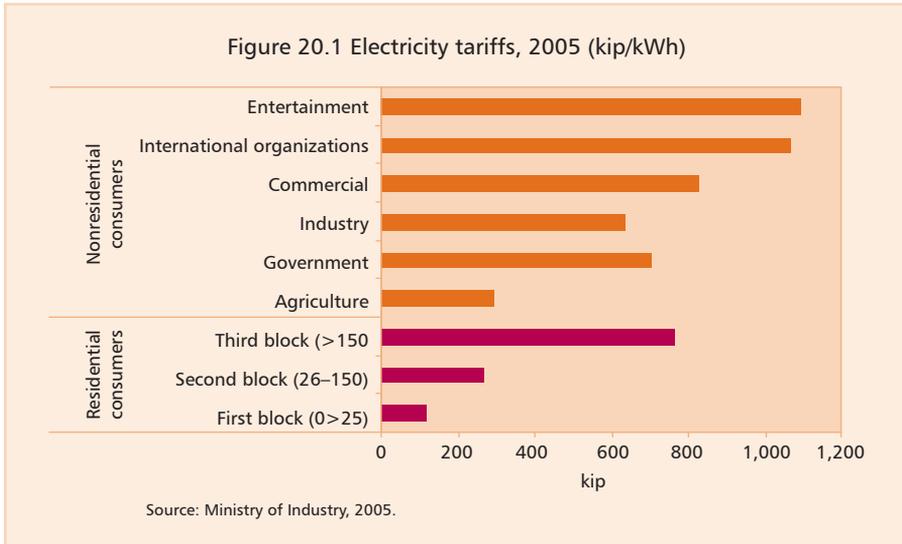
Registration procedures are not perceived by the firms as particularly burdensome. However, the benefits from registering do not appear to offset the costs of moving to the formal sector, as suggested by some surveyed firms. Thirty-eight percent of firms were not registered, although some of them have been registered before. Taxes were collected monthly by the Finance Office, suggesting a lack of coordination between finance and trade district offices. Businesses providing domestic services (small construction work, cleaning services), operating at home or in premises not visible from the street (mostly household-based tailors), were unregistered. Only one firm acknowledged paying not to be registered, but two more implicitly recognized that their businesses were incorrectly registered as district-level firms. According to these firms, the conditions to access financing did not improve and no access to a broader market was gained by registering. Only 16% of the registered firms perceived the registration process as cumbersome. Reasons given by unregistered firms not to register were lack of money to pay taxes and the small size of their activity.

20.4. Electricity

Microfirms perceive electricity prices as a secondary constraint for business. However, the cost of electricity may be one reason for staying unregistered. The tariff system is structured as residential and nonresidential sets of tariffs, as shown in Figure 20.1. EdL inspectors are responsible for ensuring that businesses are paying the nonresidential rate instead of the residential one. A small household business could be at the second level of consumption (<150 kWh/month), whereas a larger business will almost certainly be on the third consumption block. However, if these two firms are properly registered, both will be paying the rate for “commercial nonresidential consumers.”

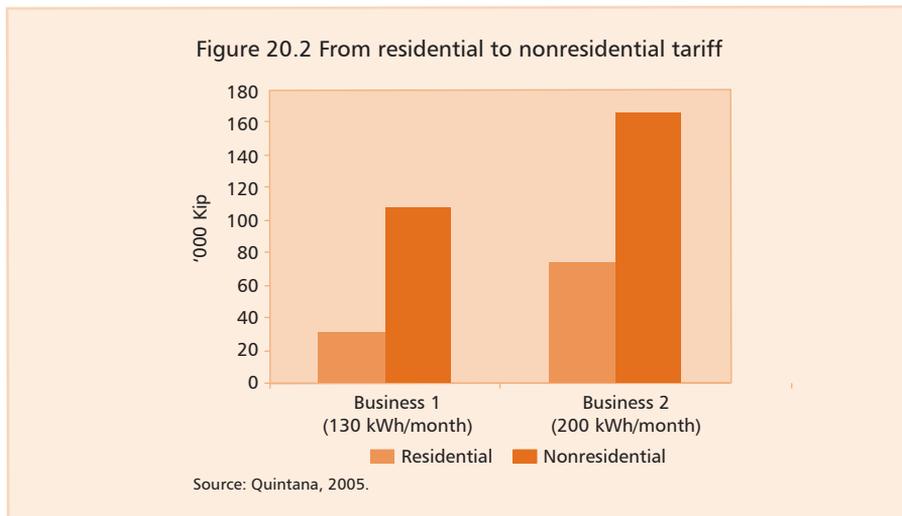
Registration has a greater effect in the smallest businesses, in terms of fixed costs for electricity bills. All types of small businesses with low consumption suffer important increases in their electricity bill after registration. Once registered, a small commercial business triples its electricity expenses, while bigger businesses double their expenses, compared with a nonregistered business with similar consumption. Figure 20.2 compares the effect of changing from residential to nonresidential commercial tariffs in businesses with low

⁹⁰ February 2005, 105 businesses in Chantabouly District, Vientiane Capital.



(second block) and high electricity consumption. In the case of low consumption businesses, the increase in expenditure is relatively higher.

The constraints described above act as barriers to the growth of informal sector firms and their move to the formal sector. Breaking these barriers will enable informal sector firms to grow and have important implications for reducing poverty.



21. Poverty, investment climate, and the informal economy

In the Lao PDR, households with relatively higher income are more likely to own a household business. Thus, while informality in developing countries has often been associated with deeper poverty, informality in the Lao PDR—defined in terms of HBEs—seems more apparent among relatively higher-income groups. LECS data indicate that business ownership by households is strongly associated with living standards. While only 2% of the poorest group own a household business, 82% of the richest group own household businesses (Table 21.1). Thus, business start-ups are more likely conducted by more well-off groups. In 2002–2003, the two poorest expenditure groups accounted for only 8% of the households that started a business in the 2 years prior to the LECS 3 survey, compared to more than 50% for the richest quintile.

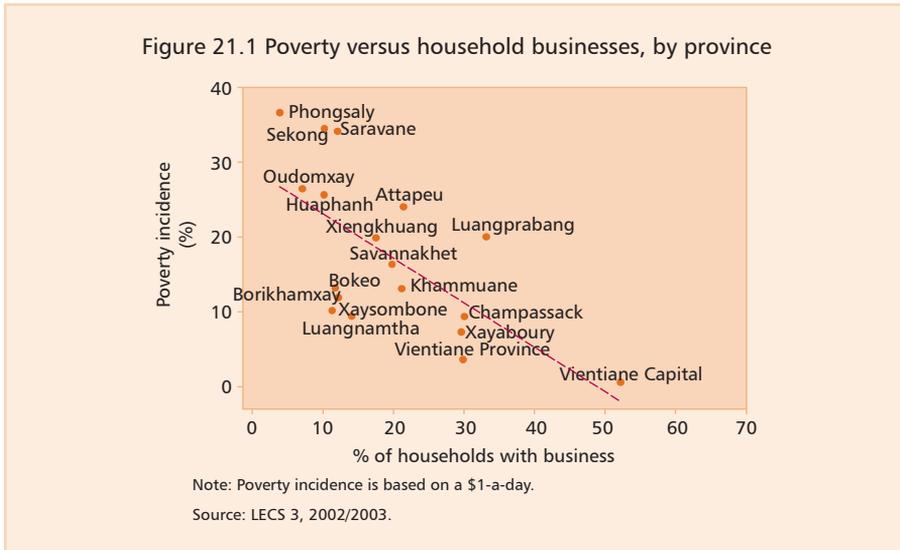
	Quintiles (poorest to richest)				
	1	2	3	4	5
Percent with household-based enterprises	2.4	6.1	15.5	36.5	82.4
Percent to total households that started businesses over past 2 years	2.0	5.5	10.4	26.3	55.9

Source: Estimates based on the LECS, 2002/2003.

A number of factors may explain why the poor are less likely to start their own business. These include low level of skills, lack of training, and limited capital. Lacking in assets, the poor are also less likely to obtain credit—especially from formal sources—to finance their working capital.

The poorest groups in the Lao PDR are less likely to engage in nonfarm businesses, like in Viet Nam (see Vijenbergh and Haughton 2002). However, a much higher proportion of the poor in Viet Nam operate nonfarm enterprises compared to the proportion of the poor in the Lao PDR. About 35% of the households in the bottom two quintiles in Viet Nam owned a nonfarm enterprise in the 1990s, compared with only 4% of the households in the two poorest expenditure groups in the Lao PDR in 2002–2003. Opportunities to engage in entrepreneurial activities appear to have been mostly captured by more well-off groups in the Lao PDR. This does not, however, indicate that the poor have not benefited from the policy reforms and accompanying high economic growth. A growing economy means more businesses created, offering alternative income

and employment opportunities for the poor. LECS data show that poverty rates are lower among provinces with a greater proportion of household businesses (Figure 21.1).



For growth to be broadly based, it requires an environment that facilitates the entry and growth of firms. Much of this growth in the Lao PDR may come from the dynamism of micro and small enterprises. An important set of factors that can strongly influence the growth and operation of enterprises is the investment climate.

Good infrastructure means better access to markets, which provides opportunities for the poor to gain from their labor endowment and from selling their products. A good investment climate lowers risks associated with operating a business, encouraging the entry of new enterprises. Thus, provinces with better access to electricity and roads have higher proportions of households that operate nonfarm enterprises (Figure 21.2). Earlier studies found that rural poverty incidence can be reduced by 7.2% by providing all-weather roads. This is equivalent to 5.6% of the total population in the Lao PDR (ADB 2005g). A study by Warr (2005) also shows that providing dry season road access can lower rural poverty incidence in the Lao PDR from 33 to 29.7%, based on the national poverty line.

Villages with better investment climate had much higher number of household businesses. Simulations based on a village-level regression analysis have been undertaken for an average village with a poor investment climate—village with no access to electricity, roads, financing, and daily or periodical markets (Appendix 9). Out of the 540 villages in the LECS 3, there are 165 of such kind. An average village had about 20% of the households running non-farm enterprises. However, for an average village with a poor investment climate, the proportion of household-based enterprises was only about 7%.

Addressing the investment climate constraints could double self-employment levels in villages with poor investment climates (Figure 21.3). This has important implications for poverty reduction since poverty was also found to be higher in areas with an inferior investment climate.

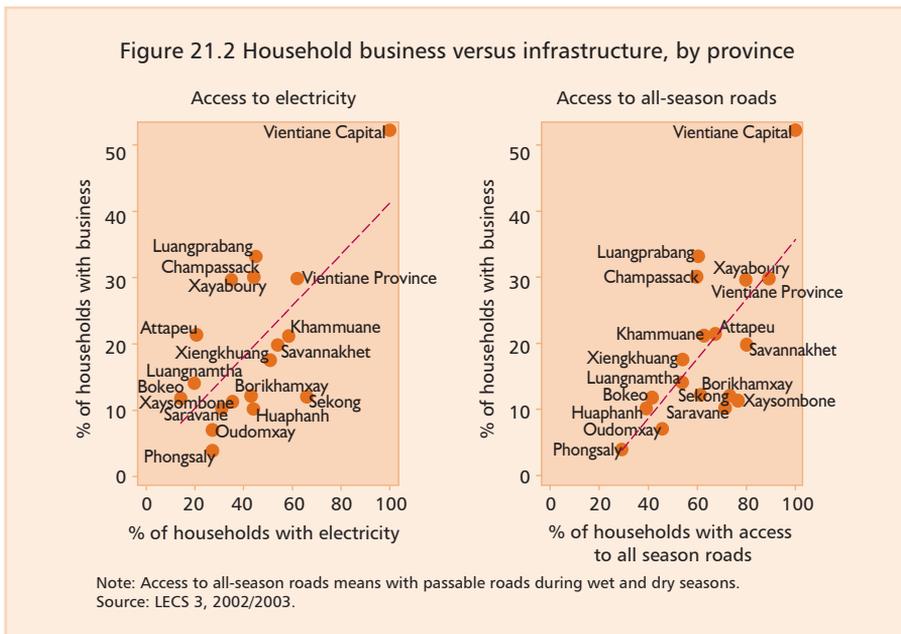
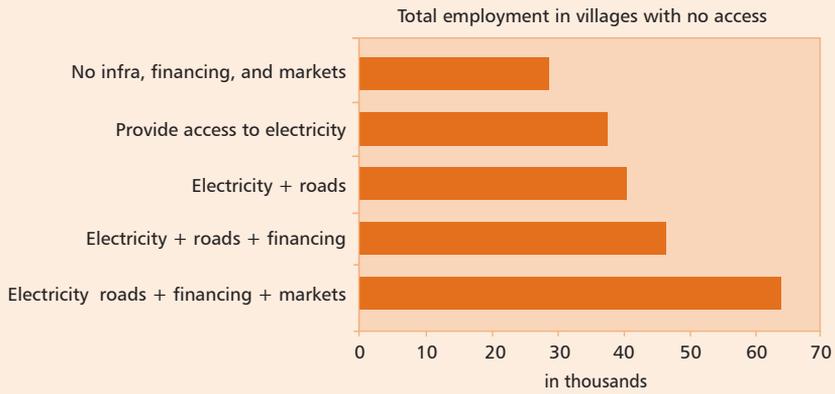


Figure 21.3 Impact of investment climate on employment



Note: Access to all season roads means with passable roads during wet and dry seasons.

Source: LECS 3, 2002/2003.

V. CONCLUSIONS AND RECOMMENDATIONS

The issue of quality of data has severely undermined the ability to rank investment climate constraints and determine the binding constraints. To identify binding constraints, perception data need to be compared with available quantitative data, and be supported by background information and evidence. The investment climate survey (ICS) of the Lao PDR has shown some disconnections between these sources of information. Most likely, the current rapid structural change and the move to a market economy have produced this disconnection. Such phenomenon has been observed in many transition countries, especially least-developed countries (LDCs), and it is hoped that this problem will be diminished as transition progresses.

To improve the diagnostics, several directions for new studies need to be deepened. These may include the reasons for informality; the size and productivity of microfirms and specific constraints that they face in comparison to formal firms; the extent and impact of governance on firm performance; the taxation of SMEs; and the policy going forward.

To improve the investment climate, the Government of the Lao PDR needs to eliminate the binding constraints on the ability of businesses to increase productivity, expand, and create jobs.

22. Manufacturing

1. Improve infrastructure that is important for business

- Improve quality of service. Improve reliability of electricity provision, especially during the rainy season and in the north. Review with respect to microbusinesses, the tariff structure of Electricité du Laos (EdL) to minimize the large tariff distortion between residential and commercial consumers. Use an information campaign to inform users about tariff changes. Encourage greater private sector involvement in utility operations to enhance the efficiency of operations.

- Good roads are critical for development. Adequate funding should be provided for building new roads and maintaining existing road networks. This will strengthen linkages between product and input markets, as well as reduce firm losses arising from transportation failures. Improve road transportation, as well as cross-border transportation, to improve access to local markets. Encourage private investment in trucking services and inland dry ports to facilitate cross-border transportation.
- Private investment in infrastructure should be encouraged through transparent and consistent regulations and more competitive markets. In deciding whether to invest, private firms are particularly concerned about the extent of regulatory uncertainties.

2. Reduce unnecessary government regulations

- Move from licensing to registration in regulations on starting a business. Hasten the review and approval of the implementing decrees for the new Enterprise Law 2005. Investment laws and incentives should be made public and easily available.
- The number of obligatory procedures prior to starting a business should be reduced, and line ministry licenses for business operating licenses in most sectors should be eliminated or changed so that registration can also take place after the start of business. For example, this can be achieved by designating one department to accept and process applications, and to coordinate with other government units in the issuance of business license. Operational licenses should be maintained only for strategic businesses that require closer overseeing. Company seal and sign requirements should also be reduced. Re-registration procedures should be significantly simplified. Regulations regarding issuance of licenses/permits and re-registration should be made uniform across the country.
- Improve government efficiency in business monitoring. Reduce the frequency of inspections to a maximum twice a year. Make the aims of inspectors transparent, and pre-identify criteria for inspections to reduce opportunities for rent seeking. Using teams of inspectors may also help decrease inspection time or opportunities for informal practices.
- Reduce the number of procedures and signatures required for exports. Streamline customs procedures. Consistent with the Greater Mekong Subregion (GMS) program, efforts should be made to simplify and make

customs procedures transparent; and continue to harmonize customs procedures, inspections, quarantines, and other cross-border regulations along with other countries in the subregion.

- The country should continue to support ongoing efforts to harmonize cross-border regulations through subregional cooperation in GMS to facilitate trade and investment. Easing cross-border regulations through faster processing and simpler rules will reduce travel time and transactions costs, accelerate investment, and ease the process of tapping into new markets.
- Promote foreign and regional cross-border investments into manufacturing (including agro-processing) and services as they can transfer technology and good management practices and contribute to higher productivity in the relevant subsector as has happened in garments and wood sectors.

The government's move toward the privatization of state-owned enterprises (SOEs), and the eventual tariff reductions under the ASEAN of Free Trade Area (AFTA) agreement, could create apprehensions over decreases in both tax and nontax revenues. Such concerns may be unwarranted if the Government can implement measures to improve tax collection and broaden the tax base. In addition to simplifying tax structures and reducing inefficiencies in tax collection, the challenge for the Government is how to promote private sector growth to raise incomes. It is critical to facilitate an environment that stimulates current private businesses and encourages entry of new firms.

3. Reduce discretion in the taxation system and improve administration

- Amend the policy on annual registration by extending the validity of registration for medium and large firms for 3–5 years. Multiplicity of taxes and confusion in tax implementation can be addressed by implementing greater transparency and simplifying tax procedures, taking lessons from other countries that have restructured their tax systems.
- A nondiscretionary system should replace the current contract tax system. While, in theory, the contract system should be adequate for a country where private firms traditionally maintain poor accounting records, it has proven inefficient in collecting revenues and has become a source of extortion in practice.

- Amend the policy on annual registration for tax purposes, extending the validity of registration for medium and large firms.
- Encourage the use of noncash payments system (banking or postal) for tax collection.
- Simplify customs regulations and make them more transparent. Unnecessary discretion in import and export licensing procedures should be removed.
- Make laws and investment incentives publicly and easily available.

4. Maintain macroeconomic stability and reduce uncertainty

- Continue to maintain macroeconomic stability.
- Promote a productive public–private dialogue and provide capacity building to industry associations to enable them to play a more active role in shaping public policy. This will also improve private sector compliance with official rules and regulations.

5. Widen opportunities to access formal sources of financing

- Continue efforts to reform, restructure, and recapitalize the banking system, together with substantial improvements in corporate governance and technical training. Encouraging the entry of foreign banks can provide the additional much needed financing—for example, by leveling the playing field between the state and private banks, and by encouraging strategic investors to partner with state banks.
- Review lending procedures of banks to simplify the application process and foster the creation of commercial-based lending criteria, to ease financing for private companies with viable investment projects.
- To support the expansion of small firms, encourage the growth of microfinance institutions.

23. Tourism

The study suggests that infrastructure, skills and education, government regulation, access to finance, and macroeconomic uncertainty are the leading constraints on private sector businesses in the tourism industry.

1. Infrastructure

The two critical problems are electricity and transportation. At the Lao Business Forum’s Tourism Working Group, the most often-cited, highest-priority issue was air transportation.

- Review EdL’s tariff structure to ensure fair assessment of utility costs and support the move to cost recovery across economic sectors and consumer categories.
- Continue infrastructure development in the rural areas of the Lao PDR to facilitate international tourism.
- Pursue an open-skies policy and direct air links with countries outside the region, particularly Europe, Japan, and the US.
- Seek a joint-venture partner for Lao Airlines that will increase the airline’s resources, help upgrade its fleet, and enhance management.

2. Skills and education

The tourism sector faces a skills shortage across the complete range of seniority levels and job functions. A variety of tourism-specific training initiatives have sprung up, but there remains no comprehensive training institute or program to ensure a steady supply of well-qualified employees.

- Strengthen vocational training for tourism workers. Develop a training institute for the tourism industry, drawing on regional or international examples, such as the Dusit Thani School in Thailand. For example, encourage a joint-venture hotel school with initial support from the Lao PDR National Tourism Authority.
- Review the resource requirements of the tourism management program at National University of Laos to ensure that it can play a valuable role in educating the next generation of industry leaders.

3. Government regulation (including tax rates and business registration procedures)

- Streamline the business registration process to create a true one-stop approval process—preferably with guaranteed decision times—and

rationalize inspections, covering only the most critical areas while ensuring transparency.

- Restructure the visa system to allow one-month visas upon arrival for no more than the cost of attaining a tourist visa at a Lao embassy overseas, and to allow tourists to obtain visa extensions outside of Vientiane. Introduce GMS visas.
- Establish a hotel classification system for the Lao market.
- Promote private-sector participation in the new Tourism Promotion and Marketing Board to enhance coordination between the country's tourism providers and the image being presented to the international market.

4. Access to finance

- Continue efforts to reform, restructure, and recapitalize the banking system, together with substantial improvements in corporate governance and technical training, to transform the Lao banking sector into a viable system for mobilizing savings to finance private sector investment.
- Review lending procedures of banks to simplify the application process and foster the creation of commercial-based lending criteria that ease financing for private companies with viable investment projects.

5. Macroeconomic uncertainty

Firms expressed great concern about the unpredictability of the government's response to external events, and the potential difficulties it could present to their operations. In general, these firms expressed frustration with the poor quality of the public-private dialogue in the Lao PDR, and the perception that the industry has little real input into the government policy-making process. Initiatives such as the Lao Business Forum have helped the industry express an agenda, but the key informants interviewed did not feel the Government's policy-making process was responsive to that agenda.

- Provide technical assistance to the two relevant industry associations—Lao Hotel and Restaurant Association (LHRA) and Lao Association of Travel Agents (LATA)—to develop their advocacy and policy development capabilities.

- Work with LNTA, LHRA, and LATA to promote a productive public–private dialogue in the tourism industry, recognizing the importance to tourism firms of involvement in shaping the future of their sector.

APPENDICES

Surveys and stand-alone studies conducted under the Investment Climate Assessment

1. Investment climate survey (see Quintana, 2006)
2. Informal firms survey and study (see Quintana, 2006)
3. Electricity demand survey and study (see TEPCO, 2006)
4. Supply chain analysis of the garment industry
(see Global Development Solutions, 2006)
5. Tourism sector study (see Peters, 2005)

Appendix 1

Review of Recent Private Sector Studies on the Lao People's Democratic Republic

Over the past several years, a number of studies have been conducted to examine private sector constraints in the Lao PDR. Like the investment climate assessment (ICA), these studies also raise a number of important issues that need to be addressed to promote private sector growth. ICA complements these studies by providing quantitative evidence of how firms view the business constraints and how the constraints impact firm operations since most of the studies did not base the results on an enterprise survey. In the case of studies that also conducted a survey of firms, their findings appear to reinforce the results of ICA.

In 2002, a study conducted under an Asian Development Bank (ADB) technical assistance project aimed to analyze issues affecting market entry and operations in the Lao PDR and formulate recommendations to strengthen the business environment. Among the key recommendations of the study were to streamline registration and licensing; conduct stronger government–private sector dialogue; improve the tax structure; formulate a mechanism for better dissemination of regulations; ensure greater transparency in the awarding of investment incentives; develop a small and medium enterprise (SME) financing strategy; and implement an action plan for private sector development. Many of these issues were reinforced in a private sector assessment conducted by Sung (2005) for ADB. In addition to analyzing the overall constraints to private sector development, Sung also explored specific issues affecting the competitiveness of key sectors, and laid out policy actions for the private sector in general, as well as measures which were sector-specific.

Another study commissioned by the United Nations Development Programme, National Economic Research Institute, and United Nations Industrial Development Organization also focused on examining the bottlenecks to private sector development in the Lao PDR. This study by Mallon (2005) highlighted the difficulties regarding business entry, taxation and customs administration, and the overall administrative and regulatory environment. Weaknesses in public administration and contract enforcement were noted to pose specific barriers to business development.

In 2006, in the trade integration study on the Lao PDR, the World Bank and donors of the integrated framework pressed the need to promote the private sector to enable the country to take advantage of trade opportunities. Among the key challenges facing the business sector are costly and unreliable infrastructure

services, cumbersome regulatory environment, and low level of entrepreneurial skills. In the study, business and regulatory environment is mentioned as the number one binding constraint for exports and trade promotion. The high degree of policy uncertainty is considered a result of poor public–private dialogue, unclear government policies, and the lack of transparency.

Other private sector studies based their analysis on interviews or surveys of firms. A study conducted by Shultze (2003)—on behalf of German development cooperation through GTZ—was based on an interview of firms, but focusing only on SMEs in Vientiane capital and working with fewer firms compared to ICA.¹ In the interviews conducted under the study, firms were asked about their assessment of the overall economic policy and situation, the impact of these on them, their rating of specific problems affecting firms, and their financing experience. On the general perception about economic policy, about half of the respondents viewed it as “good.” For some firms that viewed otherwise, their negative assessment was based on the perceptions of lack of support from the government, lack of mechanism for business promotion, inconsistency in rules and regulations, and the high cost of infrastructure services. Firms were also asked about their rating of a list of main problems affecting companies. At the top in the ranking of constraints is “too high taxes,” followed by competition, lack of marketing, and lack of capital (Figure A1.1). While both ICS and GTZ considered taxation a crucial issue, they differed in terms of the importance placed on competition. In ICS, only 5% considered anti-competitive practices as a serious obstacle compared to 33% of firms in the GTZ study. It should be noted, however, that since the GTZ survey was conducted in Vientiane where more firms operate relative to other provinces, then competition could indeed be more pronounced.

A recent survey of firms was commissioned by German development cooperation through GTZ and undertaken in 2005, almost in parallel with ICA: the Human Resource Development for Market Economy (HRDME) Enterprise Baseline Survey (EBS). Like ICA, EBS was concerned about identifying constraints to firm growth and productivity and used a combination of perceptions and quantitative data. However, EBS had a smaller geographical coverage and applied a different sampling frame based on the 2004 tax registration of covered districts. A comparison of EBS and ICA surveys indicates some similarities and differences in the importance placed on the constraints.² In comparing the two, one should note that the list of pre-identified constraints in a way differ between

¹ The study of Shultze utilized information mainly from a survey of 40 firms from Vientiane Capital.

² See “Extracts of HRDME EBS 2005 Survey” (HRDME 2006).

them. For example, macroeconomic uncertainty and transportation were not among the constraints stated in EBS, but were identified in ICA.

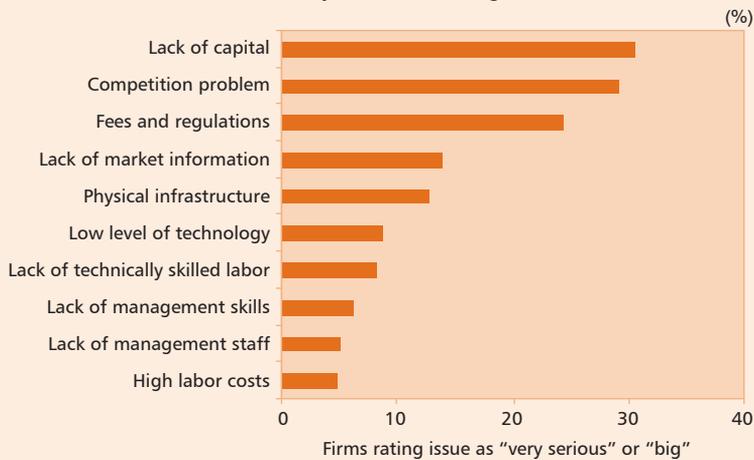


A similarity between the two surveys is the perception on regulations. Regulatory uncertainty ranked second in the list of ICS constraints. In EBS, fees and regulations were also considered among the top three constraints, with 28% of firms rating these as “big” or “very serious” problems (Figure A1.2). Taxation also figured among the top three constraints in ICS. In EBS, “too high taxes” was the foremost concern among all issues related to “fees and regulations,” with 51% of firms saying such issue was “very serious” or “big” (Figure A1.3). Another similar result is on customs and trade regulations. In EBS, about 23% viewed these as serious issues. This is comparable to the 20% of firms in ICS, which considered them as major or severe obstacles.

There is a difference, however, between the two surveys in terms of the importance placed on financing. In ICA, financing was considered a serious issue among 22% of firms surveyed, making it the fifth most important. In EBS, however, “lack of capital” was the top constraint and considered more serious than infrastructure or regulations. Infrastructure was the highest constraint in ICS, with about 50% of firms surveyed finding it as major or severe obstacle, and the main issue being electricity tariffs. In EBS, only 13% considered

infrastructure a “very serious” or “big problem.” However, in EBS, about 33% of firms considered “high utility costs” a major issue, which indicates that cost of electricity could be the problem—more so than access—just like in ICS. Although there are differences in the weighing of issues between ICA and EBS, still both have brought out quite similar issues that impede private sector development.

Figure A.1.2 Percentage of firms in the Enterprise Baseline Survey rating issue as “very serious” or “big”



Source: EBS, 2006.

Figure A.1.3 Problems with “fees and regulations”



Source: EBS, 2006.

As discussed in the main text, these differences between surveys are mostly due to different data collection methods (survey versus interviews) or from different sampling frames. The results in this study should be analyzed with care, as they can only be generalized for the sectors and firm types included in the ICS sample.

Appendix 2 Manufacturing

Regression analysis takes into account many firm-specific characteristics and provides a systematic method of measuring the effect of investment climate constraints on productivity. In the analysis below, productivity refers to the effects of any variable different from the inputs—capital and labor—affecting the production process. In general, productivity is expected to be correlated with labor and capital, and therefore, these factors of production must be treated as endogenous regressors when estimating production functions. To address the endogeneity problem of the inputs, the analysis adopts the approach described in Escribano and Guasch (2005). Specifically, an extended Cobb-Douglas production function is estimated, where a vector of firm-specific observed variables in the Lao PDR Investment Climate Survey (ICS) dataset proxies for fixed aspects in the investment climate. Given that the technical rates of substitution between the factors of production are very different for different goods, the estimation methodology consists of splitting the sample of firms into industry groups: garments/textile, food and beverages, construction materials, and wood processing.

Econometric methodology

As a starting point, technology is described by a Cobb-Douglas production function with Hicks-neutral technical change (in natural logarithmic form) for firm i in industry j at time t :

$$v_{i,t}^j = \beta_l l_{i,t}^j + \beta_k k_{i,t}^j + u_{i,t}^j \quad (1)$$

where value-added v is produced combining labor l and capital k . u is residual firm productivity and can be decomposed as follows:

$$u_{i,t}^j = \omega_{i,t}^j + \varepsilon_{i,t}^j \quad (2)$$

where ω is a component of firm productivity that is known to the firm manager and possibly affects input choices but is unknown to the econometrician and ε is a random shock to productivity that is realized after input choices are made (therefore, it is not correlated with input choices).³ Since more productive firms will hire more labor and use more capital to produce greater quantities, estimates of the corresponding production function parameters, β_l and β_k , obtained by ordinary least squares (OLS) techniques that do not account for such endogeneity are biased.

³ More specifically, the conditional expected values verify the following equalities: $E[\varepsilon_{i,t}^j / l_{i,t}^j] = 0$ and $E[\varepsilon_{i,t}^j / k_{i,t}^j] = 0$.

To mitigate the endogeneity problem of the inputs, the Cobb-Douglas production function is augmented by observed firm characteristics and proxies for usually unobserved firm-specific fixed effects available in ICS data:

$$v_{i,t}^j = \beta_l l_{i,t}^j + \beta_k k_{i,t}^j + \sum_{n=1}^{q_Z} Z_{n,i}^j + \sum_{n=1}^{q_{IC}} \beta_{IC_n} IC_{n,i}^j + u_{i,t}^j \quad (3)$$

where Z is a vector of firm characteristics and IC is a vector of firm-specific investment climate constraints. Z includes dummy variables for export status, size, province, and year. IC includes total hours of power outages in 2004; a dummy variable equal to 1 if firm i believes local government officials' interpretation of regulations is unpredictable; and the average percentage of shipment loss due to breakage or spoilage in transit.

Equation 3 is estimated by OLS using data collected in ICS for years 2002, 2003, and 2004, with clustering on establishment. Note, however, for variables in vectors Z and IC , data are available only for 2004. While variables in Z are generally fixed over the 3-year period, investment climate constraints may be quite different year-to-year. In the regression analysis, an assumption is made that IC variables are fixed over 2002, 2003, and 2004. The limited number of observations in the data collected by the Lao PDR ICS—as described below—necessitates such a heroic assumption.

Thus, several standard methods for estimation of production functions and for estimating the demand for exports and determinants of investments have been attempted in this study. However, none of these produced significant or plausible results. This was mainly due to the small sample size by sector, and to the skewed distribution of the firms types within industries (for example, too many exporters in one industry and too little in others). The pooled regressions did not work due to the too restrictive assumptions regarding constant conditions in the past and low power of tests. Thus, productivity analysis is limited, but results are presented below for further reference. Attempts with investment and export decision and demand equations are described at the end of this appendix.

Definition of variables

The regression analysis of productivity is based on a subsample of manufacturing firms from ICS for which the values of variables are not considered outliers and for which data on all production variables are available. The original total number of firms in the survey before selection is 246: 53 in garments/textiles; 34 in food and beverages; 67 in construction materials; and 92 in wood processing.

Identifying and dropping outliers, the sample size is reduced to 160 firms: 40 in garments/textile; 23 in food and beverages; 42 in construction materials; and 55 in wood processing. Consequently, pooling all 3 years of data is necessary given the small sample sizes for each industry.

An observation (i.e., firm) is defined an outlier for variable X if its value is greater than the 75th percentile of X in industry i by more than 3 times the interquartile range (IQR—which is the 75th percentile minus 25th percentile—) for industry i or if its value is less than the 25th percentile of X in industry i by more than 3 times IQR for industry i . The variables for which this outlier rule is applied are the output–labor ratio, capital–labor ratio, materials–labor ratio, labor share in revenue, and materials share in revenue. For input revenue shares, all firms with labor or materials revenue shares larger than 1 are additionally classified as outliers. Outliers are identified for the ratios and shares in each of the three sample years.

Production function variables are defined as follows:

- Value added for 2002, 2003, and 2004, respectively, are given by “total sales” ($q66_1_02$, $q66_1_03$, and $q66_1_04$) minus total purchase of “raw material and intermediate goods (whether used in production or not), including finished goods for resale” ($q66_2_02$, $q66_2_03$, and $q66_2_04$) in question 66.
- Labor for 2002, 2003, and 2004, respectively, are given by the total number of “permanent employees” ($q57_1$, $q57_2$, and $q57_3_1$) in question 57a.
- Capital for 2002, 2003, and 2004, respectively, are given by net–book value of “machinery and equipment (including transport)” ($q70_1_02$, $q70_1_03$, and $q70_1_04$) in question 70.

Input revenue shares used in the identification of outliers are defined as follows:

- Labor revenue share for 2002, 2003, and 2004, respectively, are calculated as the “total cost of labor, including wages, salaries, and bonuses” ($q66_3_02$, $q66_3_03$, and $q66_3_04$) divided by “total sales” ($q66_1_02$, $q66_1_03$, and $q66_1_04$) in question 66.
- Materials revenue share for 2002, 2003, and 2004, respectively, are calculated as total purchase of “raw material and intermediate goods (whether used in production or not), including finished goods for resale” ($q66_2_02$, $q66_2_03$, and $q66_2_04$) divided by “total sales” ($q66_1_02$, $q66_1_03$, and $q66_1_04$) in question 66.

Firm characteristics are defined as follows:

- Exporters are defined as firms that “exported directly” at least 10% of total sales in 2004 as given by question 9a (*q9b_3*).
- Size is given by sum of permanent workers (*q57_3_1*) in question 57a and the permanent-equivalent of temporary workers, which is defined as the total number of “temporary employees” (*q58a_1_1*) times the factor of “average length of employment for each temporary worker in days” (*q58a_4*) divided by 365. Size categories are defined as follows: small (less than 20 employees), medium (20–99 employees), and large (100 or more employees).

The investment climate variables are defined as follows:

- Hours of power outage is given by “number of days” of power outages (*q28_2_1*) times “average duration per day (hours)” of power outages (*q28_3_1*) in question 28.
- The dummy variable “believe local government officials” interpretation of regulations in unpredictable is given by response of firm *i* to question 48 that asks: “To what extent do you agree or disagree with this statement?: In general, (provincial/local) government officials’ interpretations of regulations affecting my establishment are predictable.” Firms are classified as belonging to two groups: (1) those that answered “fully agree,” “agree in most cases,” or “tend to agree”; and (2) those that answered “fully disagree,” “disagree in most cases,” or “tend to disagree” (*q48_2*).
- “Percentage of shipment loss due to breakage or spoilage in transit” is given by question 31a that asks “For shipments in the domestic market, what percentage of the value of your shipment was lost while in transit due to breakage or spoilage?” (*q31a_1*).

Table A.2.1 Profile of manufacturing firms						
Item	All	Construction materials	Food and beverages	Garments	Textile/handicraft	Wood processing
Number of firms	246	67	34	39	20	86
Median number of workers	21.0	11.0	13.5	250.0	20.5	25.0
Average share of female workers (%)	33.0	14.7	33.1	82.5	65.3	14.7
Average age (years)	9.1	7.5	9.4	9.5	10.9	9.6
Share of firms by age group (%)						
>=5	30.9	35.8	29.4	25.6	15.0	33.7
6-10	31.7	44.8	26.5	25.6	40.0	24.4
>10	37.4	19.4	44.1	48.7	45.0	41.9
Share of firms with one or more branches	18.7	17.9	14.7	25.6	20.0	17.4
Share of firms by majority ownership (%)						
Private domestic	78.9	88.1	79.4	43.6	65.0	90.7
Foreign	18.7	7.5	20.6	53.9	30.0	8.1
Government/ others	2.4	4.5	0.0	2.6	5.0	1.2
Share of firms previously owned by government (%)	11.0	4.5	14.7	5.1	10.0	17.4
Share of exporting firms (%)	33.7	0.0	5.9	76.9	40.0	50.0
Average share of exports to sales (%)	28.8	0.0	3.6	72.1	19.5	43.7
Source: Lao PDR ICS, 2005.						

Table A.2.2 Production function estimation

Dependent variable: ln(value added)	1	2	3	4	5	6	7	8
	Garments/textile	Food and beverages	Construction materials	Wood processing				
ln (Capital)	0.126 [0.089]	0.133 [0.084]	0.040 [0.129]	0.082 [0.160]	0.351*** [0.048]	0.378*** [0.059]	0.265** [0.109]	0.254** [0.096]
ln (Labor)	0.971*** [0.103]	0.977*** [0.181]	0.790*** [0.124]	0.760* [0.420]	0.531*** [0.119]	0.864*** [0.254]	0.688*** [0.150]	0.539* [0.285]
Power outage (hours)	(0.001) [0.002]	0.002 [0.003]	(0.003)* [0.002]	(0.002) [0.002]	(0.007)** [0.003]	(0.007)*** [0.003]	0.002 [0.002]	(0.001) [0.002]
Believe local government officials' interpretation of regulations is unpredictable	(0.523)* [0.275]	(0.553)* [0.299]	0.034 [0.290]	(0.145) [0.400]	0.363 [0.378]	0.431 [0.419]	0.199 [0.417]	0.306 [0.353]
% of shipment loss due to breakage or spoilage in transit	-	-	(0.070) [0.046]	(0.077)* [0.044]	(0.125) [0.091]	(0.164) [0.099]	-	-
Exporter	-	0.651 [0.391]	-	(0.350) [0.636]	-	-	-	0.787 [0.535]
Medium (20–99 employees)	-	0.540 [0.416]	-	0.319 [0.757]	-	(0.923)* [0.538]	-	0.146 [0.584]
Large (100 or more employees)	-	-	-	0.308 [1.358]	-	(0.915) [0.806]	-	(0.118) [0.897]
Oudomxay	-	-	-	-	-	-	-	0.435 [0.415]

(continued next page).

Table A.2.2 (continued).

Dependent variable: ln(value added)	1	2	3	4	5	6	7	8
	Garments/Textile	Food & Beverages	Construction Materials	Wood Processing				
Luangprabang	-	0.282 [0.597]	-	(0.619) [0.447]	-	-	-	1.322* [0.676]
Xayaboury	-	-	-	-	-	-	-	0.777 [0.512]
Savannakhet	-	(0.560)** [0.265]	-	0.551 [0.444]	-	(0.246) [0.320]	-	0.702** [0.332]
Champassack	-	-	-	0.437 [0.521]	-	(0.071) [0.419]	-	0.376 [0.422]
Year 2003	0.166 [0.109]	0.195* [0.110]	0.247 [0.184]	0.273 [0.190]	(0.132) [0.085]	(0.174)* [0.092]	(0.073) [0.088]	(0.062) [0.081]
Year 2004	0.138 [0.115]	0.155 [0.122]	0.266 [0.208]	0.281 [0.225]	(0.047) [0.112]	(0.146) [0.131]	(0.076) [0.120]	(0.072) [0.109]
Constant	2.081*** [0.501]	1.359 [0.961]	3.338*** [0.917]	2.881 [1.737]	2.931*** [0.403]	2.451*** [0.539]	2.589*** [0.378]	2.372*** [0.858]
Number of observations	110	110	62	62	114	114	155	155
Adjusted R2	0.739	0.762	0.589	0.610	0.677	0.694	0.659	0.717

Notes: Robust standard errors in brackets. Industries by 2-digit ISIC code: Garments/textile (17, 18, 19); food and beverages (15); construction materials (26, 27); wood processing (20)
Omitted comparison group respective set of dummy variables: size – small (less than 20 employees); province – Vientiane; year – 2002
* significant at 10%, ** significant at 5%, *** significant at 1%

Sources: Lao PDR ICS, 2005; Author's calculations.

Table A.2.3 Statistical annex to productivity in manufacturing (Unit: \$)						
	Total sales in 2004	Total sales per worker	Value added per worker	Capital per worker in 2004	Value added per capital	Total compensation per worker
All Firms	323,769	5,357	2,520	1,898	374	668
Size						
Small	57,473	4,647	2,345	1,969	366	657
Medium	355,911	6,197	2,458	2,123	220	668
Large	924,736	5,731	2,971	1,405	613	691
Industry						
Garments	628,182	4,244	2,800	792	748	646
Textile/handicrafts	113,352	3,493	1,758	1,602	253	728
Food and beverages	94,033	4,045	2,267	2,383	320	501
Construction materials	203,806	5,692	2,220	2,171	322	651
Wood processing	442,306	6,582	2,917	2,058	310	746
Province						
Vientiane	371,756	5,164	2,469	1,761	377	676
Oudomxay	16,313	2,451	1,776	1,117	242	637
Luangprabang	168,095	6,900	2,986	1,939	305	538
Xayaboury	183,286	5,988	3,701	1,460	411	762
Savannakhet	349,296	6,200	2,388	2,118	455	684
Champassak	364,902	4,888	2,601	3,111	189	556
Export status						
Nonexporters	131,245	4,828	2,241	2,056	300	664
Exporters	737,053	6,443	3,090	1,578	526	675
Ownership						
Domestic	280,592	5,333	2,535	1,992	336	659
Foreign	529,120	5,463	2,457	1,460	547	705

Source: LAO PDR ICS, 2005.

Several attempts have also been made to estimate investment and export demand/decision equations. Export demand equations lacked right-hand-side variables and number of observations. On the investment decision equations, a probit model was used. The Tobit model could be used if the dependent variable took on the value zero with positive probability but was roughly continuously

Table A.2.4 Investment incidence and propensity by type, region, and sector			
	Investment > 0 (percentage of firms)	Investment rate (%) for investing firms (new investment/ last year capital)	Investment rate (%) all firms (zeros included) (new investment/ last year capital)
All firms	66.3	44.9	28.9
Size			
Small	64.9	53.4	33.60
Medium	60.8	49.4	29.23
Large	76.9	24.1	18.22
Industry			
Garments	77.8	28.2	21.5
Textile/handicrafts	65.0	50.1	31.6
Food and beverages	60.6	57.7	35.0
Construction materials	63.6	38.7	22.9
Wood processing	65.9	51.0	33.2
Province			
Vientiane	62.0	34.1	20.7
Oudomxay	78.6	74.9	56.2
Luangprabang	77.8	45.1	35.1
Xayaboury	68.8	66.8	45.9
Savannakhet	70.5	41.2	27.9
Champassak	63.2	80.5	49.2
Export status			
Non-exporters	62.7	49.0	29.6
Exporters	73.4	38.0	27.5
Ownership			
Domestic	66.0	47.5	30.5
Foreign	67.4	33.2	21.8
Source: LAO PDR ICS, 2005.			

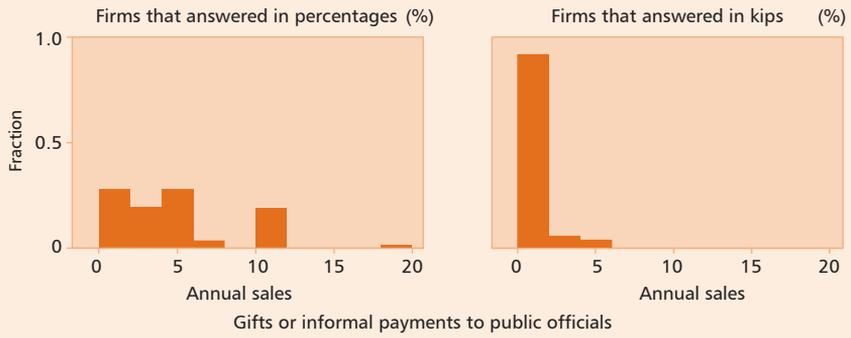
distributed over strictly positive values. Therefore, the Tobit model is appropriate if the dependent variable is the investment rate and non-investors are included. If the quality of data is poor and the identification of zeros and missing values is inaccurate, one usually gets around this problem by estimating the investment rate equation on only the sample of investors (i.e., firms with investment > 0) only. In this case, probit is appropriate since the sample is not censored at zero. However, such model did not give positive estimates and results are not reported here.

Appendix 3 Governance

In the Investment Climate Survey (ICS), firms were asked whether establishments are sometimes required to give gifts or informal payments to public officials to “get things done” with regard to customs, taxes, licenses, regulations, services, etc. Over 50% of firms answered affirmatively: 58 firms (24%) responded “always” and 66 firms (27%) responded “sometimes.” For firms that answered “always” or “sometimes,” a subsequent question was asked: “On the average, over a year, what percentage of annual sales value would such expenses cost a typical establishment in your area of activity?” If the firm could not answer in percentage terms, the total value was alternatively given in kips (and divided by the annual sales number provided by the firm). Of the 124 firms that answered affirmatively to the first question, 68 and 56 firms provided estimates of the bribe value in percentages and kips, respectively.

As seen in the histograms presented in Figure A.3.1, the distributions of the two groups are significantly different. From the answers provided by the 68 firms that answered in percentage terms, the value of gifts and informal payments is estimated to be on the average 4.2% of annual sales (when 4 outliers are dropped). On the other hand, from the answers provided by the 56 firms that answered in kips, the value is estimated to be on the average 0.2% of annual sales (when 2 outliers are dropped). Because the question is answered solely in percentages in the ICS of comparator countries, the two types of answers in the Lao PDR cannot be combined and compared to the averages of other countries. (In the comparison of the bribe level in the Lao PDR against the averages of comparator countries presented in the ICA report, only the average of firms that answered the question in percentage terms is used.) Therefore, further survey work is necessary before strong conclusions can be made about corruption in the Lao PDR.

Figure A.3.1 The size of bribes – measurement differences due to response type



Source: Lao PDR ICS, 2005.

Appendix 4 Regulation

To examine the question of how different factors—including ownership—affect the burden of regulation for enterprises in the Lao PDR, we estimate several versions of the equation below:

$$\text{Regulatory Burden}_i = \beta_1 + \beta_2 \text{ Firm Characteristics}_i + \varepsilon_i$$

The dependent variables are two measures of the burden of regulation—the number of inspections that the firm faced in the previous year and the percentage of time that the senior management of the firm spends dealing with regulations (Table A.4.1). Although these two variables are positively correlated at the enterprise level ($\rho = 0.36$, $p\text{-value} = 0.00$), they are not perfectly correlated. As discussed in the main text, this is not surprising. Dealing with inspections is not the only burden associated with regulation. For example, firms also have to deal with preparing for required meetings, filling out forms, preparing tax statements, and ensuring that their physical premises meet regulatory standards.

Both dependent variables are limited dependent variables. The first variable—the percentage of time that senior management spends dealing with regulatory requirements—is bounded between 0 and 100%. To take account of this in the estimation, we allow this variable to be bounded between 0 and 100. In practice, no firms reported that their senior management spent all their time dealing with regulatory requirements. The other variable—the number of inspections—is a count variable (i.e., it only takes scalar values). We estimate this model using a negative binomial count data model. We use this more general model because hypothesis tests strongly reject the null hypothesis that the count data follows a simpler Poisson distribution.

Previous studies have shown that small firms—especially microenterprises—manage to avoid much of the burden of regulation in low- and middle-income countries.⁴ For example, in a sample of low and middle-income countries, microenterprise managers spent about 10% of their time dealing with government regulations and faced about 3 inspections, compared to 12% and 12 inspections for very large enterprises.⁵ We therefore control for this in the number of employees that the firm has in the model.

⁴ See World Bank, 2005a.

⁵ Data from World Bank (2004b) for Bangladesh, Brazil, Cambodia, Guatemala, India, Indonesia, Kenya, Pakistan, Tanzania, and Uganda.

Other factors might also affect the burden of regulation. To control for this, we include a dummy variable representing whether the enterprises exports more than 10% of its sales. It seems plausible that the burden of regulation will be greater for exporters. For example, exporters are likely to face inspections related to exporting (e.g., customs and trade department inspections). Given that firms appear to be concerned about trade regulation, this might be a especially big problem in the Lao PDR.

The regressions include two variables indicating firm ownership. If the government owns more than 10% of the enterprises, the enterprise is classified as (partly) state-owned. State ownership might affect the burden of regulation if state-owned firms are more visible to the government. On the other hand, previous studies in other countries have often found that state-owned enterprises manage to use their political influence to avoid many burdensome regulations.⁶ If foreign enterprises or individuals own more than 10%, it is classified as (partly) foreign-owned. Foreign-owned enterprises might be able to avoid some of the burden of regulation either by bargaining with governments for reduced regulation or by locating in special economic zones or export processing zones. On the other hand, foreign enterprises are likely to be especially visible to the authorities and might be easier to regulate for political reasons.

In addition to these variables, the regressions also include a series of sector and location dummies. The regional dummies are dummy variables indicating that the firm is located in the capital, Vientiane, and a dummy variable indicating that it is located in the south (Champassak/Savannakhet). The omitted region is the north (Oudomxay/Luangprabang/Xayaboury). Previous studies have shown that regulation varies between region in the Lao PDR.⁷

Finally, the regressions include a series of dummies indicate the subsection of the economy that the firm operates in. The dummies are for garment, textile, food and beverage, and wood processing firms. The omitted sector is construction materials. Given the large number of inspections by the forestry department, it seems plausible that wood processing firms might face more inspections even after controlling for other factors that affect the number of inspections.

When we regress management time spent dealing with regulation on each type of regulation, the size and statistical significance of the coefficients are different for different types of regulation—although the coefficients are

⁶ See, for example, the discussion of the effect of state ownership on pollution in Asia in Hettige and others (1995).

⁷ See the World Bank, 2005a.

positive in all cases (Table A.4.2). Combining the types of inspections that have the lowest levels of statistical significance and rerunning the regressions tend to increase the significance of the remaining variables. The null hypothesis that the coefficients on inspections by customs, the economic police, municipal police, trade department, and food and drug department are all equal cannot be rejected at conventional significance levels (p -value=0.97). When we reestimate the equation allowing the coefficients on these inspections to be equal but allowing the coefficients on those types of inspections that are more highly significant to be different, we reject the null hypothesis that coefficients on the remaining variables (tax inspections, forest department inspections, industry department inspections, and labor inspections) are the same as the other combined category at a 5% significance level (p -value=0.02). Based upon the coefficient estimates in column 3, an additional tax inspection increases total management time spent dealing with regulation by 0.31 percentage points, while an additional industry department inspection increases the total time spent dealing with regulation by 0.35 percentage points. Although the coefficients on labor inspections and forest department inspections are statistically insignificant at conventional significance levels, the point estimates of the parameters suggest that an additional inspection increases the total time by 0.88 and 0.07 percentage points, respectively. Although inspections increase the time spent dealing with regulations, labor, tax, and industry department inspections appear the most time consuming.

Table A.4.1 Impact of inspections on time spent dealing with government regulations

Model	Tobit		
Dependent variable	Time spent dealing with government regulations		
Observations			
Total inspections	0.09*** [4.44]	0.02 [0.59]	
Forest department	0.08 [1.20]	0.06 [0.76]	0.08 [1.48]
Tax department	0.38** [2.33]	0.35** [2.49]	0.39*** [3.08]
Industry department	0.37 [1.54]	0.40* [1.84]	0.42** [2.02]
Labor department	0.92 [1.16]	1.05 [1.53]	1.20* [1.87]
Customs department	0.03 [0.19]		
Economic police	0.06 [0.30]		
Municipal police	0.38 [0.78]		
Trade department	0.10 [0.43]		
Food and drug department	(0.01) [(0.03)]		

*** Significant at 1% significance level. ** 5% level. * 10% level.
Source: LAO PDR ICS, 2005.

Table A.4.2 Regression results				
	Tobit Percent of time spent dealing with regulations	Poisson Number of inspections	Tobit Percent of time spent dealing with regulations	Poisson Number of inspections
Observations	238	240	237	239
Firm characteristics				
Number of workers (natural log)			0.3285 [0.59]	0.2472*** [13.96]
Firm is an exporter (dummy)	3.2878** [2.45]	0.5829*** [14.59]	2.7737* [1.73]	0.1092** [2.03]
Ownership				
State-owned (dummy)	1.7885 [0.67]	0.2950*** [3.45]	1.5967 [0.60]	0.2151** [2.50]
Foreign-owned (dummy)	0.0314 [0.02]	(0.1718)*** [4.02]	(0.1503) [0.11]	(0.2860)*** [6.55]
Sector of operations (construction materials is omitted)				
Garment (dummy)	(2.9466) [1.47]	0.7412*** [11.18]	(3.2244) [1.57]	0.6232*** [9.19]
Textile (dummy)	2.1049 [1.03]	0.0828 [1.04]	2.1759 [1.06]	0.1843** [2.32]
Food and beverages (dummy)	0.4873 [0.31]	0.4228*** [6.95]	0.5168 [0.33]	0.4735*** [7.77]
Wood (dummy)	0.3590 [0.26]	0.6891*** [13.23]	0.3687 [0.26]	0.7341*** [13.91]
Region				
Vientiane (dummy)	0.0309 [0.02]	(0.3163)*** [6.53]	(0.2132) [0.14]	(0.4956)*** [9.84]
South (Champassak/ Savannakhet) (dummy)	(0.0208) [0.01]	0.0652 [1.40]	(0.2063) [0.14]	(0.0654) [1.37]
*** Sig. at 1% level. ** Sig. at 5% level. * Sig. at 10% level.				
Note: Outliers for the dependent variables with more than three standard deviations above or below the mean are dropped from the regressions.				
Source: LAO PDR ICS, 2005.				

Appendix 5

Statistical Appendix on Access to Finance

We examine the question of how different factors, including ownership, affect access to credit in the Lao PDR, estimating different versions of the equation below:

$$\text{Finance}_i = \beta_1 + \beta_2 \text{ For, Characteristics}_i + \varepsilon_i$$

The dependent variables are various measures of access to finance for firm *i*. The measures include the firm's perceptions about access to financing and the cost of financing, whether the firm has a loan from a bank or an overdraft facility, the percent of short-term assets (e.g., inventories of short-term assets that are used in production such as raw materials and intermediate goods and accounts receivable) that the firm uses bank loans to acquire or finance, the percentage of new investment that the firm finances with bank loans, and loan duration for firms with loans.

The dependent variables are limited dependent variables. The two perception variables are based upon questions that asked the manager to rank on a 5-point scale how great an obstacle access to financing and the cost of financing were to enterprise operations and growth.⁸ Since the responses are ordered, with higher numbers meaning a greater obstacle, but not count data, the model is estimated as an ordered Probit model. Two of the variables—whether the firm has a bank loan and whether it has an overdraft facility—are dummy variables. These models are estimated as simple Probit models. Two of the variables, percentage of new investment and short-term assets financed through the banking sector, are restricted to be between 0 and 100%—although in practice, few firms financed 100% of short-term assets through the banking sector.⁹ These models are estimated as a two-limit Tobit model. The final variable is loan duration in months. This variable is truncated below at 0 and, therefore, we estimate it using a one-limit Tobit model.

A large literature has shown that financing tends to be a greater problem for small- and medium-sized enterprises.¹⁰ The regressions therefore contain a variable to control for enterprise size—the number of workers in the enterprise. We also included a variable representing firm age in some model specifications.

⁸ Responses were 0=no obstacle, 1=minor obstacle, 2=moderate obstacle, 3=major obstacle, and 4=very severe obstacle.

⁹ None of the firms in the Lao PDR obtain all their financing from banks, making this restriction nonbinding in this case.

¹⁰ See Schiantarelli (1996) for a review of the literature on firm size and financial constraints.

Since this variable was consistently statistically insignificant we omit it from the main specification.

Firm's financing needs are also likely to depend upon its customers. In particular, we include a dummy variable representing whether the enterprises export more than 10% of its sales. A priori, it is difficult to assess whether the coefficient on this variable should be positive or negative. On the one hand, exporters are likely to be more efficient than other enterprises, suggesting that they might find it easier to get financing. On the other, if their greater efficiency translates into higher profits—not necessarily the case since international markets are likely to be more competitive than domestic markets, they might have less demand for bank loans.

The regressions include two variables indicating firm ownership. If the Government owns more than 10% of the enterprises, the enterprise is classified as (partly) state-owned. State-ownership might affect the availability of credit—especially in the Lao PDR, where the banking sector is primarily state-owned. If foreign enterprises or individuals own more than 10%, it is classified as (partly) foreign-owned. Foreign-owned enterprises might be able to get financing either in their home country or from their parent company and, therefore, be less likely to depend upon local banks for financing.

If better educated managers are more likely to have contacts that allow them to get loans or find it easier to deal with bureaucratic requirements and paperwork, then they might find access to finance a less serious constraint than other firms. Consistent with this idea, firms with university educated managers are more likely to have audited accounts than other firms—47% of firms with university educated managers reported having audited accounts compared to 22% of other firms. This remains true after controlling for additional variables (i.e., the ones included in the main regressions), although the coefficient becomes marginally statistically insignificant (13% significance level). In a simple probit regression of a dummy variable indicating that the firm has audited accounts on a dummy variable indicating that the manager has a university education and other control variables (e.g., size, ownership, location, and sector), the coefficient on the dummy indicating education remains positive.

In addition to these variables, the regressions also include a series of sector and location dummies. The regional dummies are dummy variables indicating that the firm is located in the capital, Vientiane, and a dummy variable indicating that it is located in the South (Champassak/Savannakhet). The omitted region is the north (Oudomxay/Luangprabang/Xayaboury).

Finally, the regressions include a series of dummies indicate the sub-section of the economy that the firm operates in. The dummies are for garment firms, textile firms, food and beverage firms, and wood processing firms. The omitted sector is construction materials.

Table A.5.1 Effect of firm characteristics on access to credit

Estimation method	1	2	3	4	5
Dependent variable	Probit Firm has loan (dummy)	Probit Firm has overdraft (dummy)	Probit Percent of working capital financed through bank loans	Tobit Percent of investment financed through bank loans	Tobit Duration of most recent loan
Observations	244	224	244	239	56
Firm characteristics					
Number of workers (natural log)	0.1631*** [4.84]	0.0675*** [3.26]	22.4751*** [3.66]	26.5017*** [3.57]	7.3258*** [3.11]
Firm is an exporter (dummy)	(0.3107)*** [3.82]	(0.1713)*** [2.69]	(62.0860)*** [3.35]	(69.0377)*** [3.15]	(19.3525)** [2.47]
Ownership					
State-owned (dummy)	(0.0896) [0.85]	(0.0025) [0.03]	(13.9545) [0.58]	(9.8368) [0.38]	(3.7293) [0.33]
Foreign-owned (dummy)	(0.2322)*** [3.52]	(0.0860)** [2.20]	(43.6509)*** [2.67]	(41.0386)** [2.20]	14.8410* [1.93]
Manager education (secondary or less is omitted)					
University education (dummy)	0.0347 [0.51]	0.0343 [0.74]	16.4976 [1.44]	16.7109 [1.25]	6.0966 [1.16]
Vocational education (dummy)	0.0696 [0.89]	(0.0149) [0.33]	6.2090 [0.50]	9.8522 [0.70]	9.5420* [1.70]
Sector of operations (construction materials is omitted)					
Garments (dummy)	0.0639 [0.54]	0.1524 [1.52]	1.3435 [0.07]	(12.2648) [0.55]	(3.4873) [0.39]
Textiles (dummy)	0.2164* [1.68]		(6.6741) [0.34]	2.9828 [0.14]	17.0937** [2.14]
Food and beverages (dummy)	0.0002 [0.00]	(0.0682) [1.32]	(11.9745) [0.76]	(21.5350) [1.10]	11.6150 [1.54]
Wood (dummy)	0.0865 [1.11]	0.0085 [0.19]	7.8001 [0.62]	13.2738 [0.94]	5.1858 [0.89]
Region					
Vientiane (dummy)	(0.0519) [0.62]	(0.0524) [0.92]	(10.4360) [0.74]	(9.3957) [0.57]	(6.0432) [0.88]
South (Champassak/ Savannakhet) (dummy)	(0.0388) [0.48]	0.0006 [0.01]	(24.2003) [1.64]	(19.1321) [1.13]	(6.5271) [1.00]
*** Sig. at 1% level. ** Sig. at 5% level. * Sig. at 10% level.					
Source: LAO PDR ICS, 2005.					

Appendix 6 Electricity

Pertinent conclusions of the original ICA Survey are summarized in the following table:

Table A.6.1 ICS results – electricity						
	Firms identifying electricity as major constraint (%)	No. of days of power interruptions (2005)	Average duration of power interruptions (hours)	Lost value due to power interruptions (% sales value)	Days to obtain electrical connection	Own generator (%)
Sector						
Garments	53.8	8.2	4.0	5.2	9.7	2.6
Textile/ handicrafts	40	4.7	5	3.7	22.5	5
Food and beverages	44.1	8.1	2.8	2.1	7.0	8.8
Construction materials	29.9	7.3	5.9	3.9	43.7	9.0
Wood processing	43.0	11.3	4.9	4.9	38.1	9.3
Province						
Vientiane	47.6	7.2	4.2	4.1	42.3	3.2
Oudomxay	57.1	19.0	7.8	8.0	7.0	35.7
Luangprabang	66.7	14.8	7.0	1.3	–	–
Xayaboury	29.4	5.1	5.6	6.3	9.2	35.3
Savannakhet	24.6	9.3	4.7	4.6	42.0	3.3
Champassak	36.8	12.5	5.3	3.2	–	10.5
Size						
Small (< 11)	37.7	8.5	5.2	4.7	13.8	6.5
Medium (10 < workers <51)	36.0	9.0	4.7	3.4	50.4	11.6
Large (51+ workers)	49.4	8.7	4.4	4.9	34.4	4.8
Total	41.1	8.7	4.7	4.3	34.2	7.7

Source: LAO PDR ICS, 2005.

Appendix 7 Tourism/Services

Table A.7.1 Tourist arrivals in the Lao PDR by region of origin, 1998–2004

Region of origin	1998	1999	2000	2001	2002	2003	2004
Asia-Pacific	421,196	510,703	604,254	553,249	579,031	498,185	730,107
of which,							
Thailand	273,095	356,105	442,564	376,685	422,766	377,748	489,677
Viet Nam	78,216	71,748	68,751	82,411	71,001	41,594	130,816
Europe	52,076	68,564	86,462	80,736	101,924	93,960	112,092
Americas	25,326	31,780	42,111	34,370	46,704	39,453	47,153
Others	1,602	3,231	4,381	5,468	8,003	4,763	5,454
Total	500,200	614,278	737,208	673,823	735,662	636,361	894,806

Source: Lao National Tourism Administration Planning and Cooperation Department, 2005.

Table A.7.2 Revenue from tourism by origin, 2004

Origin	Number of arrivals (people)	Average stay (days)	Average expenditure (\$/day)	Tourism revenue (\$)
Thai (passport)	75,702	3	40	9,084,240
Thai (border pass)	413,975	1	20	8,279,500
Viet Nam (passport)	72,412	3	30	6,517,080
Viet Nam (day tripper)	58,404	1	12	700,848
PRC (passport)	18,379	3	30	1,654,110
PRC (day tripper)	14,640	1	12	175,680
Subtotal	653,512	1.5	26.8	26,411,458
International tourists	241,294	6.5	59	92,536,249
Total	894,806	2.9	46.6	118,947,707

Source: Lao National Tourism Administration Planning and Cooperation Department, 2005.

Appendix 8 Informality Section

Table A.8.1 Selected characteristics of nonfarm household-based enterprises (%, unless otherwise specified)						
	All	Manu- facturing	Trading	Tourism and other services*	Communi- ty and personal services	Others**
Region						
<i>As a proportion to total establishments for each sector</i>						
North	24.5	32.7	20.9	25.1	30.3	21.3
Central	58.0	60.3	57.7	59.3	52.4	66.8
South	17.5	7.0	21.3	15.7	17.3	11.9
<i>As a proportion of total establishments in the region</i>						
North	100.0	20.8	46.6	11.6	19.2	3.8
Central	100.0	16.3	54.5	11.6	12.6	5.0
South	100.0	6.3	66.8	10.1	13.8	3.0
Urban/Rural						
Urban	60.3	57.7	61.0	70.9	52.9	56.2
Rural	39.7	42.3	39.0	29.1	47.1	43.8
Areas of operation						
Home	54.1	83.7	52.2	20.2	62.4	33.2
Industrial site/market	17.6	5.3	26.4	8.9	8.6	3.4
Roadside/other fixed place	10.2	7.7	10.0	8.6	15.9	8.8
Mobile	15.8	1.4	8.8	60.6	12.0	51.7
n.a.	2.2	1.9	2.7	1.8	1.1	2.8
Age						
Mean (in years)	7.0	7.2	7.3	5.1	7.0	7.0
2 or less	34.0	28.8	34.2	36.9	35.4	37.4
3–5	25.4	30.8	25.0	26.5	19.9	26.7
6–10	13.1	13.2	12.4	14.3	15.0	12.7
Over 10	22.4	24.2	22.9	16.7	24.3	17.3
n.a.	5.1	3.0	5.5	5.5	5.4	6.0

(continued next page).

Table A.8.1 (continued).						
	All	Manu- facturing	Trading	Tourism and other services*	Commu- nity and personal services	Others**
Number of months in operation in the past year						
Mean	9.5	9.6	9.7	9.6	9.4	7.4
1–3	10.1	7.3	9.5	9.6	11.1	25.1
4–6	12.9	16.3	11.0	12.8	13.1	23.9
7–11	17.9	20.1	16.3	18.8	19.1	24.4
12	57.9	55.0	61.8	58.0	55.4	26.6
n.a.	1.2	1.2	1.3	0.7	1.2	0.0
Labor						
Household head is male	94.6	92.1	91.1	94.8	94.9	95.1
Number of workers who are not household members						
0	60.9	55.8	63.7	58.7	61.4	47.6
1–2	13.5	13.4	12.5	14.5	15.3	16.3
3–4	2.2	1.7	1.6	1.3	2.7	12.3
>=5	1.7	3.3	0.3	0.6	1.8	15.7
n.a.	21.8	25.8	21.9	24.9	18.8	8.1
Number of household members working in the household business						
0	4.8	2.5	4.9	3.9	6.1	9.3
1–2	81.3	72.3	83.8	80.3	84.8	73.8
3–4	7.8	8.6	8.0	5.2	6.3	14.6
>=5	1.1	3.8	0.6	0.6	0.6	0.9
n.a.	5.0	12.8	2.7	10.0	2.2	1.4
Mean workers employed (household members + non-household members)						
	1.8	2.0	1.7	1.4	1.7	3.5
Estimated employment	462,808	80,050	238,447	42,331	61,750	40,229
Note: *includes hotels, restaurants, travel agencies, transport, finance, and real estate. **covers businesses related to agriculture, mining, electricity, gas, water, construction, and unclassified business.						
Source: Estimates using LECS 3, 2002/2003.						

Appendix 9 Household Businesses

An examination of the investment climate factors is important in unlocking the most important barriers to starting a business. To examine the impact of investment climate on household businesses, this section applies a regression analysis using village-level data culled from the LECS 3 survey. The model is given below:

$$Y = \alpha_0 + \beta_1(HHchar) + \beta_2(IC) + \varepsilon$$

where:

Y – the proportion of households with non-farm enterprises in the village

$Hhchar$ – average household characteristics of the village

IC – investment climate factors

The following are used as indicators of investment climate: roads, electricity, daily market, and financing. These variables are measures of access at the village level, making them more likely exogenous, which may not have been the case if they were measures of access at the household level.

The investment climate factors are represented by dummy variables, which take on a value of “1” to denote availability of the factor, and 0, for lack of access. Thus, a village is assigned a value of 1 for “road access” if a transportation (i.e., truck or car) can reach the village in both dry and wet seasons. A village also takes on a value of 1 for electricity access if connected to an electric network, and a “1” for “daily market” if there is a permanent daily market in the village. These three measures are found under Part D-Infrastructure of the LECS village questionnaire. Access to financing refers to availability of a public financial institution in the village under Part A-Organization/Services of the LECS.

In addition to the investment climate factors, household attributes averaged at the district level are also included in the regression. These include age of household head, landownership per capita, value of durables, number of household members at ages 15–64, maximum education of any household member, and proportion of male-headed households in the village is also used as an additional regressor.

To derive the regression parameters, the maximum-likelihood probit regression for grouped data or probit is used. Two variants of the model are also employed, one with household attributes and another without. In both models,

all investment variables are found to be significant predictors of the proportion of household businesses in the village. The regression utilizes information from 537 villages.

The regression results in Table A.9.1 indicate that, on the average, a village with access to all-season roads has a greater proportion of household businesses compared to one that has no access. Controlling for household attributes, the share of households with businesses is also higher by 4 percentage points for a village with electricity compared to that having no electricity. Access to financing also makes a good difference—villages with a formal financial institution have a greater proportion of household businesses, at 3 percentage points more than those without. A relatively more pronounced impact is provided by presence of markets. This is so since villages with access to markets have about 8 percentage points more businesses compared to those without markets.

It is interesting to quantify how an improvement in access to investment climate factors can enhance business activities at the village level. The regression coefficients are used to simulate the impact of changes on investment climate on the proportion of household businesses and employment. The simulation is done for an average village with a poor investment climate, having no access to infrastructure, financing, and markets. Out of the 537 villages in the LECS data, there are 165 of such kind. Simulations on the impact of an improvement in the investment climate for a village with average characteristics are also undertaken for comparison.

Based on the regression model, the expected proportion of households having non-farm enterprises is about 20% (Table A.9.2). However, for an average village with a poor investment climate, the expected proportion of household-based enterprises is only about 7%. Providing electricity in the village tends to raise the proportion of households with non-farm enterprises to around 10%. An increase in the proportion of businesses is also seen with the addition of roads. Moving further, setting up financing facilities makes a 2 percentage-point improvement in the proportion of household businesses from the previous state when only roads and electricity were available. Finally, establishment of markets at the village level could raise the proportion of household businesses by 6.5 percentage points. Overall, the share of the household population with businesses at the village level rises from a base of 7% to nearly 20% with an improvement in the investment climate factors. For an average village, however, the increase in the proportion of household businesses is from 20–33%.

Another important analysis is the impact on employment, which is estimated by multiplying the average number of workers employed by household businesses to the increase in the number of household business for every improvement in the investment climate. For an average village, the mean number of workers is 1.8 while the mean is just one worker for each household business in villages with poor investment climate. Overall, new household businesses have the potential of increasing employment of non-farm enterprises by about 50%. But a bigger impact can be seen on the employment levels of villages with poor investment climate, or those with no access to infrastructure, financing, and markets. The increase in the number of household businesses in villages with poor investment climate is estimated to be slightly more than double.

Table A.9.1 Impact of investment climate on proportion of household businesses at the village level (bprobit)

	1 Without household attributes		2 With household attributes	
	Coefficient	Pr(outcome)	Coefficient	Pr(outcome)
Road access (wet and dry seasons)	0.363*** [89.26]	0.095*** [96.02]	0.061*** [13.24]	0.015*** [13.34]
Electricity	0.656*** [189.90]	0.185*** [191.81]	0.165*** [39.41]	0.041*** [39.15]
Finance	0.083*** [13.53]	0.023*** [13.13]	0.100*** [16.92]	0.026*** [16.28]
Daily market	0.510*** [113.49]	0.162*** [100.56]	0.289*** [60.04]	0.079*** [54.15]
Average age			0.168*** [55.70]	0.041*** [56.57]
Average age-squared			(0.002)*** [57.73]	(0.000)*** [58.60]
Average land ownership per capita			(4.204)*** [7.53]	(1.032)*** [7.55]
Average durables (log)			(0.382)*** [45.59]	(0.094)*** [45.83]

(continued next page).

	(1) Without household attributes		(2) With household attributes	
	Coefficient	Pr(outcome)	Coefficient	Pr(outcome)
Average durables-squared (log)			0.027*** [47.39]	0.001*** [47.61]
Average no. of household members within ages 15–64			(0.163)*** [47.25]	(0.040)*** [47.54]
Share of male-headed households			(1.332)*** [61.60]	(0.327)*** [61.75]
Average maximum education of any household member			0.131*** [179.93]	0.032*** [182.04]
Constant	(1.431)*** [392.91]		(3.762)*** [57.66]	
Observations	861,578		861,578	
Wald chi2(4)	93,174.75		143,145.47	
Prob > chi2	0.0000		0.0000	
Log pseudo-likelihood	(427,002.21)		(392,216.59)	
Pseudo R2	0.1101		0.1826	
Notes: (i) Robust z statistics in brackets. (ii) * significant at 10%; ** significant at 5%; *** significant at 1%.				
Source: Estimate using LECS 3, 2002/2003.				

	Village with poor investment climate	Average village
Expected proportion of household businesses	0.07	0.20
Provide access to electricity	0.10	0.22
Electricity + roads	0.11	0.23
Electricity + roads + financing	0.13	0.25
Electricity + roads + financing + markets	0.20	0.33
Source: LECS 3, 2002/2003.		

REFERENCES

- Asian Development Bank. 2001. Technical Assistance to the Lao People's Democratic Republic for Preparing the Financial Sector Development Program. Manila: ADB.
- . 2003. Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Lao PDR for the Northern Area Rural Power Distribution Project. Manila: ADB.
- . 2004. The GMS Beyond Borders—Regional Cooperation Strategy and Program, 2004–2008. Manila: ADB.
- . 2005a. Country Strategy and Program Update for Lao PDR. Manila: ADB.
- . 2005b. Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Lao People's Democratic Republic for the Greater Mekong Subregion: Nam Theun 2 Hydroelectric Project. Manila: ADB.
- . 2005c. Facilitation of the Cross-Border Transport of Goods and People in the Greater Mekong Subregion. Available: www.adb.org/GMS/Cross-Border/agreement.asp.
- . 2005d. Final Report on the Advisory Assistance to the Lao PDR on Small- and Medium-size Enterprise and Private Sector Development Project: ADTA 4279-Lao. Manila: ADB.
- . 2005e. Greater Mekong Subregion Tourism Sector Strategy (TA 6179-GMS). Volume 1, Final Report. Manila, Philippines.
- . 2005f. TA No. 6195-REG: GMS Transport Sector Strategy Study. Recommendations on Strategic Objectives and Directions for the Sector. Ninth Meeting of Subregional Transport Forum. Beijing. June. Manila: ADB.
- . 2005g. The Mekong Region. Economic and Social Impacts of Projects. Manila: ADB.
- ADB/JBIC/World Bank. 2005. Connecting East Asia—A New Framework for Infrastructure. Washington DC.
- Bank of Thailand. 2005. Economic and Financial Statistics, 3rd Quarter 2005. Bangkok.
- Country Economic Memorandum (CEM). 2004. Lao PDR Country Economic Memorandum: Realizing the Development Potential of the Lao PDR. Report N30188-LA. World Bank.
- Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation, GTZ). 2006. Extracts from the HRDME EBS 2005 Survey. Vientiane.

- DTIS. 2006. Lao PDR Diagnostic Trade Integration Study, Integrated Framework. Washington DC.
- Electrowatt–Ekono. 2004. EdL Tariff Study. Vientiane. December.
- Enterprise Development Consultants. 2002. Study on Generating Employment through Micro and Small Enterprise and Cooperative Development in Lao PDR. International Labour Office, ILO Bangkok Area Office, and East Asia Multidisciplinary Advisory Team (ILO/BAO-EASMAT).
- Escribano, Alvaro, and J. Luis Guasch. 2005. Assessing the Impact of Investment Climate on Productivity using Firm Level Data: Methodology and the Cases of Guatemala, Honduras, and Nicaragua. Policy Research Working Paper # 3621. Washington DC: World Bank.
- Eshoo, Paul, Darany Phommavongsa, and Ackonsay Rattanavong. 2003. Local knowledge providers in the tourism sector in Laos: A survey of educational and training institutions and assessment of training needs in the tourism industry. Vientiane: Stichting Nederlandse Vrijwilligers (Netherlands Development Organization).
- Fratzcher, Oliver, Thomas Rose, and Renuka Vongviriyatham. 2005. A Preliminary Stock Tanking of the Banking Sector Reform in Lao PDR. Washington DC: World Bank. June.
- Fukui, Ryu, and Gilberto Llanto. 2003. Rural finance and micro-finance development in transition economies in South-East and East Asia. Paper presented at the Annual Conference of Asian Development Bank Institute, “Microfinance in Asia: Poverty Impact and Outreach of the Poor.” Tokyo, Japan.
- Global Development Solutions (GDS). 2006. Supply and Value Chain Analysis of the Garment Industry in Lao PDR. Background study for the Lao Investment Climate Assessment.
- Hettige, Hemamala, Mainul Huq, Sheoli Pargal, and David Wheeler. 1995. Determinants of pollution abatement in developing countries: evidence from South East Asia. *World Development* 24(12):1891–1904.
- HRDME. 2006. Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation, GTZ). 2006. Human Resources Development for a Market Economy – Enterprise Baseline Survey Report 2005.
- International Monetary Fund (IMF). 2004. Article IV Consultation Report. www.imf.org.
- Kanokpan, Lao-Araya. 2003. How can Cambodia, Laos, Myanmar and Viet Nam Cope with revenue lost due to AFTA tariff reductions. *Asia-Pacific Tax Bulletin*. February.
- Lao National Tourism Administration Planning and Cooperation Department. 2005. Statistical Report on Tourism in Laos 2004. Vientiane.

- Lao PDR Economic Monitor. Various Issues. World Bank. www.worldbank.org/lao.
- Lao PDR Poverty Assessment. 2006. From Valleys to Hilltops: A Decade of Poverty Reduction. NSC, ADB, SIDA, and the World Bank.
- Leidholm, Carl, and Donald C. Mead. 1999. *Small Enterprises and Economic Development: The Dynamics of Micro and Small Enterprises*. London: Routledge.
- Lord, Montague J. 2006. *Lao PDR: Study on the Tax and Tax Administrative Burden on SMEs*. Final report submitted to the European Commission. June.
- Mallon, R. 2005. *Bottlenecks to Private Sector Development*. United Nations Development Programme, National Economic Research Institute, and United Nations Industrial Development Organization. Vientiane.
- Martin, Will. 2001. *Trade policy perform in the East Asian transition economies*. World Bank Policy Research Working Paper 2535. Washington DC: World Bank.
- MPDF. 2006. *Mekong private Sector Development Facility. Business Registration and Licensing in Lao PDR*. Vientiane.
- National Statistical Centre, Lao PDR. 1999. *Lao Expenditure and Consumption Survey 1997–1998 (LECS 2)*. Vientiane.
- National Statistical Centre, Lao PDR. 2005. *Lao Expenditure and Consumption Survey 2002–03 (LECS 3)*. Vientiane.
- National Statistics Office, Thailand. n.d. *Population and Labor Statistics*. Available: web.nso.go.th/eng/stat/subject/subject.htm#cata3.
- Ng, Francis, and Alexander Yeats. 2003. *Major Trade Trends in East Asia: What are Their Implications for Regional Cooperation and Growth*. World Bank Policy Research Working Paper 3084. Washington DC: World Bank.
- Okonjo-Iweala, Ngozi, Victoria Kwakwa, Andrea Beckwith, and Zafar Ahmed. 1999. *Impact of Asia's Financial Crisis on Cambodia and the Lao PDR*. *Finance and Development* 36(3): 1–8.
- Peters, David. 2005. *An assessment of investment climate in the tourism industry*. Background study for the Lao Investment Climate Assessment.
- Quintana, Francisco. 2006. *Informality in Lao PDR: a survey and a study*. Background study for the Lao Investment Climate Assessment.
- Schiantarelli, Fabio. 1996. *Financial constraints and investment: methodological issues and international evidence*. *Oxford Review of Economic Policy* 12(2):70–89.
- Schneider, F. 2004. *The size of the shadow economies of 145 countries all over the world: first results over the period 1999 to 2003*. Institute for the Study of Labor, IZA DP No. 1431.

- Schultze, Michael. 2003. Framework conditions for domestic and foreign investments in the private sector in Lao PDR. Lao-German Technical Cooperation Project: Training and Advisory Services in Market-oriented Economic Policies at NSAM. Vientiane. draft.
- Stuart-Fox, M. 2006. The political culture of corruption in the Lao PDR. *Asian Studies Review*, Vol. 30.
- Sung, Woonki. 2005. Private Sector Assessment: Lao PDR. Asian Development Bank. Manila.
- Tokyo Electric Power Company (TEPCO). 2004. Distribution System Loss Reduction Study. December.
- _____. 2006. Electricity Supply Survey. March.
- Tybout, James R. 2003. Plant- and firm-level evidence on “new” trade theories. In E. Kwan Choi and James Harrigan, eds., *Handbook of International Trade*. Malden, MA: Blackwell Publishers, pp. 389–415.
- Vijverberg, Wim P.M., and Jonathan Houghton. 2002. Household Enterprises in Viet Nam: Survival, Growth, and Living Standards. Policy Research Working Paper Series 2773, Washington DC: World Bank.
- Vongsam-ang, M. 2006. Tourism in Laos set for record highs. *Vientiane Times*. 10 January.
- Warr, Peter. 2005. Road Development and Poverty Reduction: The Case of Lao PDR. Institute Discussion Paper No. 25. Manila: Asian Development Bank.
- World Bank. 2004a. Lao PDR Country Economic Memorandum: Realizing the Development Potential of Lao PDR. Washington D.C.
- _____. 2004b. World Development Report 2005: A Better Investment Climate For Everyone. Washington D.C.
- _____. 2005a. Lao PDR Provincial Business Policy Assessment. Vientiane Study of Provincial Regulations. Washington D.C.
- _____. 2005b. Doing Business 2006: Creating Jobs. Washington D.C.
- _____. 2005c. Lao PDR Economic Monitor. Vientiane.
- _____. 2005d. World Development Indicators. Washington D.C.
- _____. 2006e. World Development Indicators Online. Washington D.C.
- World Development Indicators Online (WDI) World Development Indicators. www.worldbank.org/data