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LITHUANIA

INVESTMENT CLIMATE ASSESSMENT

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Acknowledgments

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Acronyms and abbreviations

BEEPS	Business Environment and Enterprise Performance Survey
CIS	Commonwealth of Independent States
EBRD	European Bank for Reconstruction and Development
EU	European Union
EU8	Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia
EU10	EU8 plus Cyprus and Malta
EU15	EU countries before the May 2004 enlargement
EU25	EU15 + EU10
FIAS	Foreign Investment Advisory Service
GDP	Gross domestic product
GNI	Gross national income
INVEGA	Investments and Business Guarantees Agency (Lithuania)
ISO	International Organization for Standardization
IT	Information technology
LTL	Lithuanian litas
NACE	Nomenclature générale des activités économiques dans les Communautés Européennes (EU classification standard for economic activities)
NGO	Nongovernmental organization
OECD	Organization for Economic Co-operation and Development
R&D	Research and development
RCA	Revealed comparative advantage
SME	Small or medium-size enterprise
SMEDA	SME Development Agency (Lithuania)
SODRA	Social Insurance Agency (Lithuania)
TFP	Total factor productivity
VAT	Value added tax
VILIBOR	Vilnius interbank offered rate

What is an investment climate assessment?

Investment climate assessments systematically analyze the conditions for private investment and enterprise growth in a country, drawing on the experience of local firms to pinpoint the areas where reform is most needed to improve the private sector's productivity and competitiveness. By providing a practical foundation for policy recommendations and involving local partners throughout the process, the assessments are designed to give greater impetus to policy reforms that can speed the private sector's growth, leading to faster economic growth and poverty reduction.

Produced by the World Bank Group in close partnership with a public or private institution in each country, the investment climate assessments are based on a survey of private enterprises to find out what difficulties they encounter in starting and running a business—and, if the business fails, in exiting. The survey captures firms' experience in a range of areas—

Executive summary

The World Bank undertook an investment climate assessment in Lithuania in 2004 as part of its efforts to support member countries through in-depth analysis of major microeconomic constraints in their business environments. The assessment drew on the Productivity and Investment Climate Survey of Lithuanian enterprises, also carried out in 2004, for input and background. It also relied on many other sources, local and international, to provide a full picture of Lithuania's business environment and to benchmark it against those of comparator countries. The findings highlight impressive improvements in Lithuania's investment climate in the past few years.

Marketing the country's achievements

Lithuania's progress in putting more business-friendly regulations into place has been recognized in several international measures, including the World Economic Forum's Business Competitiveness Index and the Heritage Foundation's Index of Economic Freedom. Indeed, in 2004 Lithuania was ranked among the top 20 countries worldwide on its business-friendly environment by the World Bank–International Finance Corporation Doing Business survey. So, while Lithuania may still be catching up with the rest of the European Union (EU)—including most of the other new members—in economic growth and total factor productivity, it has shown strong performance in many areas of the business environment, productivity growth among them. That record is worth promoting among foreign investors.

Principal recommendation

- *Ensure that Lithuania's achievements in improving its business environment are properly marketed among investors worldwide.*

Supporting innovation for a quantum leap by the economy

As globalization deepens, countries' ability to compete in world markets is becoming increasingly critical. Lithuania has been able to maintain its international competitiveness thanks in large part to its low labor costs and the growing productivity of its labor force. But it faces big new challenges with its entry into the EU single market and with the liberalization of the global textile and clothing market, where Lithuania has traditionally been strong. Several factors add to these challenges: Lithuania still specializes in low-tech exports. Labor costs may not stay competitive for long. And organic productivity growth has its limits.

To keep its investment climate accommodating and growth-oriented—and its global competitiveness strong—Lithuania needs to make a quantum leap to a higher-tech, higher-quality economy. Perhaps the only way to make this happen is through innovation. And the best way to ensure innovation on a nationwide scale is to have the right human capital—a labor force prepared to absorb the best of new technologies and modern management concepts introduced by foreign direct investment. The state has a role in supporting small, innovative companies. Public-

private risk sharing schemes to provide early-stage finance (seed capital) should be set up for this purpose.

Principal recommendations

- *Benchmark Lithuania's competitiveness and its innovation infrastructure against those of peer countries and global leaders.*
- *Promote a focus on the quality of products and services by supporting ISO certification of companies through grant programs.*
- *Promote early-stage (seed) finance for innovative start-ups through innovation financing schemes with public participation.*

Further smoothing the way for company entry and exit

Lithuania maintains uncomplicated procedures for market entry. Establishing a company involves relatively little time or cost, though global leaders in company registration (Denmark, New Zealand) show that room remains to raise the speed and lower the cost of the process. Reducing the capital requirement for small and micro companies and consolidating the various registration numbers into one could also ease the entry of new firms.

The system in place for company exit works fairly well. But weak incentives for maximizing the value of a bankrupt company result in a low recovery rate. Moreover, the system for company rehabilitation does not function as intended, leading to the liquidation of companies that could instead have been restructured, preserving jobs, assets, and markets.

Principal recommendations

- *Establish an online window for company registration and further improve the process by raising its speed and lowering its cost.*
- *Overhaul the law and practice of company rehabilitation to make this a desired solution when companies run into financial difficulties.*

Shifting the focus in education to quality

Labor relations, well established in Lithuania, are governed by a fairly recent labor code. Labor regulation could use some improvements to allow greater flexibility, but overall it maintains the right balance between the interests of employers and those of employees.

By contrast, the education system, especially tertiary education, suffers from too strong a focus on quantity rather than quality. Lithuania spends more on education as a share of GDP than any other country in the EU, yet spends among the smallest amounts per student. The result is poor quality in education and poor qualifications for university graduates entering the job market. Adding to the skill gap is the limited development of lifelong learning in Lithuania. Older generations lack the motivation to pursue continued education, and those who do have interest in further education

lack the financial resources. But steps to promote the concept of continuous learning can be observed—for example, encouraging younger generations to stay in the education stream longer and offering adult training programs as part of public sector employment policies.

Principal recommendations

- *Undertake the substantial changes needed in tertiary education to shift the focus from quantity to quality.*
- *Promote on-the-job training through matching grants to employers.*
- *Consider a nationwide lifelong learning campaign to encourage middle-aged Lithuanians to take up new learning opportunities.*

Simplifying commercial land development

Commercial land development presents its own set of problems in Lithuania. Indeed, problems are reported in all links of the chain—from the acquisition and leasing of land to land use planning, change of land use, application for building permits, and supervision of construction. The laws, rules, and regulations governing land acquisition and use are deficient, conflicting, and unclear, and the red tape enormous. Administrative tasks are divided among authorities, undermining coordination of the land development process—and often prompting developers and construction companies to cut corners, ignore rules, and solicit undue favors.

Principal recommendation

- *Overhaul the legislative and administrative framework for commercial land development—at a minimum, placing land management tasks with one competent regional authority (such as municipalities)—to simplify land use and improve the performance of the public sector on issues relating to land use and development.*

Maintaining and extending beneficial tax policies

Lithuania maintains a generally business-friendly tax regime. Its statutory rate of corporate income tax is among the lowest in the EU (and its average effective rate the lowest), its labor taxation in line with that of peer countries, and its overall tax burden the smallest in the EU. Still, lowering the rate of labor taxation would send another positive signal to investors and reduce under-the-table remuneration along with all its negative consequences. With tax administration a persistent concern among businesses, and tax regulations subject to conflict and frequent change, investors would also appreciate a possibility for obtaining binding rulings on tax matters.

Principal recommendations

- *Explore options for reducing labor taxes and select the most appropriate one.*
- *Introduce into law an unequivocal obligation of the State Tax Inspectorate to respond to requests for clarification of tax matters with binding rulings.*

Improving access to finance for small enterprises

Lithuania's financial sector is sound and adequately capitalized, and its enterprises view obtaining finance as no major problem. Moreover, the financial system appears to have been big enough to support the recent strong growth in the economy. Yet despite growing recently itself, the financial system remains small relative to its peers in the region. Credit to the private sector represents a smaller percentage of GDP in Lithuania than in any of the other seven Eastern European countries joining the EU in May 2004. The financial system—indeed, the entire economy—would benefit if more funds flowed to the small companies making up most of the corporate sector. One way to improve access to the formal financial system for the smallest members of the corporate community is through better policies on foreclosure on collateral and disclosure of financial information. A central credit bureau providing all financial intermediaries with access to corporate credit information would also be a welcome addition to Lithuania's financial sector infrastructure.

Principal recommendation

- *Develop, possibly through a public-private partnership, a central credit bureau offering access to credit information on Lithuanian companies to all financial intermediaries.*

Chapter 1 Background

Lithuania has put in an impressive economic performance in the past few years, earning such nicknames as the "Ballistic Baltic" and the "Baltic Tiger" from foreign market observers for the speed and expected sustainability of its recent economic growth. The economy made a sharp turnaround in the aftermath of the Russian crisis of 1998. GDP grew by more than 6 percent in 2001–02, 9.7 percent in 2003, and 7.4 percent in the first half of 2004 and is expected to continue growing strongly for the next few years. Meanwhile exports have largely changed direction from eastward to westward. Between 1998 and 2000 the share of exports to the Commonwealth of Independent States (CIS) fell from 36 percent to about 16 percent signaling a permanent shift in the foreign trade structure (table 1.1). The share of exports to the European Union (EU) increased accordingly.

Table 1.1 Export volume, growth, and destinations, Lithuania, 1998–2003

Indicator	1998	1999	2000	2001	2002	2003
Exports (millions of U.S. dollars)	3,711	3,004	3,810	4,583	6,095	7,984
Export growth (percent)	3.9	–19.0	26.8	20.3	10.7	8.7
Major export destinations (percentage of total exports)						
European Union	38.0	50.1	47.9	47.8	48.4	—
Commonwealth of Independent States	35.7	18.2	16.3	19.7	19.2	—
Central European Free Trade Area	3.9	6.0	7.0	7.3	4.8	—
European Free Trade Association	2.2	2.7	2.5	1.9	4.1	—

— Not available.
Source: Eurostat data.

It was strong export performance that helped to restart GDP growth and eliminate the (short-lived) effects of the Russian crisis. Two years later the initially export-led GDP growth translated into expanding domestic consumption, followed and complemented by bustling construction activity. All this started a positive growth cycle, and the Lithuanian economy is showing its best performance since the start of transition in 1990.

Even so, Lithuania is merely catching up with the higher-income countries of the EU8.[1] The conventional wisdom is that high economic growth is always more likely in lower-income countries. Indeed, Lithuania produced the highest growth in industrial production and overall GDP among the EU8 countries in 2000–03, yet still ranks at the bottom of this group in these areas relative to 1990: it is one of only two EU8 countries whose GDP remains below the 1990 level, and it had the slowest recovery in industrial production during the 1990s (table 1.2). Moreover, the recent rapid economic expansion has a

[1] The EU8 is the group of eight Eastern European countries acceding to the EU in 2004. For the members of this and other EU groups mentioned in the text, see the list of acronyms and abbreviations.

downside, including high unemployment, the dependency of GDP growth on low-tech exports, and an ongoing loss of productive labor leaving for the larger EU countries in search of better-paying jobs and thus exacerbating the old-age dependency ratio.

Table 1.2 GDP and industrial production, EU8 countries, 2003

Indicator	Lithuania	Latvia	Estonia	Czech Republic	Hungary	Poland	Slovak Republic	Slovenia	EU8 average
Real GDP (1990 = 100)	88.1	79.6	109.2	108.6	119.3	134.6	116.8	130.2	129.7
Real GDP (2000 = 100)	123.7	123.5	120.0	107.4	110.5	106.3	112.9	108.6	109.0
GDP per capita (EU15 = 100)	43.6	36.7	43.3	63.3	54.9	42.5	48.2	70.6	—
Real industrial production (1990 = 100)	53.5	57.9	84.5	99.6	171.4	139.8	111.6	95.8	140.2
Real industrial production (2000 = 100)	138.9	123.0	129.4	118.1	113.3	107.8	119.9	106.8	113.3

— Not available.
Source: Vienna Institute for International Economic Studies and Eurostat data.

Accession and the investment climate

Lithuania's accession to the EU as a full-fledged member on May 1, 2004, crowned the long journey toward membership that started in the early 1990s. In the previous few years Lithuania had emerged among the leaders in the EU10 in making structural changes in preparation for membership and in completing accession negotiations with Brussels. The latest European Commission pre-accession report on membership readiness[2] praised Lithuania for its efforts, noting only a few minor unresolved issues relating to the transposition of the *Acquis Communautaire* (the EU's body of laws) into its legal and regulatory system.

Meanwhile Lithuania's investment climate has been constantly improving and was probably no insignificant factor in the recent economic push. The many research and analytical reports prepared on the country's investment climate and business environment—notably the Foreign Investment Advisory Service's study on administrative barriers and regulatory costs (FIAS 1999), the World Bank and European Bank for Reconstruction and Development's (EBRD) Business Environment and Enterprise Performance Survey in 2002, the World Bank's Country Economic Memorandum (2002), and the European Commission's reports reviewing Lithuania's preparedness for EU membership—all provide a positive assessment of the changes, though they also highlight areas needing further improvements.

The quality of the business environment is assessed in a variety of ways. Numerous periodic indicators and ratings on different aspects of the environment are compiled by such entities as A. T. Kearney, the Heritage Foundation, the World Economic Forum, the Economist Intelligence Unit, and the World Bank and EBRD. Many indicators are based on the perceptions of respondents and can be difficult to compare. Nevertheless, they represent the market sentiment toward the business environment at a point in time.

[2] European Commission 2002 Regular Report on Lithuania's Progress Towards Accession

One representative indicator is the World Economic Forum's Business Competitiveness Index (table 1.3). Among the EU8 and three potential EU members, Lithuania is one of only three (the other two being Latvia and Slovenia) that managed to improve its ranking on this index and its two components between 2001 and 2003. This upward trend suggests the improvement in Lithuania's overall investment climate. But in its primary peer group of the EU8 Lithuania still hovers near the bottom on all three counts. Even where such differences are marginal, they can sometimes be the decisive factor in investors' decisions on where to site an office or factory.

Table 1.3 Selected country rankings on Business Competitiveness Index, 2001 and 2003

Country	Business Competitiveness Index		Business environment		Company operations and strategy	
	2003	2001	2003	2001	2003	2001
Estonia	28	28	27	26	36	32
Latvia	29	41	31	42	29	35
Slovenia	30	32	34	35	27	28
Czech Republic	35	34	38	31	33	41
Hungary	38	27	37	25	45	33
Lithuania	40	50	41	47	41	47
Slovak Republic	42	40	42	36	44	57
Poland	46	42	44	40	43	55
Turkey	51	35	54	33	50	44
Romania	67	61	64	60	72	63
Bulgaria	68	68	67	65	73	70

Source: World Economic Forum 2003.

Still, on specific business climate indicators, such as the cost and time involved in opening a new business or closing one down, Lithuania does considerably better than the average for EU10 countries. The World Bank and International Finance Corporation, in *Doing Business in 2005* (World Bank and IFC 2004), rank Lithuania among the top 20 countries in the world on the ease of doing business—a significant achievement. And the Heritage Foundation ranked Lithuania 22nd on its 2004 Index of Economic Freedom—below Estonia (6th) and Cyprus (14th) but above all other new EU members as well as many high-income OECD countries, such as Italy, Norway, Spain, Japan, and France.

What aspects of the business environment do business executives value most? The global consultancy McKinsey attempted to gauge the priorities of top executives from 15 leading financial services companies in decisions to establish regional corporate headquarters. The executives surveyed emphasized the importance of a sound legal and regulatory framework, a strong local economy, and a stable political environment (box 1.1). The survey presents views from only one industry and is applicable mostly to major cities. Yet most of the findings are probably equally valid for most foreign investors and thus should not be overlooked by the authorities striving to improve business environments everywhere.

Toward a stronger investment climate

Notwithstanding the positive overall picture and strong trend of improvement, the investment climate in Lithuania still has areas that should be strengthened if the country is to remain—and to continually perfect itself as—an attractive place for doing business. EU membership and the globalization of business provide myriad opportunities but also pose the greatest challenge.

Lithuania will need to maintain its strong growth for many years to catch up not only with the long-standing EU members but also with most of its peers in the EU8. That feat will become increasingly difficult if the competition of the single market and, in some instances, global competition prove too tough for many enterprises—and if the country's advantage of low-cost manufacturing dissipates through wage-cost convergence without a corresponding increase in productivity.[3] To thrive in competitive markets, Lithuania will have to raise the skill level of its exports: in 1999 more than 70 percent of its exports to the EU were low-skill (low value added) products, while more than 40 percent of Estonia's and Hungary's were high-skill (high value added) products. A better educated and more productive labor force is thus among the few factors that will be key to improving Lithuania's investment climate.

Box 1.1 What global financial industry executives value in choosing locations

McKinsey's 2004 survey of top executives in the global financial industry found that when considering a city for regional headquarters, these executives have six important criteria.

The survey identified three primary criteria:

- A rational legal and regulatory framework, with such features as equal treatment of domestic and international companies; predictable, consistent, and logical regulatory procedures; a globally competitive tax structure; and liberal policies on visas and work permits.
- An attractive and sustainable local economy, with such qualities as deep, liquid, and long-term capital markets and growing local businesses that have risk management capabilities, are accountable to shareholders, and embrace global best practices in management.
- A stable political environment, with productive government-business relationships and stable, transparent, and dependable political institutions.

The survey also pointed to three secondary criteria:

- A highly developed infrastructure, with English-speaking talent, flexible labor markets, and advanced information technology systems.
- A strategic geographic location, with low vulnerability to natural disasters.
- A good quality of life, with cultural openness to things foreign, affordable housing and living costs, and affordable schools for foreigners.

Source: McKinsey Global Institute

[3] Some observers, however, hold the view that many large and medium-size Lithuanian companies, which are likely to feel the biggest impact from single-market competition, have already adapted enough to avoid a major competitive shock as a result of EU membership.

Chapter 2 Enterprise survey results

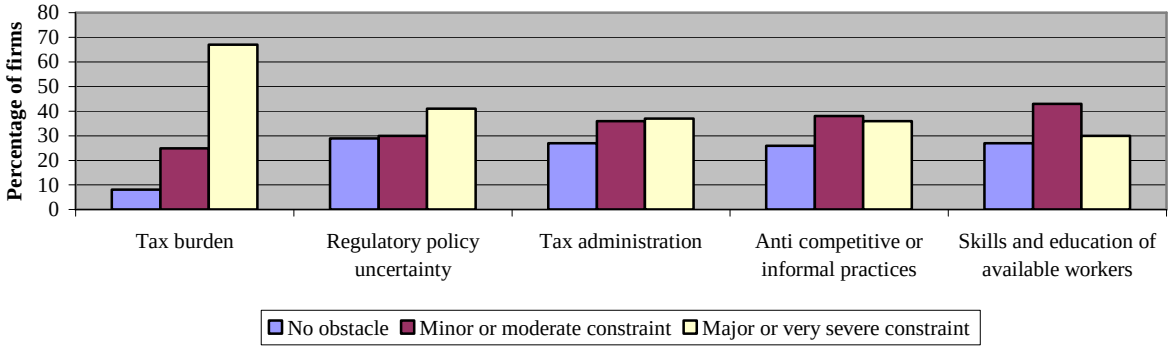
What difficulties do Lithuanian enterprises perceive in starting and running a business? To shed light on this question, a World Bank team conducted a core Productivity and Investment Climate Survey in Lithuania in 2004. Participating in the survey were 239 companies representing mainly five sectors—food production, textiles, construction, furniture manufacturing, and transport. (See appendix 1 for detailed results of the survey, and appendixes 2 and 3 for a survey-based discussion of the determinants of productivity in Lithuania.)

The results of the survey, while representative of a significant share of sectors in Lithuania's economy (based on their contribution to GDP), are not all-inclusive. For example, the survey covered neither wholesale and retail trade—major contributors to GDP in Lithuania—nor most service sectors. In addition, chapters 3–6, which provide an international perspective on Lithuania's investment climate by drawing on a range of sources, present some findings that may differ from those of the survey because of these limitations in coverage.

How businesses perceive constraints

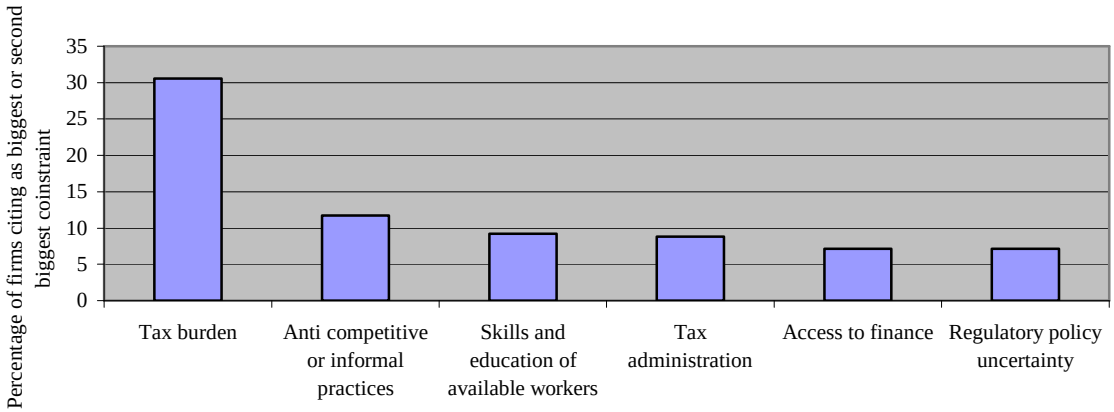
Tax-related issues and regulatory uncertainty preoccupy Lithuanian firms as the most important business constraints. The burden of taxes tops all other constraints by a large margin: 67 percent of respondents view the tax burden as a major or very severe obstacle, while more than 30 percent perceive taxes as the biggest or second biggest obstacle to developing their business (figures 2.1 and 2.2).

Figure 2.1 Top five constraints on business as perceived by firms, Lithuania



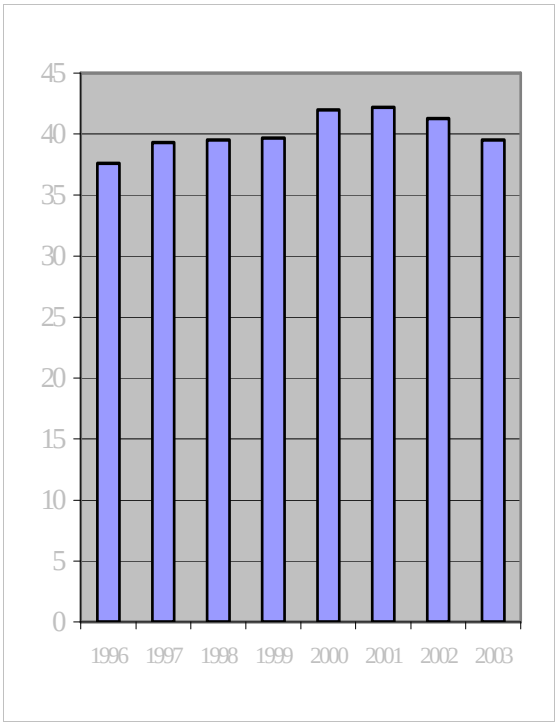
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Figure 2.2 Top five constraints on business development as perceived by firms, Lithuania



Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

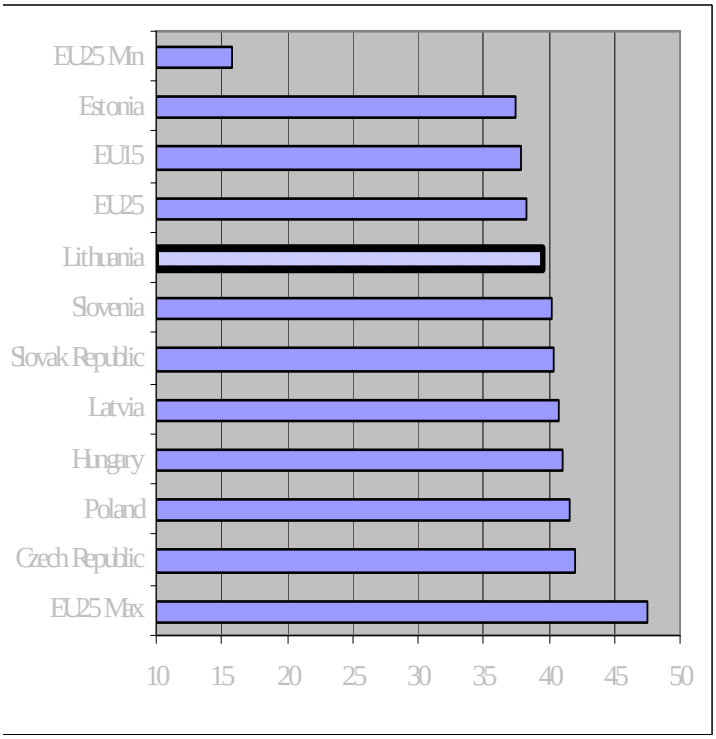
Figure 2.3 Labor tax burden, Lithuania, percentage share of gross wages, 1996–2003



Note: Data show the tax burden for an employed person with low earnings

Source : Eurostat Data

Figure 2.4 Labor tax burden, EU8 countries, EU15, and EU25, percentage share of gross wages, 2003



Note: Data show the tax burden for an employed person with low earnings

Source : Eurostat Data

Taxes the biggest constraint

That the tax burden is perceived as a major constraint may appear somewhat paradoxical: Lithuania has a very favorable profit tax rate, and its overall tax burden (fiscal revenue as a share of GDP) is the lowest in the EU. But it is labor-related taxes—social security and personal income taxes—that cause such dissatisfaction among businesses (for more discussion, see the section on tax competition in chapter 7).[4] Labor taxes—personal income taxes, social security contributions, and payments into the unemployment guarantee fund—amounted to about 39 percent of gross labor compensation in 2003.[5] The labor tax burden has remained fairly stable in Lithuania since 1996 and was fully in line with those in other EU8 countries and the EU25 in 2003 (figures 2.3 and 2.4).

The burden of regulation

Among issues relating to regulatory burden, Lithuanian businesses worry most about regulatory policy uncertainty, with slightly more than 40 percent of respondents considering it a major or very severe constraint (table 2.1). Unclear and frequently changing rules and regulations, and unpredictability and inconsistency in their interpretation, have been a far larger problem for businesses than business regulation itself. Labor regulations and customs and trade regulations are worrisome to only 15.5 percent, and business licensing and operating permits to only 13.4 percent. The concern seems to increase with the size and sophistication of firms except in the case of licensing.

Table 2.1 Perceptions of regulatory issues by type of firm, Lithuania

(percentage of firms evaluating issue as major or very severe constraint)

Issue	All firms	Small	Medium-size	Large	Domestic	Foreign
Customs and trade regulations	15.5	11.1	18.5	32.3	14.2	29.2
Labor regulations	15.5	12.4	14.8	32.3	15.6	16.7
Business licensing and operating permits	13.4	14.4	13.0	9.7	13.7	12.5
Regulatory policy uncertainty	40.6	42.5	33.3	45.2	41.5	33.3

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Senior managers reported spending a large part (27 percent) of their time dealing with regulations (table 2.2).[6] Moreover, firms' management must spend an average of 40 days

[4] Such findings are common in Productivity and Investment Climate Surveys and thus not unexpected. Indicators from the surveys describe problems rather than prescribe solutions to them. From the firms' perspective the indicators show what hurts the most, but they do not necessarily suggest that the issues should be immediately addressed (for example, by reducing taxes). Economic and social objectives—fiscal stability, monetary management, labor protection, and the like—are the "benefit" side of the cost-benefit analysis needed to determine the optimal policy stance.

[5] Data from the Lithuanian Department of Statistics show that in 2003 labor compensation was LTL 22.1 billion, and labor taxes LTL 8.6 billion.

[6] This result, from the 2004 Productivity and Investment Climate Survey, differs significantly from that for a similar indicator, the share of senior management's time spent dealing with public officials from the 2002 Business Environment and Enterprise Performance Survey, reported in table 6.1 in chapter 6. The reason relates to the survey questions. The 2002 survey asks about "dealing with public officials about the application and interpretation of laws and regulations and to get or to maintain access to public services," while the 2004 survey asks a broader question about "dealing with requirements imposed by government regulations, including dealing with officials."

a year with inspectors and other officials from government and municipal agencies. Not surprisingly, most time is spent with tax inspectors (9 days), followed by Department of Statistics officials (8), labor and social security officials (8), and customs inspectors (5).

Table 2.2 Regulatory burden by type of firm, Lithuania

Indicator	All firms	Small	Medium-size	Large	Domestic	Foreign
Share of senior management's time spent dealing with regulations (percent)	27.1	25.8	30.6	28.4	26.9	29.2
Days spent in inspections	40.5	39.2	35.6	56.5	40.8	39.3

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

The survey suggests that bureaucratic delays are in most areas no longer a major constraint to starting or operating a firm. The longest waits for permits or licenses (10–11 days) were reported for construction permits and operating licenses or permits (table 2.3)—instruments for which much longer delays are common in most countries. But customs clearance—while vastly improved, particularly as a result of EU accession—remains something of a problem. The average wait to clear customs was reported to be 5.8 days for imports and 4.5 days for exports.

Table 2.3 Bureaucratic delays experienced by firms, Lithuania

Type of service	Wait (days)
Electricity connection	2.4
Water connection	3.6
Construction permit	10.5
Import license	0.3
Operating license or permit	10.5
Customs clearance for imports	5.8
Customs clearance for exports	4.5

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Anticompetitive behavior widespread

Anticompetitive or informal business practices rank among the top five constraints to both conducting and developing a business (see figures 2.1 and 2.2). There is ample anecdotal evidence of businesses engaging state agencies in fighting off competition, particularly in state procurement and the larger privatization transactions. Indeed, the survey suggests that anticompetitive business practices are so widespread as to seriously impair fair competition and business development (for more on the state of business ethics in Lithuania, see box 4.1 in chapter 4). Firms' concerns about this issue probably extend to the competitive threat from the gray economy. While this report does not address the gray economy, it is an important area of focus for policymakers and law enforcement officials seeking to protect competitive business practices in Lithuania.

Few labor issues

The companies surveyed reported a larger share of permanent staff than the national average (table 2.4). Moreover, respondents were generally seeking to add new staff—potentially an increasingly difficult task. Firms cited the skills and education of available

workers among the top five constraints to both conducting and developing their business (see figures 2.1 and 2.2).

Firms reported having lost no days to labor unrest in the previous year. Lithuania has no tradition of resolving labor disputes through strikes or other types of unrest. Indeed, the country has had no labor strike since 2001. Its labor laws include no lockout provisions allowing employers to fire striking workers, though a major business association is now pushing the adoption of such provisions. (For more detailed data on labor issues, see table A1.12 in appendix 1.)

Table 2.4 Selected labor indicators for firms, Lithuania
(percent, except where otherwise specified)

Indicator	Value
Labor composition	
Share of workers who are permanent	96.6
Share of permanent skilled workers who are foreign nationals	0.2
Labor turnover	
New employees (hired during the last 12 months) as a share of total	24.5
Employees who left during the last 12 months as a share of total	35.7
Average time to fill a skilled technician vacancy (weeks)	3.2
Average time to fill a production or service worker vacancy (weeks)	3.0
Desired workforce as a percentage of current workforce	102.6
Labor unrest	
Days lost to labor disputes or civil unrest in previous year	0.0

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Access to finance a diminishing problem

The survey shows that entrepreneurs consider access to finance less of a problem than in the past. More than half the enterprises interviewed (56 percent) said access to finance is no obstacle or only a minor obstacle to the operation and growth of their business, and only 27 percent consider it a major or very severe problem. Nor do most entrepreneurs consider the cost of finance to be a problem. (For more detailed data on finance, see tables A1.3, A1.6, and A1.7 in appendix 1.)

As the economy has grown and the society developed, the sources of finance have changed considerably. In earlier surveys firms cited family and friends, informal sources, and retained earnings as the main sources of finance for investments. The results of the 2004 Productivity and Investment Climate Survey show that of these three sources, only retained earnings remain important, financing slightly more than half of investments. Bank loans, leasing, and increase in equity each account for just over 10 percent of investment finance. Notably, equity finance is a slightly more important source than bank finance.

A third of respondents reported having loans from banks. The collateral required for bank loans averaged 114 percent of the loan value, the interest averaged 6 percent (ranging from 3.3 percent to 13 percent), and the duration of loans averaged 40 months. Among

the enterprises reporting that they had no bank loans, the vast majority (86 percent) said it was because they had never applied for a loan. Only 15 percent reported having had their loan applications turned down. Two-thirds of those never applying for a loan said the main reason was that they did not need loans, while less than 20 percent pointed to cumbersome application procedures or stringent collateral requirements.

Conflict resolution not a top concern

The legal system and conflict resolution do not rank among the top concerns for businesses in Lithuania: only one in five companies surveyed (and one in four exporters, which may have more complicated conflicts than nonexporters) considers these aspects of the business environment to be a major or very severe constraint (table 2.5). Nevertheless, the legal system for resolving conflicts would benefit from more specialization and better skills among the judges and legal staff working on cases relating to business conflicts.

Table 2.5 Perceptions of legal system and business conflict resolution by type of firm, Lithuania

	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign
Percentage of firms evaluating legal system or conflict resolution as major or very severe constraint	20.5	21.6	18.5	19.4	25.8	17.1	20.8	20.8

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

An improving record on corruption

The Productivity and Investment Climate Survey appears to confirm the improvement in Lithuania's record on corruption: only 27.6 percent of respondents rated corruption as a major or very severe constraint. Firms reported needing an average of 2.7 percent of sales for informal payments (table 2.6). Small firms have more problems with informal payments than large ones, and domestic firms strikingly more problems than foreign ones. Large firms reported using 0.7 percent of sales, and foreign firms 0.1 percent, for informal payments.

Table 2.6 Indicators of corruption as reported by firms, Lithuania

Indicator	Percent
Share of sales needed for informal payments	2.7
Inspections	
Share of interactions in which informal payment requested	17.2
Share of sales needed for informal payments to inspectors	1.4
Share of firms reporting requirement for gift or payment	
For an electricity connection	2.8
For a construction permit	5.6
For an import license	0.9
For an operating license	8.2

Source:

World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Promising findings on innovation

Survey questions to elicit information about and attitudes toward innovation brought encouraging responses. Among the Lithuanian companies surveyed, the most popular way to acquire new technology is through the acquisition of new machinery (table 2.7). Promisingly, the second most important way is to develop or adapt new technology in-house.

Table 2.7 Selected indicators on technology and innovation, Lithuania

Indicator	Percent
Share of firms with ISO certification	29.3
Share of firms with technology innovations (during the last 12 months)	
Developed a major new product line	27.6
Upgraded an existing product line	57.7
Introduced new technology that has substantially changed the way the main product is produced	26.8
Discontinued at least one product line	31.0
Agreed on a new joint venture with a foreign partner	3.3
Obtained a new licensing agreement	5.9
Share of firms rating form of technology acquisition as first, second, or third most important	
Embodied in new machinery or equipment	47.3
Hiring key personnel	4.8
Licensing or turnkey operations from international sources	3.4
Licensing or turnkey operations from domestic sources	3.4
Developed or adapted within the establishment locally	16.4
Transferred from parent company	2.7
All others	21.9

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Survey answers on innovation suggest responsiveness to market demands. More than half the firms reported upgrading an existing product line in the previous year. Moreover, firms were fairly eager to discontinue existing products and to develop new product lines or introduce new technology. But only 29 percent of the companies surveyed had ISO certification. While no comparable survey data are available for other countries in the region, this share appears low. On the positive side, the number of firms with ISO certification exceeds the number of large firms in the sample, suggesting that certification has extended beyond large firms to small and medium-size firms as well. Less positive, however, is that there are fewer ISO-certified firms than there are exporters in the sample, indicating that no less than a quarter of all exporters are putting too little emphasis on the quality of their products and processes. The government could speed ISO certification by providing special-purpose grants to small and medium-size enterprises seeking to be certified.

Chapter 3 Company landscape, competitiveness, and innovation

Lithuania has moved from a planned economy 15 years ago to a functioning market economy in which the private sector creates more than 70 percent of all value added. How competitive is this market economy—and what is its potential for increasing its competitiveness? Low labor costs and rising productivity have given Lithuania a competitive edge. And comparative measures suggest that the country has the necessary resources to maintain and strengthen its competitiveness through innovation. But that will require harnessing those resources for a quantum leap from low-tech to high-tech industries.

The company landscape

In 2004 some 56,300 companies were in operation in Lithuania. Of these, 95 percent were open or closed joint stock companies and sole proprietorships. In addition, around 140,000 people—about 10 percent of the employed in Lithuania—held licenses for individual commercial activities.

Small enterprises have become the mainstay of the Lithuanian company landscape. More than 95 percent of all registered and active companies have fewer than 50 employees, and 80 percent have fewer than 10 (micro companies). In 2002 small and medium-size enterprises contributed almost 60 percent of value added in Lithuania. Most such enterprises are involved in trade, manufacturing, or services.

Since the late 1990s there has been a noticeable decline in the population of small and medium-size enterprises, especially in trade. Contributing to this trend are rising labor costs and a stricter regulatory environment for micro companies, as well as rapid expansion of large grocery chains and shopping malls. At the same time there has been a welcome increase in the share of small and medium-size enterprises in manufacturing and services. The services sector will continue to offer the greatest potential for the smallest firms and entrepreneurs in the years to come.

The business support network—well intentioned but short on capacity

In Lithuania, as in many other countries, small and medium-size enterprises—whether established or just starting up—need nurturing and advice. They face the same regulatory burden as larger companies but do not have the same corporate resources—such as lawyers, tax accountants, and human resource support. For an entrepreneur with good technical skills but less savvy about regulations, starting a business can be a daunting task.

To support, inform, and train the management and staff of small and medium-size enterprises, the Ministry of Economy has established a network of business information centers—now 32 strong. The activities of these centers are supervised and coordinated by the SME Development Agency (SMEDA), which operates under the Ministry of Economy but is governed by a board with representatives from various ministries and

business organizations. In the view of many private sector representatives, SMEDA and the centers it supervises have good intentions and a sound institutional framework but need better capacity to perform their intended activities.

One business information center, that in Kaunas, was established jointly by the Ministry of Economy and the local SME association. This public-private partnership appears to work better than centers with no private participation.

Several business incubators and innovation centers also have been established under the auspices of the Ministry of Economy. In addition, seven science and technology parks operate in conjunction with universities and public research institutions.

In evaluations of the public or semipublic institutions in the small business support system run by the Ministry of Economy, private participants—and indeed some of the institutions themselves—point out that while the institutions are needed and potentially useful, most do not perform their duties as effectively and professionally as intended, do not cooperate effectively, and suffer from chronic lack of funding. Moreover, they lack clear quality standards. And while access to finance is a problem facing most enterprises seeking guidance, these organizations focus their support to businesses largely on aspects of entrepreneurship other than finance. For the small business support system, expanding entrepreneurship in Lithuania should be an explicit overarching goal.

How does Lithuania fare on competitiveness?

Lithuania, like so many other countries, claims to have just the right mix of macro- and microeconomic ingredients to provide a favorable location for any business, foreign or local, seeking to expand its activities. But lacking a large internal market—such as that in China, Brazil, or Poland—and having positioned itself as an exporter of primarily low-tech goods, Lithuania faces a big repositioning challenge (box 3.1). In today's crowded market for new investments the traditional pillars in marketing a country—a stable macroeconomic environment, a strategic geographic location, and educated and inexpensive labor—are still required, but they are not enough. A deeper look into the microeconomic underpinnings of the country's competitive strengths is needed.

Box 3.1 How to escape the low-tech, low-quality trap?

Empirical studies by the Vienna Institute for International Economic Studies, an authority on transition economies, have analyzed industrial diversity, export concentration, and productivity convergence in the new EU members. The results of several studies suggest that Lithuania and its Baltic neighbors, Estonia and Latvia, have been able to diversify their industrial structure, reduce their relative share of low-tech exports to the EU, and increase the share of high-tech exports (Havlik 2001; Stehrer and Wörz 2003; Dulleck and others 2004). But both Lithuania and Latvia lag behind the other EU8 countries in the export share of technology-driven industries.

In the late 1990s technology-driven industries accounted for almost no exports for Lithuania, compared with 20–30 percent for the Czech Republic, Estonia, and the Slovak Republic and almost half for Hungary. In 2002 only 2.6 percent of the labor force in Lithuania worked in medium- or high-tech manufacturing, compared with 7.4 percent in the EU15 and 7.5 percent in Estonia. At the same time Lithuanian exports reflected a rising concentration of low-skill, labor-intensive industries. Lithuania may have seen growing exports from technology-driven industries in the past few years, driven by the return of positive export growth following the Russian crisis, but it is unlikely to fully catch up with its peers.

Stehrer and Wörz (2003) argue that a country has better potential for productivity and growth if it specializes at the low end of high-tech industries rather than at the high end of low-tech industries. Low-tech specialization yields no productivity growth spillovers in high-tech industries. Dulleck and others (2004) find that during the five-year period before 2000 the Baltic countries managed to increase their share of high-tech products in total EU imports more than other Central European countries. But most of the increase came from the lower end of high-tech products, and the share of higher-quality high-tech products in the Baltic countries' total exports fell during the same period.

How can Lithuania avoid getting trapped in low-quality, low-tech specialization in the long run? It must promote higher-quality high-tech industries through incubators for high-tech industry, support to research and development, and an appropriate focus in education.

How Lithuania measures up

The modern way to prosperity is through economic growth—and these days economic growth, it is widely agreed, comes from being internationally competitive. And to be competitive, a country needs to be at least as productive and as innovative as its peers.

As countries seek prosperity, they move from reliance on low-cost goods or local natural resources toward unique products and processes. For Lithuania, a middle-income country with GDP per capita of $10,015 (adjusted for purchasing power parity) in 2002 (World Economic Forum 2003), innovation-based competitiveness is the driver with the greatest potential to carry the country into the prosperous high-income group.

How well does Lithuania fare on measures relating to competitiveness and innovation? Consider an index developed by the World Economic Forum to measure the strength of a country's competitive advantage, where a higher score indicates more reliance on unique products and processes. Here Lithuania ranks 48th in the world, with a score of 3.2 on a scale of 1–7. In the EU8, only Slovenia and Hungary rank higher. Lithuania also ranks well—37th in the world—on capacity for innovation. It scores 3.4 on the same scale, where a higher score means more propensity for local companies to conduct formal research and pioneer their own new products rather than relying on licensing or imitating foreign companies.

Another indicator from the World Economic Forum measures the development of industrial clusters, considered a key underpinning of higher productivity and thus

competitiveness. For individual companies from middle-income countries such as Lithuania, it is extraordinary difficult to compete with established market players from high-income countries. Clusters can strengthen the competitive muscle of a country. International experience shows that clusters grow out of an improving business environment and boost the current and potential productivity of member firms, increase the capacity for innovation, and stimulate and enable new business formation.

Lithuania fares well on the measure of cluster development relative to its peer group. It ranks 34th globally—highest among the EU8—with a score of 3.3 on the scale of 1–7, with a higher score indicating deeper and more common clusters. Yet data on export specialization suggest that the clusters have formed in low-tech, low-value-added areas rather than more innovative sectors. The textile industry in Kaunas provides examples of clusters that are well organized but located in low-value-added industry segments.

Industrial clusters are an important competitiveness policy issue in the EU and part of the Lisbon Agenda. While a broader discussion of clusters is beyond the scope of this report, Lithuania should consider its clusters—and its knowledge about creating them—a strategic asset and continue to develop them. A number of analytical papers on clusters by the Lithuanian Ministry of Economy are steps in the right direction.[7]

What export specialization reveals

Lithuania still has a way to go on the innovation and competitiveness front. The country's clusters and innovative capacity have not yet translated into actual strength in high-tech sectors. A comparison with a group of peer countries shows that Lithuania has relatively low export specialization in two high-tech market segments, electronic components and information technology (IT) and consumer electronics (table 3.1). Lithuania has an unimpressive performance in electronic components and is second to last in information technology and consumer electronics in both rank and revealed comparative advantage (RCA).

Lithuania does have a high revealed comparative advantage in clothing, a traditionally strong export segment for the country. But changes in global trade policy and newly emerging competitive pressures threaten even this export stronghold (box 3.2).

[7] For more discussion, see World Economic Forum (2003) and works by Michael Porter.

Table 3.1 Export specialization as measured by revealed comparative advantage index, selected EU countries, 2003

	Electronic components		IT and consumer electronics		Highest rank in any industry		Highest revealed comparative advantage (RCA) in any industry	
Country	**Rank**	**RCA index**	**Rank**	**RCA index**	**Rank**	**Industry**	**RCA index**	**Industry**
Czech Republic	25	0.92	20	0.99	12	Nonelectronic machinery	1.71	Basic manufactures
Estonia	49	0.47	16	1.25	11	Wood products	4.86	Wood products
Greece	54	0.37	42	0.27	22	Basic manufactures	3.86	Clothing
Hungary	20	1.21	**5**	**2.22**	5	IT & consumer electronics	2.22	IT & consumer electronics
Latvia	61	0.27	57	0.09	**4**	**Wood products**	**11.43**	**Wood products**
Lithuania	39	0.62	49	0.16	17	Transport equipment	3.00	Clothing
Poland	31	0.78	34	0.38	12	Misc. manufacturing	2.12	Wood products
Portugal	23	0.98	33	0.42	9	Textiles	4.22	Leather products
Slovak Republic	32	0.76	43	0.24	11	Transport equipment	2.22	Basic manufactures
Slovenia	**18**	**1.22**	48	0.20	7	Misc. manufacturing	2.29	Wood products
Spain	48	0.48	40	0.32	9	Transport equipment	2.05	Transport equipment

Note: The RCA index measures the country's specialization in exports according to the Balassa formula. The index compares the share of a given sector in national exports with the share of this sector in world exports. Values more than 1 indicate that the country is specialized in the sector. A rank of 1 indicates that the country has the highest specialization index in the world for the sector.
Source: International Trade Centre data.

Box 3.2 How changes in the global textile and clothing market will affect Lithuania

The gradual elimination of quota systems for textiles and clothing that began January 1, 2005, under the Agreement on Textiles and Clothing will transform global patterns of production and trade in these products. The removal of quota systems will open the EU and U.S. markets to much higher levels of imports from the main global players—China, India, and other Asian countries. China alone is expected to expand its share of textile and clothing exports from its current 20 percent of the global total to as much as 50 percent thanks to high productivity and recent big investments in production equipment.

These changes in the global market pose a big threat to Lithuania's textile and clothing industry, among the most important sectors of its economy. The industry accounts for more than 8 percent of GDP and a quarter of total industrial employment. Its share of exports, though falling in recent years, was 13.6 percent in 2003, the second largest in the export structure (after mineral products). As long as Lithuania competes with China and other global players in the same segments of the textile and clothing market, it is likely to see job losses in the industry (see appendix 3 for a discussion of the productivity of Lithuania's industry relative to that of China).

The Lithuanian textile and clothing industry depends on export markets in the EU: in recent years its products accounted for about 30 percent of the country's manufactured exports to the EU. With the EU likely to receive significant new inflows of cheaper textiles from Asia, Lithuanian firms will have to reinvent themselves to survive. Industry insiders predict that the competitive edge of the future will be on-demand production—the ability to deliver the right products quickly and to the right place. The fashion-sensitive market segment, which requires rapid reaction from producers, could be one line of specialization for Lithuania, which should be able to compete with Asian producers on the rapid delivery of product to key EU markets.

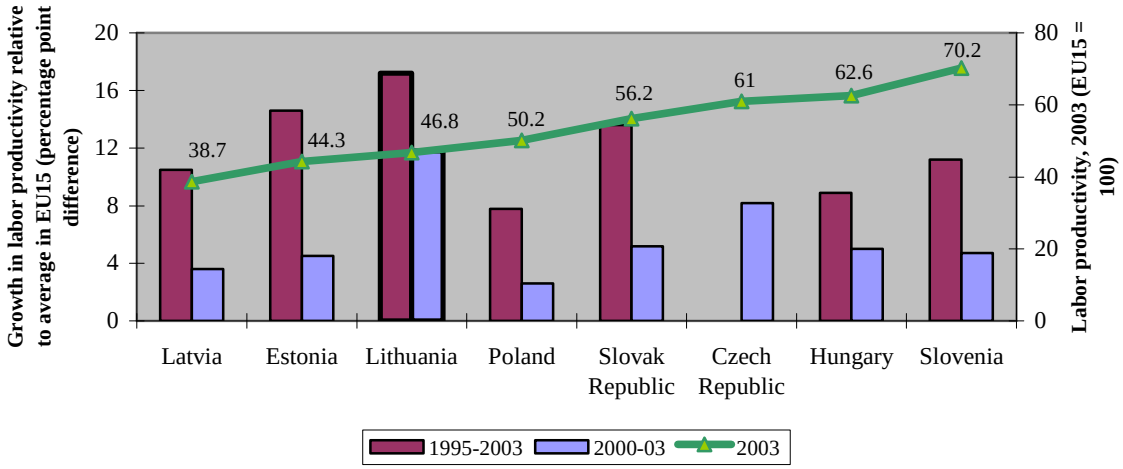
Catching up with the EU in labor productivity—but still a long way to go

In the expanded EU (EU25) Lithuania and the two other Baltic countries, Estonia and Latvia, offer the cheapest labor force for export-oriented foreign direct investment. Average monthly wages in Lithuania's manufacturing sector amount to about €350–400, significantly lower than in the high-income EU members. But unless labor productivity is high, the low labor cost loses its competitive advantage.

Lithuania has done well on the productivity front lately, though it began from a low starting position. In 2003 its labor productivity was still only 47 percent of the level in the EU15, but up to that point growth in productivity had been phenomenal (figure 3.1). Indeed, Lithuania led all EU countries—old and new—in the pace of productivity growth. Its rate of productivity growth was about 17 percentage points higher than the EU15 rate in 1995–2003 and about 12 percentage points higher in 2000–03. It also exceeded the rate in its peer countries. The European Commission (2003) reports that labor productivity in Lithuania grew about 6.5 percent a year in 1995–2000—much faster than the 1 percent in the EU15 and the 3.5 percent average in the 10 new EU members.

Despite this positive picture, the strong productivity growth in Lithuania should be seen as a somewhat late process of catch-up. It could be argued that other EU8 countries exhibit slower productivity growth because they have done more economic restructuring at an earlier stage. Data over a longer period suggest that Lithuania lags behind its peer countries in growth in output and total factor productivity (figure 3.2).

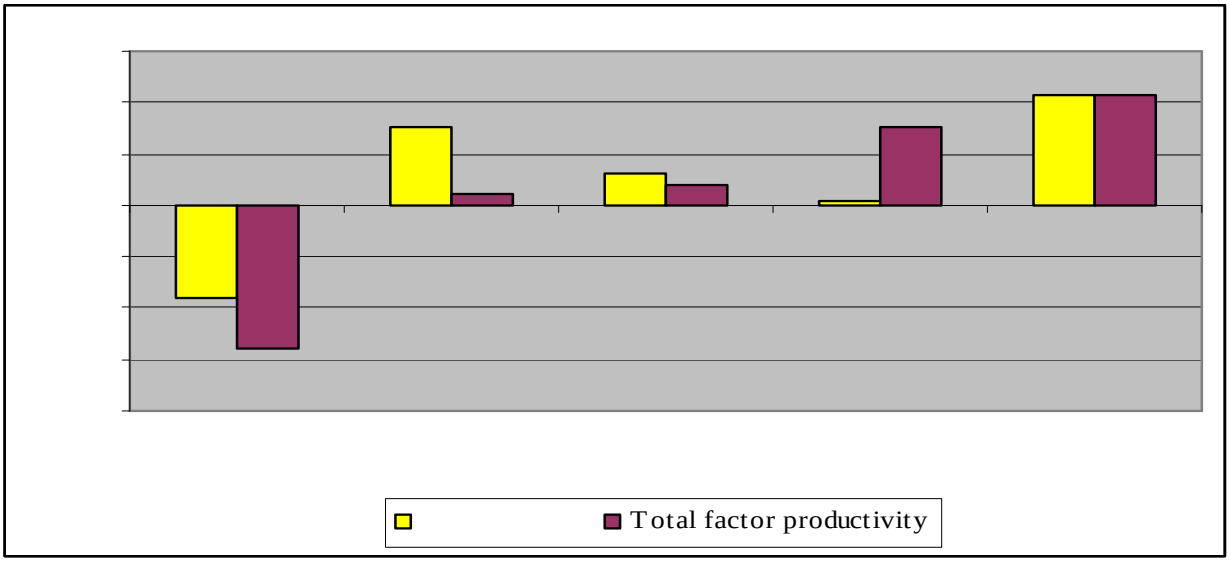
Figure 3.1 Labor productivity and its growth, EU8 countries, 1995–2003



Source: Eurostat data.

Even so, Lithuania maintains its cost-based competitive edge (figure 3.3). Unit labor costs have been low and largely falling in the past several years. Lithuania registered a significant drop in unit labor costs in 2000–02, with a slight increase in 2003 (figure 3.4). In the four years leading up to 2004 Lithuania had the lowest growth in unit labor costs among the EU8, and lower growth than the EU15 average.

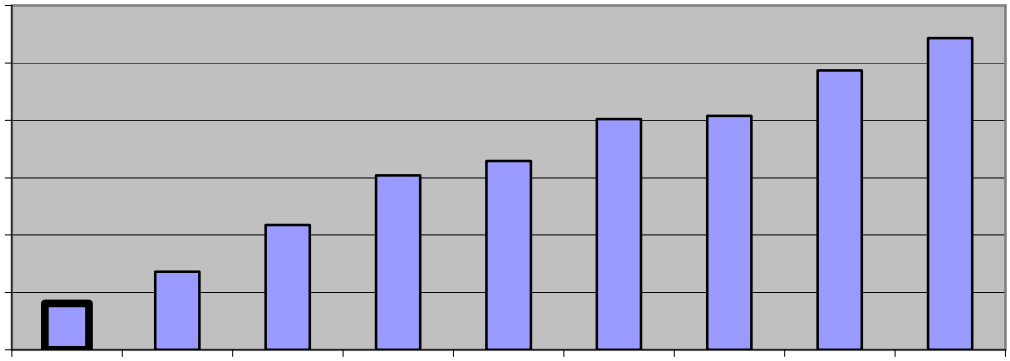
Figure 3.2 Average annual growth in output and total factor productivity, selected EU8 countries, 1991–2003



Source: World Bank data.

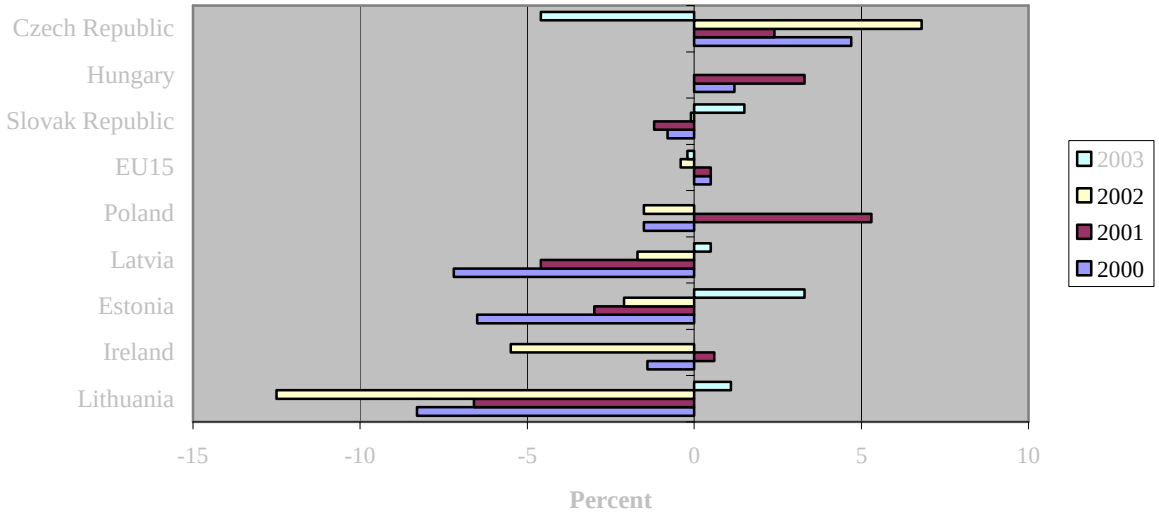
Figure 3.3 Labor cost index, EU8 countries and EU15, 2003

Index (2000 = 100)



at a competitive disadvantage relative to the other EU8 countries (except for Estonia, which also has a currency board), which have been able to devalue their currencies when market pressures, including loss of trade competitiveness, become too strong. Recent reports from the International Monetary Fund and the Vienna Institute for International Economic Studies point out that Lithuania experienced real appreciation of the litas against the euro in the past few years, losing exchange rate competitiveness (Gligorov and others 2004; Burgess, Fabrizio, and Xiao 2004). But its labor productivity rose and unit labor costs fell during the same period, indicating that these improvements are more permanent than those in countries with currency devaluations.

Figure 3.4 Growth in unit labor costs, selected EU countries and EU15, 2000–03



Note: The derived indicator shown in the figure compares remuneration (compensation per employee) and productivity (GDP per employee) to show how the remuneration of employees is related to the productivity of their labor. It shows the relationship between how much each "worker" is paid and the value he or she produces. Its growth rate gives an impression of the dynamics of the participation of labor in the output value created. The variables used in the numerator (compensation, employees) refer to employed labor only, while those in the denominator (GDP, employment) refer to all labor, including the self-employed.
Source: Eurostat data.

Does Lithuania innovate enough to remain competitive?

Innovation is widely recognized as one of the main engines for increasing a country's competitiveness. Ireland, Israel, the Republic of Korea, and Singapore are just a few of the many countries that have put themselves firmly on the map of developed competitive economies thanks to their capacity to support groundbreaking research, the development of new products and processes, the registration of new patents, and other essential steps. Innovation breeds more innovation, creating a virtuous circle that leads to economic growth.

How well is Lithuania equipped to carry out innovation? During its years of independence it has seen its scientific institutes, the primary sources of innovation, gradually losing funding and fighting for survival. The World Bank (2003b), in an in-depth look at Lithuania's innovation system, finds that while the country has elements of

such a system in place—including universities, research institutions, and private companies—those elements are not interacting effectively to link the research community with the business community. The disconnect between businesses and scientists is large, and the output of scientists—measured in publications, patents, licenses, and the like—inadequate.

The vast majority—around 90 percent—of research and development (R&D) in Lithuania is publicly funded and undertaken by public institutions (universities and state research institutions). By comparison, the average public share of R&D funding is 29 percent in the OECD, 34 percent in the EU, and 56 percent in the EU8 (World Bank 2003b). Lithuania's public funding system is inflexible and resistant to changes in priorities.

Private venture capital to finance innovation is virtually nonexistent in Lithuania, especially for the very early stages of company development. A few business incubators provide support for new firms, but their financial capacity is weak. And while new private equity investment funds enter the market every year, few of them target young firms, and none provide seed capital for start-ups.

The state of R&D, while inadequate a few years ago, may be slowly improving, however, with the private sector showing initiative (see also the section in this chapter on Lithuania's competitiveness). According to the European Innovation Scoreboard for 2003[8], Lithuania led the EU10 member countries in science and engineering graduates, in the share of the population with tertiary education (though there are issues with quality, as discussed in the section on education in chapter 4), in the cooperation of small service and manufacturing firms in innovation, and in the trend of business R&D as a share of GDP. Lithuania ranked among the top three in in-house innovation by small and medium-size enterprises and in the trend[9] in the number of European patents relative to population, current number of patents, and Internet access and use.

But even where Lithuania has the resources for innovation, those resources do not seem to translate into achievements. Lithuania entered the new millennium with one of the world's largest numbers of science and technology graduates relative to population, surpassing even such industrial powerhouses as Germany, Sweden, and the United States.[10] Yet it has one of the smallest numbers in the EU of patents registered with the European Patent Office or the U.S. Patent and Trade Office (while Lithuania has a positive trend in European patents, it is slow in producing high-tech patents, with the latest trend index of 13.4 compared with Latvia's 30.4, Estonia's 132.8, and Slovenia's 309.3).

All this suggests a clear potential in Lithuania for more innovation. The active participation by small and medium-size enterprises in the innovation process is very encouraging. Yet there is a strong need for more risk capital, especially early-stage (seed) capital for financing innovative start-ups that might otherwise falter. Since the private

[8] European Innovation Scoreboard is prepared annually by the European Commission since 2000.
[9] The European Innovation Scoreboard measures trends for certain indicators, in addition to static numbers.
[10] Eurostat figures for tertiary science and technology graduates per 1,000 people ages 20–29 for 2003.

sector may be unprepared to handle the risks associated with such financing, the state has a role to play. Public-private partnerships in designing and funding seed capital schemes, modeled on those in Finland, Ireland, and the United States, might be a preferred option. Peer countries such as Latvia and Poland also have financing initiatives that are worth exploring. The education system also needs attention, to reverse its orientation toward quantity rather than quality in science and technology graduates. Finally, industrial clusters should be further promoted, with measures to encourage the participation of universities and scientific institutions and the speedy commercialization of innovations.

Chapter 4 Firm Entry & Exit

How easy are entry and exit for firms?

Firm entry and exit are two critical parts of the creative destruction process that helps keep an economy dynamic and healthy. Easy entry and quick exit of companies allow competition to flourish and resources to be allocated efficiently. They also support growth in productivity, since new companies can be expected to operate at higher productivity than incumbents on average, while exiting companies usually have low productivity.

A quick way to assess entry and exit policies is to look at the level of competition in an economy, shown by many studies to be a strong determinant of the growth and performance of companies and the economy. Lithuanian companies report high levels of competition. In the 2002 Business Environment and Enterprise Performance Survey 86 percent of respondents reported having four or more competitors, higher than the EU8 average of 84 percent. In the 2004 Productivity and Investment Climate Survey almost 94 percent of respondents reported having four or more competitors.

Firm entry—quick and inexpensive, though with a high capital requirement

Lithuania has a fairly streamlined system of enterprise entry into the market. There are two types of entry. The first is incorporation, in which a company with at least the minimum regulatory capital—LTL 10,000 (about $3,660) for a private stock company and LTL 100,000 (about $36,600) for a public stock company—is set up. The second type is for an individual activity, in which an entrepreneur receives a license from the tax authorities to engage in one or more of about a hundred types of eligible business activities. The registration process for an individual activity takes about 10 days.

Registering a formal company takes 26 days on average, through a process that includes obtaining the services of a notary public, making a record in the company register, and receiving the necessary identification numbers for paying profit taxes, value added taxes, and social security contributions (table 3.2). The cost of company registration as reported by one local law firm was LTL 2,500 (about $875). Registering a standard private stock company (*uzdaroji akcine bendrove*, or UAB), including registration as a value added tax payer, costs about LTL 950 (about $330; table 3.3). The time and cost of registration are higher for foreign owners, which must provide certified translations of the paperwork.

Lithuania has recently improved its company registration system. Starting in July 2004, for example, the company register was required to issue registration numbers to new enterprises in five days or less (down from the previous wait of about 10 days). But there is room to further simplify and accelerate the registration process. One shortcoming is that the registration, taxpayer, value added tax, and social security numbers are all assigned independently. Another is that the tax authority can issue identification numbers only after the registration number is received, a staged process that creates unnecessary delay for new businesses. Starting the application process for all new business numbers concurrently and in one place would be a great improvement. The company register could

serve as "registration central," distributing the registration application filed by new businesses to all state agencies needing it (such as regional tax inspectorates and the Social Insurance Agency, or SODRA).

Table 4.1 Time and cost of starting a business, selected countries and country groups, 2004

Country or country group	Procedures	Duration (days)	Cost (percentage of GNI per capita)	Minimum capital (percentage of GNI per capita)
Latvia	7	18	17.6	41.4
High-income OECD	6	25	8.0	44.1
Lithuania	8	26	3.7	62.8
Poland	10	31	20.6	237.9
Greece	15	38	35.2	125.7
Czech Republic	10	40	10.8	44.5
Europe and Central Asia	9	42	15.5	51.8
Hungary	6	52	22.9	86.4
Slovak Republic	9	52	5.7	46.1
Slovenia	10	61	12.3	19.0
Estonia	6	72	7.5	49.7
Portugal	11	78	13.5	39.5
Spain	6	108	16.5	16.9

Source: World Bank and International Finance Corporation, Doing Business in 2005 database.

Global best practice supports such a "one-stop shop" for business registration. It also suggests making registration an administrative process, using a single identification number, requiring low minimum capital or none at all (especially for small and medium-size enterprises), and allowing electronic application. On two of these points Lithuania still needs to catch up with the global leaders—such as Estonia, which has a single business identification number, and Ireland, which has no minimum capital requirement for new start-ups.

Table 4.2 Cost of setting up a private stock company, Lithuania, 2003

	Cost (litai)	Cost as a percentage of 2003 GDP per capita[a]
Cost of registration	950[b]	6
Minimum capital	10,000	63

Source: World Bank staff estimates.
a. Per capita GDP in 2003 was LTL 15,879.
b. This cost fell in 2004 (see table 3.2).

Firm exit—quick but not quite efficient

Complicated exit from the market is often considered a barrier to firm entry, because difficult bankruptcy procedures keep inefficient firms operating longer than necessary and thus crowd out new, more productive entrants. Lithuanian laws allow fairly easy exit

of companies from the market through liquidation. Bankruptcy cases last about 1.2 years on average, among the shortest periods in the region. The cost of the bankruptcy process has fallen, from about a fifth of the estate in 2002 to 8 percent in 2004 (table 3.4). But the 52 percent recovery rate in bankruptcies, while exceeding that in most other EU8 countries and the average for Europe and Central Asia, lags significantly behind Latvia's 85 percent and the OECD average of 72 percent. Slow preparation for formal bankruptcy processes, and a lack of strong incentives for the trustees (bankruptcy administrators) to recover as much as possible quickly, may be among the reasons.

Table 4.3 Time and cost of closing a business, selected countries and country groups, 2004

Country or country group	Time (years)	Cost (percentage of estate)	Recovery rate (cents on the dollar)
Ireland	0.4	8.0	88.9
Latvia	1.1	4.0	85.0
Lithuania	1.2	8.0	52.4
Poland	1.4	18.0	68.2
High-income OECD	1.6	6.8	72.2
Greece	2.0	8.0	45.6
Hungary	2.0	23.0	30.8
Portugal	2.5	8.0	69.9
Estonia	3.0	8.0	40.0
Europe and Central Asia	3.3	13.1	30.5
Slovenia	3.6	18.0	23.6
Slovak Republic	4.7	18.0	39.6
Czech Republic	9.2	18.0	16.8

Source: World Bank and International Finance Corporation, Doing Business in 2005 database.

Lithuania adopted new bankruptcy and company rehabilitation laws in 2002. But bankruptcy lawyers and administrators maintain that it is already time for a thorough review of the laws, to tackle a few important issues affecting the quality and success of bankruptcies and rehabilitations. These practitioners point to a need for specialized courts or at least specialized judges to handle bankruptcy cases, now adjudicated in the general courts. They also call for having the same judge handle a case from start to finish. Under current practice more than one judge may adjudicate a bankruptcy case (which may include the main case plus derivative cases, such as a civil claim on the assets of the bankrupt enterprise), leading to delay and complication.

While the bankruptcy regime operates relatively smoothly, behind it lie problematic procedures for company rehabilitation. An efficient process of company rehabilitation, or restructuring, keeps viable companies out of liquidation, increasing their productivity, ensuring efficient use of resources, and maintaining employment. Few rehabilitation cases have occurred in Lithuania, though there have been bankruptcy cases that could easily have been restructurings, saving the companies and thus preserving their jobs, assets, and markets. The legislation does not encourage saving companies from liquidation by transferring them to new owners. Nor do bankruptcy administrators have

incentives to turn companies around. The law is somewhat vague about their role in restructuring, and state agencies—usually the largest creditors of the troubled companies because of taxes owed—are reluctant to offer monetary incentives, such as success fees, to the administrators. Piecemeal sale of assets is therefore the approach preferred by administrators.

Company rehabilitation also suffers from other weaknesses. Starting a rehabilitation case appears to be a time-consuming, paperwork-laden process. Judges tend to insist on perfecting a rehabilitation plan before they start a case. During the delay in the formal start of the case, the situation of the troubled company usually worsens, pushing it toward liquidation. Courts need to make quicker decisions on starting a rehabilitation case, by focusing more on the substance of the case than on form.

An apparent weakness noted by industry practitioners relates to an EU rule on state aid. According to the practitioners, the public sector, so often a creditor in bankruptcy cases, is unwilling to support company restructurings rather than outright liquidations because of an EU rule mandating that any state aid exceeding €100,000—including the debt restructurings and write-offs by the fiscal and social security authorities that are so common during rehabilitations—must be reviewed and approved by Brussels. Few Lithuanian state agencies are willing to go down this bureaucratic route.

But this interpretation of the EU rule on state aid appears to be erroneous. While the *de minimis* threshold of €100,000 (below which no aid is considered to be involved) indeed exists, it applies to cases in which the state intentionally attempts to stave off the bankruptcy of a specific enterprise for social reasons. The EU rule does not consider state aid to be involved if debt in a restructuring is forgiven by both public and private creditors on equal terms (the pari passu principle).[11]

[11] This is a general finding by the World Bank's investment climate assessment team. A definitive conclusion would require further investigation by qualified lawyers.

Chapter 5 Factor markets

Good performance of factor markets – capital, labor, knowledge, and land - is crucial to the health of an economy. Distortions in factor markets lead to inefficient resource allocations in the economy, resulting in a decline of the potential output. Lithuania has a small but fairly well functioning financial system. Labor regulations in Lithuania warrant some improvements to allow greater flexibility, but overall they maintain the right balance between the interests of employers and those of employees. By contrast, the education system, especially tertiary education, suffers from too strong a focus on quantity rather than quality. Finally, commercial land development presents numerous constraints to businesses.

The financial market—supply outstripping demand?

Access to finance has improved for Lithuanian businesses, as discussions with financial institutions, business associations, business support agencies, and government officials all confirm. Much of the improvement is due to changes on the supply side. Banks and finance companies are very liquid and have become both more willing to take risks and better able to evaluate them. Product development has picked up, and financial institutions now offer a range of financing instruments. And equity finance is now much more readily available than it was just a few years ago. Indeed, managers of foreign funds claim that it is difficult to find investments in Lithuania, citing fierce competition from domestic funds and investors.

Development on the demand side has also been considerable, but the main obstacles to realizing and financing investments still lie with enterprises and entrepreneurs, particularly small and medium-size enterprises. As noted, in the Productivity and Investment Climate Survey 85 percent of the respondents that did not have a bank loan said that they had not applied for one, mostly because they had no need for a loan. Attitudes have been changing, however, and businesses are becoming more willing to adjust to the demands of financial providers so as to obtain debt finance for investments—and more willing to accept dilution of ownership as a price for growth. But development and growth in the small and medium-size enterprise sector remain slow, and many financial institutions and investment managers cite lack of education, knowledge, and experience among entrepreneurs and managers as the main constraint.

The financial sector—relatively small but growing fast

The Lithuanian financial sector is still very small, even compared with those in the other EU8 countries. While financial sector assets averaged 117 percent of GDP in the EU8 at the end of 2002 (Bakker and Gross 2004), they totaled only 50 percent of GDP in Lithuania. Indeed, Lithuania ranked lowest among the EU8 in the size of all financial subsectors. The situation is changing rapidly, however. Lithuania has been catching up with most of the other EU8 in bank lending, leasing, and factoring. Sophistication in its financial sector is relatively high and increasing, aided by foreign ownership from the EU15 of a large part of its financial institutions.

Banks. The Lithuanian banking sector, like the financial sector as a whole, is still quite small relative to the size of the economy. Bank assets were equal to only 42 percent of GDP in April 2004, though they have been growing by 20–30 percent annually in the past few years (table 4.1). Loans to private enterprises grew slowly until about 2001, but lending has since picked up, increasing by 40–50 percent annually in 2001-2003. Still, total outstanding loans to private enterprises amounted to just 17 percent of GDP at the end of April 2004. Bank credit to the private sector is considerably lower in Lithuania than in any of the other EU8 (table 4.2).

Table 5.1 Bank assets and loans to private sector, Baltic countries, selected years, 1997–2004

(percent)

Country	1997	2000	2002	2003	January - April 2004
Lithuania					
Assets/GDP	25.6	31.2	33.5	39.8	41.9
Loans/GDP	8.4	8.2	11.2	15.5	16.8
Growth of assets	—	43.9	20.6	28.2	7.3
Growth of loans	—	15.6	54.1	49.1	10.6
Latvia					
Assets/GDP	47.5	62.1	85.1	97.3	99.7
Loans/GDP	9.3	16.1	23.8	28.5	32.5
Growth of assets	—	59.6	63.8	29.3	4.6
Growth of loans	—	112.7	76.4	35.3	16.4
Estonia					
Assets/GDP	59.4	62.4	69.9	78.5	85.2
Loans/GDP	19.4	16.6	16.4	18.4	20.1
Growth of assets	—	42.5	41.3	20.9	10.4
Growth of loans	—	16.0	24.6	20.7	11.3

— Not available.

Source: National central bank data; World Bank staff estimates.

Lithuanian banks have been lending to a very small part of the private enterprise sector. At the end of 2003, by some accounts, only 17 percent of enterprises had bank loans.[12] Some sources suggest that about 90 percent of all bank lending had gone to only around 1,200 companies—merely 2 percent of the total population of firms.

[12] This share of companies with bank loans differs markedly from that found in the Productivity and Investment Climate Survey. One likely reason is the limitation in the survey's coverage of sectors (see chapter 2). The sectors not covered (trade, most services) may have much smaller percentages of firms with bank loans.

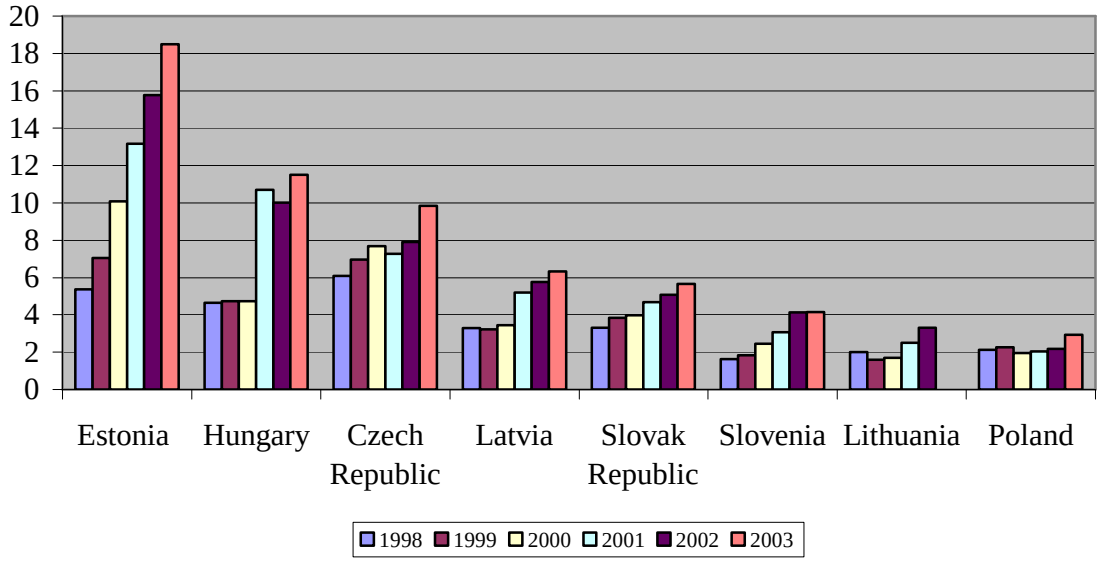
Table 5.2 Bank credit to private sector, EU8 countries and EU15, 1996–2002
(percentage of GDP)

Country or country group	1996	1997	1998	1999	2000	2001	2002
Czech Republic	72.89	68.12	69.16	55.48	52.96	44.15	34.36
Estonia	18.62	25.57	26.43	24.51	25.62	26.86	32.83
Hungary	20.42	22.32	23.68	24.46	32.01	34.76	40.40
Latvia	7.08	10.34	15.40	15.76	18.33	22.50	30.16
Lithuania	11.07	10.85	11.32	12.98	11.52	11.64	15.80
Poland	21.75	20.44	24.53	26.27	30.31	29.18	30.86
Slovak Republic	28.18	42.99	43.02	40.70	32.94	26.05	26.61
Slovenia	27.56	32.22	32.18	40.59	43.14	42.75	37.58
EU8	31.97	30.80	33.34	32.13	34.12	32.17	32.65
EU15	75.87	75.92	82.98	80.48	93.05	94.87	104.7

Source: International Monetary Fund and World Bank data.

Leasing and factoring. Leasing and factoring companies have been growing rapidly in number and assets, though the sector, still in its infancy, remains small. What the sector lacks in size it makes up for in increasing importance, by offering enterprises a wider range of options for obtaining finance. The main products offered are financial leases and domestic factoring with and without recourse. Leasing and factoring are particularly important sources of finance for small and medium-size enterprises, which often lack collateral and equity to cushion bank lending. Taken together, leasing and factoring have grown to almost 40 percent of bank lending to private enterprises. A big reason for this growth has had to do with the legal and practical difficulties for banks in foreclosing on and realizing collateralized assets.

Figure 5.1 Leasing assets, EU8 countries, 1998–2003
Percentage of GDP



Note: No data are available for Lithuania in 2003.
Source: For assets, Euromoney, *World Leasing Yearbook 2003*; for GDP, World Bank data.

Leasing volumes have been growing by more than 50 percent annually. At the end of March 2004 leasing assets totaled LTL 2.9 billion, or 5 percent of GDP. Financial leases accounted for 93 percent of the leasing portfolio, and operating leases for the rest. There are 11 leasing companies in Lithuania, 10 of which are owned by banks. Leasing activities are dominated by two bank-related leasing companies, which hold 74 percent of leasing assets. But other leasing companies have been gaining ground.

Much as for bank lending, leasing volumes in Lithuania still lag behind those in all other EU8 countries except Poland (figure 4.1). One driver of the leasing industry's rapid growth in the EU8 has evidently been weaknesses in creditor rights systems. That is certainly the case in Lithuania, where leasing has had an advantage over secured lending: in case of default the lessor already has legal title to the underlying asset. Until recently leasing also had a tax advantage over bank lending.

Although offered for only a few years in Lithuania, factoring has also been growing rapidly, presumably in large part thanks to support from foreign parent banks. Factoring can help companies better manage their leverage; by reducing their need for short-term bank credit to finance working capital, it helps attract longer-term investment finance from banks and leasing companies.

Table 5.3 Factoring companies and volume, EU8 countries and EU15, 2003

Country or country group	Factoring companies	Annual factoring volume (millions of U.S. dollars)	Annual factoring volume as a percentage of GDP
Czech Republic	5	1,783	2.56
Estonia	12[a]	944	14.72
Hungary	11	608	0.92
Latvia	—[a]	629	7.49
Lithuania	—[a]	734	5.32
Poland	7	2,622	1.40
Slovak Republic	5	252	1.06
Slovenia	2	83	0.39
EU8	42	7,654	1.93
EU15	265	531,227	6.20

a. The number of factoring companies shown for Estonia includes those for all three Baltic countries.
Source: Factors Chain International and World Bank data.

Factoring turnover in Lithuania increased 2.4 times in the past two years (2002-2003), reaching $734 million in 2003 (table 4.3). At the end of 2003 the factoring portfolio reached $188 million, equivalent to 0.9 percent of GDP. The same two banks that dominate leasing also dominate factoring, together holding more than 90 percent of the factoring portfolio.

Insurance companies. The insurance sector helps diversify access to finance by passing premium income into the capital market for investment in equity and corporate fixed income instruments. In Lithuania, however, the insurance industry is not a big provider of finance for the enterprise sector. Most investments of both life (81 percent) and nonlife (69 percent) insurance companies are in Lithuanian treasury bonds and bills. At the end

of March 2004 only LTL 8.7 million—less than 1 percent of total investments by life and nonlife insurance companies—were in securities listed on the Vilnius stock exchange. Investments in nonlisted shares were negligible. Those in corporate bonds totaled LTL 5.3 million. Total assets of the insurance industry were LTL 1,410 million at the end of 2003, equivalent to 2.6 percent of GDP (Table 4.4).

The government-owned Lithuanian Export and Import Insurance agency provides subsidized, short-term (up to one year) credit insurance for exports and trade on the domestic market. The state pays 90 percent of the premiums. The volume of such insurance is small, with outstanding obligations totaling LTL 167 million at the end of 2003. Export insurance accounted for 45 percent of this portfolio, and domestic credit insurance for the other 55 percent. The government is considering privatizing the insurance agency.

Table 5.4 Insurance market indicators, EU8 countries and EU15, 2002

Country or country group	Premiums (millions of U.S. dollars)	Insurance density[a] (U.S. dollars)	Insurance penetration[b] (percent)
Czech Republic	2,962	292	4.26
Estonia	145	107	2.25
Hungary	2,546	251	3.87
Latvia	174	72	2.06
Lithuania	224	65	1.62
Poland	6,020	156	3.21
Slovak Republic	744	138	3.14
Slovenia	1,061	532	5.03
EU8	13,876	189	3.50
EU15	696,251	1,840	8.13

a. Country's insurance density is measured as an amount of insurance premiums per person
b. Country's insurance penetration is measured as a ratio of insurance premiums over the GDP
Source: European Federation of National Insurance Associations (CEA), *European Insurance in Figures 2003;* World Bank data.

Investments and Business Guarantees Agency. Another government-owned institution, the Investments and Business Guarantees Agency (INVEGA), provides subsidized guarantees for loans to small and medium-size enterprises. INVEGA guarantees 50–80 percent of the amount of loans up to LTL 1 million for investments and up to LTL 0.5 million for working capital. The state pays two-thirds of the guarantee fee and half the interest on guaranteed loans. At the end of 2003 INVEGA's outstanding guarantees, extended to 179 enterprises, totaled LTL 37 million.

INVEGA expected a doubling of its volume of guarantees in 2004, which would bring its obligation close to the limit authorized by the Ministry of Economy. That projection signifies the agency's growing importance in small company finance. As noted, the companies turning to banks for finance are limited to a small number of larger firms. A clear gap exists between the formal financial system and the micro and small companies that make up the bulk of the corporate sector. There are a range of reasons why these smallest corporate citizens have no relationship with the formal financial system—biases, lack of bankable ideas, lack of interest among enterprises in expanding, and lack of

interest among financial institutions in working with small borrowers. While, for example, small operators' bias against formal financiers may disappear with time, it is more important to close the gap where there is interest from small entrepreneurs in opening the channels of access. This is where INVEGA could continue to focus its efforts until the market reaches out to small entrepreneurs on its own, without additional incentives from INVEGA.

Capital markets. On the size of capital markets, both absolute and relative, Lithuania again ranks near the bottom among the EU8 countries. Only Latvia and the Slovak Republic have a smaller equity market capitalization as a percentage of GDP, and only Slovenia ranks lower in stocks traded as a percentage of GDP (table 4.5). Lithuania has virtually no fixed income market for private corporations.

Table 5.5 Equity market indicators, EU8 countries and EU15, 2002

Country or country group	Market capitalization (millions of U.S. dollars)	Market capitalization as a percentage of GDP	Listed companies	Stocks traded as a percentage of GDP
Czech Republic	15,893	22.84	78	8.74
Estonia	2,430	37.89	14	3.76
Hungary	13,110	19.91	48	9.02
Latvia	714	8.50	62	1.48
Lithuania	1,463	10.60	51	1.32
Poland	28,750	15.32	216	3.11
Slovak Republic	1,904	8.03	354	3.33
Slovenia	4,606	21.82	35	0.50
EU8	68,869	17.37	858	—
EU15	5,905,587	68.97	7,047	79.70[a]

— Not available.
a. Average for 2001.
Source: National stock exchange and World Bank data.

So the Lithuanian capital market is not yet a significant source of finance for private enterprises. Issuers and investors are few, volumes are low, and activities are concentrated in the stock exchange. In 2003 the National Stock Exchange of Lithuania had a capitalization of LTL 17.9 billion, equal to 32.7 percent of GDP, and a turnover of LTL 1,980 million ($700 million). Only 45 companies are listed on the exchange's two lists, down from 54 in 2000. The decline in listed companies is due mainly to delistings resulting from redemptions by principal shareholders.

Relatively little capital is raised through new issues of shares, and the amount has been decreasing in recent years. In 2003 a total of LTL 254 million ($90 million) was raised through 32 issues (21 public issues and 11 private placements). A large share of the issuers was banks and other financial institutions.

Issues of debt securities registered in Lithuania have been limited mainly to treasury bonds and bills. In 2003 there were six issues of corporate bonds, raising LTL 714 million ($255 million). Private placements accounted for much of this (LTL 434 million, or $155 million). In the previous four years corporate bond issues had averaged about

LTL 150 million ($53 million), but most of the issuers were government-owned companies, such as banks and the energy and gas companies. Only half a dozen private companies have issued debt, accounting for about a dozen issues. Currently outstanding are three such issues for a total of LTL 16.5 million.

A recent development that in time should bring big benefits to the capital market is the 2003 pension reform. The reform introduced the three-pillar pension system, which enables citizens to redirect part of their pension contribution to private pension funds (though still small, this share is set to grow in the future). In 2003 more than a third of insured people took advantage of this opportunity, far more than expected.

Cross-border financing. A large share of Lithuanian enterprises has access to cross-border finance. This reflects a dramatic change. During the early years after the breakup of the Soviet Union foreign exporters demanded cash payments for deliveries to most Lithuanian enterprises. But today, except for very small companies and start-ups, most Lithuanian companies are able to get normal credit terms from foreign suppliers once a business relationship has been established.

No reliable statistics exist on Eurobond issuance by Lithuanian companies or on cross-border lending by international banks to Lithuanian firms. But a few companies are large and solvent enough, and have the right caliber of corporate governance, to borrow directly from international banks. Some German banks, for example, are known to lend directly to Lithuanian companies. But for most companies, borrowing from foreign banks is not yet a realistic alternative.

Small yet fully adequate? The dilemma

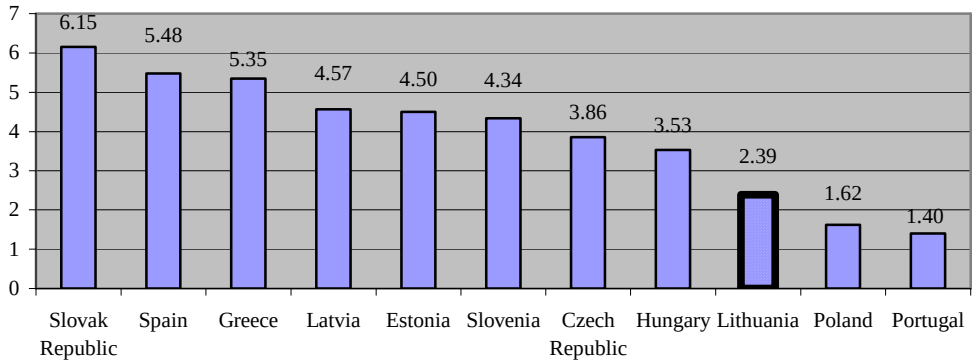
The Lithuanian financial system presents a peculiar picture. Despite growing quite rapidly in the past couple of years, on the back of massive privatization lending to local business groups,[13] the system remains small in both absolute and relative terms. As noted, the banking sector—the backbone of the financial system—holds assets equal to only about 40 percent of GDP. The value added of the financial system to GDP is commensurately small: in a comparator group only Poland and Portugal have financial systems that make smaller contributions (figure 4.2).

Yet despite the small size of the financial system Lithuania has experienced extraordinarily strong economic growth in the past few years, across a range of sectors. There is no indication that any size class of companies has been excluded from this growth. Nor is there any apparent lack of channels to access financing. Indeed, bankers continually complain of the cutthroat competition in the lending market, now fully dominated by borrowers. Stories abound of banks routinely slashing basis points off their offerings just to keep demanding clients from switching to another lender. Interest rates on loans of one to five years have hovered around 5 percent in 2004 —a remarkably low

[13] Notable syndicated loans include those to two major Lithuanian business groups to purchase an electricity transmission network and alcohol production companies from the state.

level.[14] And the Productivity and Investment Climate Survey suggests that Lithuanian entrepreneurs no longer consider access to finance to be much of a problem.

Figure 5.2 Gross value added by financial intermediation, selected EU countries, Percentage of GDP, 2002



Note: Data for the Czech Republic are for 2003; data for Slovenia, Hungary, and Portugal are for 2001.
Source: Eurostat data.

But bank lending probably should no longer be considered the main source of formal financing for enterprises in Lithuania. Equity capital increases (from retained earnings) and especially leasing and factoring are filling the gap between what banks offer and what the corporate sector needs. Nor should the small size of the financial system be considered a constraint to the growth of private enterprises. The need that does exist, however, is for the financial system to broaden its reach to the smaller members of the corporate community—by offering them innovative products that admittedly may carry more risks (but also greater rewards) than lending to the cream of the corporate sector.

But what of the dilemma? Is the financial system adequate despite being small? The survey finding that two-thirds of enterprises do not have a bank loan because they have no need of one suggests a couple of answers: All these enterprises are so profitable that they can easily finance themselves from the profits generated in the regular course of business—or the enterprises lack ideas or investment proposals that formal lenders would deem creditworthy. While the answer probably lies somewhere in between these two, the second may have more validity than the first. The same bankers that face stiff competition in the lending market and yet limit their lending to only a small share of Lithuanian enterprises say that the market is dry of good bankable ideas and opportunities. More than once the Lithuanian counterparts to the World Bank team voiced the notion of a general lack of managerial and entrepreneurial talent in Lithuania—a notion that fits well with the dilemma of the small-yet-adequate financial system. While this dilemma is best left to the market to address, the state may want to support the growth of entrepreneurial talent, whether locally educated or imported,

[14] Lithuania's harmonized long-term interest rate, calculated for convergence purposes and reported by the European Central Bank, was 4.57 percent in August 2004, the third lowest rate in the non-Euro area of the EU. While the rate was higher than those in Sweden and Denmark, it was lower than rates in the United Kingdom and in all other new EU members.

through a range of means (such as offering tax incentives for continuing executive education and making it easier for non-Lithuanian residents to get work or business permits).

How the authorities could help improve access to finance

What can the authorities do to help improve credit markets and increase access to finance for companies? There are several legislative and practical ways of doing so. Many transition economies—Lithuania among them—have worked to improve bankruptcy legislation and procedures and introduced procedures for reorganizing and rehabilitating insolvent or illiquid companies. As detailed in chapter 6, Lithuania has amended its bankruptcy legislation several times, introduced restructuring legislation in 2001, and arranged for the training of judges, bailiffs, and other professionals involved in bankruptcy and restructuring procedures. While the company liquidation system operates fairly well, there is still a need for a thorough overhaul of the legislation on enterprise restructuring and for reform of procedures and training of personnel.

A quicker and more effective way to improve credit markets is to introduce sound public or private credit information systems. While there has been little sharing of credit information in the past in Lithuania, recent progress has been promising. The several national and international debt collection firms now operating in Lithuania are developing a common database with credit information obtained in the process of debt collection. A few debt collection companies already provide information to this database, and others are expected to join soon. Lithuanian banks have long been reluctant to share credit information, and there have been questions about whether the law allows this. But some Lithuanian banks too are now planning to create a common database. Combining this database, if and when it is created, with that being developed by the debt collection companies would offer clear advantages. In any case the overarching goal should be a single central credit bureau that provides both positive and negative credit information to all financial intermediaries on an equal basis. The authorities should encourage and direct the private sector efforts toward this goal.

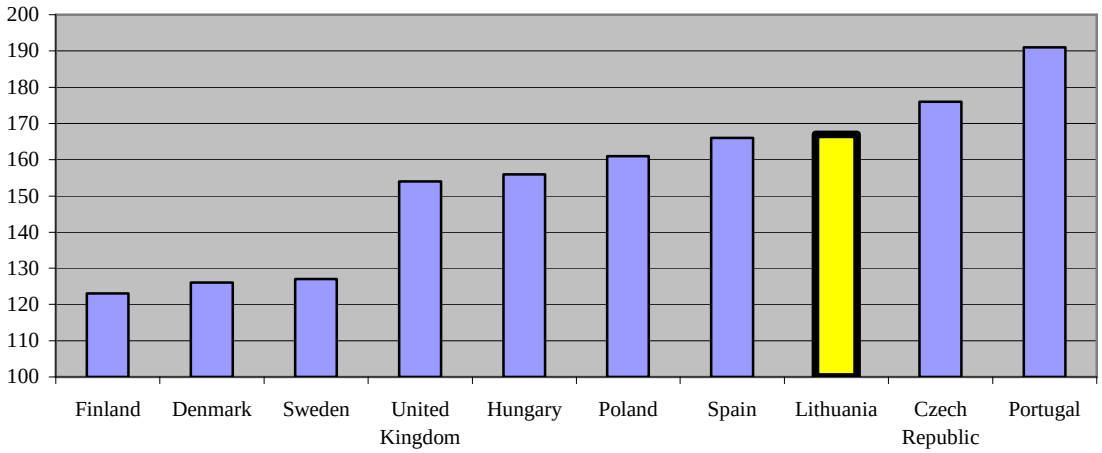
A third way to help improve credit markets is to institute clear and adequate legal rights for creditors. Measures to achieve this include giving clear and predictable priority to secured creditors, establishing a centralized electronic registry for all security interests, and permitting out-of-court collateral enforcement. Lithuania has two of these three elements in place. Secured creditors have priority in the law, though there are still deficiencies in practice, with procedures that reduce the value of collateral. There is a well-functioning registry for immovable and movable security interests and for all leasing transactions involving movable property. But it is not possible to enforce collateral through out-of-court procedures.

Developing a credit culture

Related to the issue of improving credit markets and access to finance is the need to develop a credit culture. In Lithuania as well as across the EU, habitually late payments are a common theme. The EU has tackled this problem by issuing an EU directive, in August 2000, on Combating Late Payment in Commercial Transactions. Lithuania passed a corresponding law based on the directive, the Law on Prevention of Late Commercial Payments, which came into effect May 1, 2004. This law, which complements the relevant provisions of the civil code, will make it simpler to resolve cases of late payment. Under the law, if a creditor complies with the provisions of a contract and does not receive payment under the contract on time, interest equal to the Vilnius interbank offered rate (VILIBOR) plus 7 percent will start accumulating on the overdue amount and will be legally enforceable without separate notification of the debtor.

Figure 5.3 Payment delays, selected EU countries, 2003

Payment index



Note: A score of 100 on the payment index indicates no payment risks, with all payments made in cash, on time, and with no credit. The maximum score of 200 indicates severe problems with late payments.
Source: Intrum Justitia data.

Late payments pose a serious problem to businesses across the EU. Data from the EU suggest that in the late 1990s one of four insolvencies occurred because of late payments, and through these insolvencies 450,000 jobs and €23.6 billion worth of receivables were lost each year. The problem, despite the EU directive, is not receding. According to Intrum Justitia, a pan-European credit management firm, late payments in Europe increased in length by an average of 14 percent in the past six years (1998-2003).

In Lithuania late payments are a fact of daily business life. While payment terms average 28.8 days, actual payment periods average 48.5 days, so that payments are 20 days late on average.[15] Late payments occur mostly because of poor cash flow planning by companies. Among European countries Lithuania has the third worst record on late payments, surpassed only by Portugal and the Czech Republic (figure 4.3). In Lithuania's

[15] Data are from the law firm Norcous & Partneriai.

environment of abundant financial resources, where working capital credit lines and factoring are easily available to large and small enterprises alike, lack of concern about one's business reputation must be a factor (box 4.1).

Box 5.1 The ethics of business in Lithuania

Although no exhaustive surveys of business ethics have been conducted in Lithuania, some observations are nevertheless possible. Business is generally inclined toward ethical behavior, but institutions to ensure and promote ethics in business are weak. Most professional and business associations have issued ethical codes or standards, but these standards usually are not very strict and there are no systematic efforts to enforce them. Both the Roman Catholic and the Russian Orthodox Church have made occasional efforts to promote ethical business. And in a welcome initiative the Lithuanian Foreign Investors' Forum recently started promoting the concept of corporate social responsibility.

There are also unwritten but widely accepted standards of business ethics. These include such norms as honoring oral agreements, settling disputes without litigation, and not involving government institutions in competition among enterprises. But because of a heritage of business activities requiring only short-lived cooperation, many businesses often do not follow those standards, choosing instead to rely on unethical behavior and legal institutions. Moreover, competitors have incentives to use regulators as unfair means of competition because regulators tend to use anonymous information, have the right to make surprise inspections, and tend to impose strict sanctions. Assessing the scale of these practices is difficult, however.

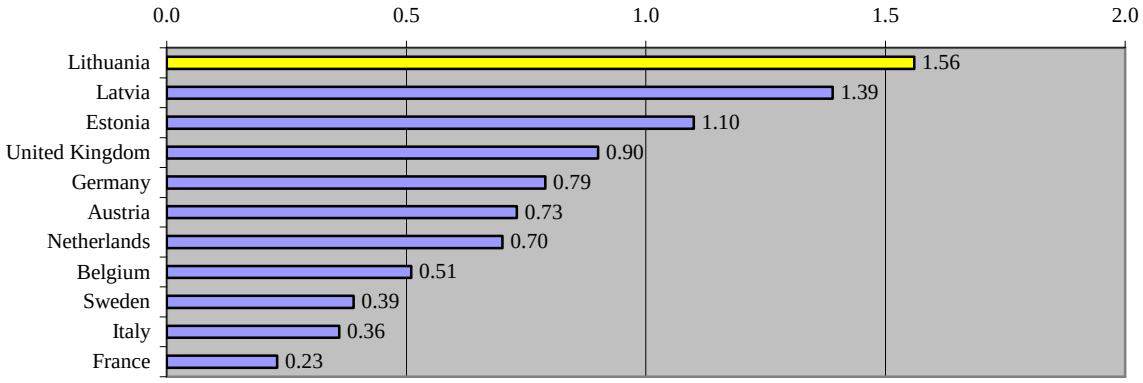
While contracts are respected and usually performed, delays are common, especially in fulfilling financial obligations. The Lithuanian Free Market Institute and the main business associations are launching a project aimed at reducing such delays.

All this notwithstanding, the post-Soviet history of business practices suggests that business ethics are playing an increasingly important role in shaping such practices. For example, 10 years ago or so foreign partners of Lithuanian enterprises used to complain that Lithuania had no business ethics. Today such complaints are much fewer. Meanwhile Lithuanian firms have begun to voice increasing complaints about poor business ethics in neighboring countries to the east.

According to research by a debt collection company working in Lithuania (UAB Patikimo Verslo Sistemos part of the CreditReform Group), the country lags behind its two Baltic neighbors, Estonia and Latvia, in the development of a credit culture in its corporate sector. In 2002 debts were paid on time in less than 10 percent of cases in Lithuania, compared with 55 percent in Estonia and 40 percent in Latvia. This research also found that debt repayments were about 35 days late on average in Lithuania—despite its having the longest average credit terms—compared with 15 days in Estonia and 20 in Latvia. Lithuania leads Europe in payment delays relative to credit terms (figure 4.4).

Commercial transactions and late payments in Lithuania are very small, averaging about LTL 7,000 and LTL 3,000—and the interest that would be paid on a bank loan taken to repay a creditor cannot outweigh the trust lost by paying late. The stiffer penalties introduced by the new law on prevention of late payments can be expected to encourage debtors to pay up faster. And smaller businesses in particular would be well advised to think about the (often intangible) opportunity cost involved in delaying payments to their business partners.

Figure 5.4 Payment delays relative to credit terms, selected EU countries, 2004
Ratio of average debt repayment period (in days) to average credit term (in days)



Source: UAB Patikimo Verslo Sistemos (CreditReform) data.

While the culture of late payments prevails in Lithuania, the country fares well in debt resolution compared with peer countries. The cost of enforcing a contract through the courts, at 14 percent of the debt, exceeds that in high-income OECD countries, but the speed of the process makes up for the higher cost. Lithuania's average enforcement period of 154 days is among the shortest in its peer group (table 4.6).

Table 5.6 Time and cost of contract enforcement, selected countries and country groups, 2004

Country or country group	Procedures	Time (days)	Cost (percentage of debt)
Estonia	25	150	10.6
Greece	14	151	12.7
Lithuania	17	154	14.1
Spain	23	169	14.1
Latvia	23	189	11.0
High-income OECD	19	229	10.7
Czech Republic	22	300	9.6
Portugal	24	320	17.5
Hungary	21	365	8.1
Europe and Central Asia	29	412	17.6
Slovak Republic	27	565	15.0
Poland	41	1,000	8.7
Slovenia	25	1,003	16.3

Source: World Bank and International Finance Corporation, Doing Business in 2005 database.

The labor market—a key to global competitiveness?

If Lithuania is to develop the national innovation capability needed to make the quantum leap to a higher-tech, higher-quality economy, it will have to have the right human capital, prepared to absorb the best of new technologies and modern management concepts introduced by foreign direct investment. And that requires a labor market that functions well thanks to sound regulation—and an education system that produces graduates with the qualifications that employers demand.

Labor regulation in Lithuania warrants some improvements to allow greater flexibility, but overall it maintains the right balance between the interests of employers and those of employees. By contrast, the education system, especially tertiary education, suffers from too strong a focus on quantity rather than quality.

Getting the balance right in labor regulation

Labor legislation in Lithuania, despite important changes in the past few years, does not allow enough flexibility. A new labor code that came into effect in January 2003 replaced a number of separate laws on specific issues and did away with some superfluous rules, such as a list of detailed grounds for terminating a contract. But it did not change the essential nature of the detailed and extensive labor regulation. Little room is left for negotiation between the parties to a contract, the major flaw of strict regulation.

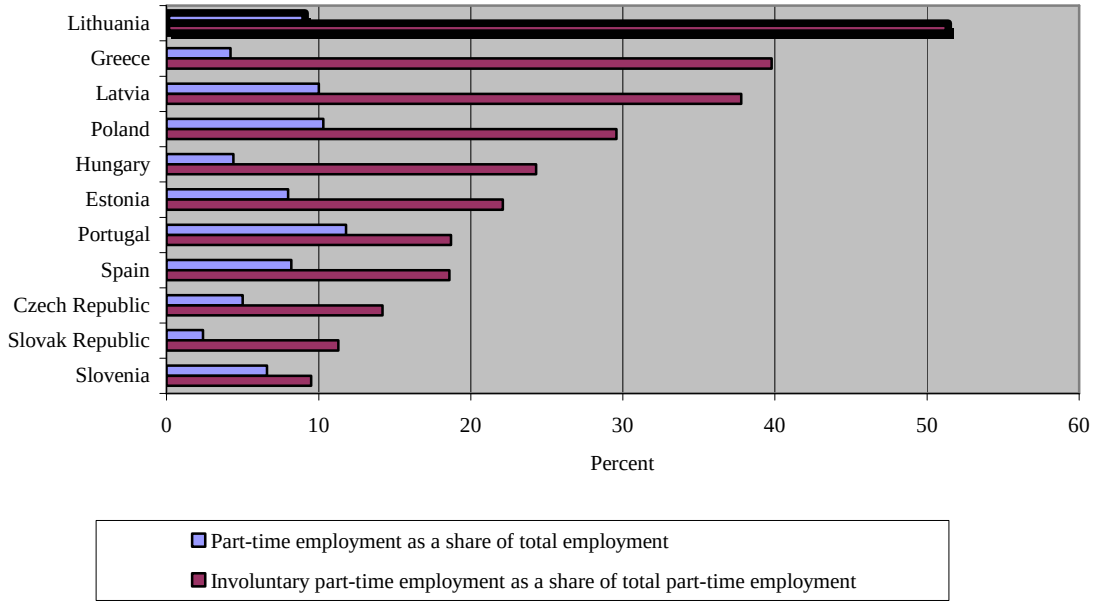
The law requires, for example, that labor contracts be in writing and based on a model set out by law. Fixed term contracts are prohibited for permanent employment except in cases designated by laws on collective agreements. Employers must register each employee with the local department of the State Social Security Board on the day an employment contract is concluded. The law sets out detailed grounds for special leave and prohibits unpaid leave on any grounds not specified in the law or in a collective agreement.

One measure of labor market flexibility is part-time employment. Flexible markets allow ample voluntary part-time employment—jobs taken by workers already employed elsewhere, as second jobs, or filled by those who prefer to work part-time rather than full-time. In 2003, 9.1 percent of workers employed in Lithuania were employed part-time, a rate similar to those in comparator countries, though much lower than the 16–45 percent in more developed EU countries (figure 4.5). But more than half of those with part-time jobs had taken those jobs involuntarily, unable to find full-time employment. Little flexibility is left to a job seeker if an employer insists on part-time employment to save costs. The large share of involuntary part-time employment also suggests that employers may view full-time employment as unattractive, a type of labor contract to be avoided through alternative forms of employment.

Rules and practices relating to trade unions and collective agreements also indicate the flexibility of labor markets. According to the labor code, employees may be represented and protected by trade unions or worker councils. While worker councils are supposed to be made up of representatives of all employees, trade unions can be established by a small share of the employees in an enterprise. Nevertheless, trade unions have priority in

negotiating with an employer. Trade unions are active in only about 5 percent of private enterprises in Lithuania, but the institution of worker councils is unavailable to workers in practice because of delay in adopting a special law regulating their formation and status. As a result, conditions favor trade unions.[16]

Figure 5.5 Part-time employment, selected EU countries, 2003



Source: Eurostat data.

Under the new legislation collective agreements have become a requirement for almost every enterprise. Without a collective agreement neither employees nor employers can fully exercise their rights or protect their interests. Employees cannot receive unpaid leave on grounds not specified in the labor code nor conclude a fixed term employment contract even if they wish to do so. An employer can undertake an agreement on full liability with the accountants or store clerks it employs only if the collective agreement mentions those positions. But companies have not achieved full compliance with the legal requirements for such agreements because the lack of worker councils has made them difficult to conclude. The State Labor Inspectorate does not apply strict sanctions for lack of such agreements yet, since the problem stems from lack of legislation. With time, however, collective agreements should become almost universal.

How does Lithuania compare with other countries in rigidity of employment? Data from the World Bank and International Finance Corporation indicate that rigidity of employment in Lithuania is about the average for Europe and Central Asia and somewhat greater than that in the high-income OECD countries (table 4.7). Lithuania has much

[16] According to the labor code, the law on worker councils should have gone into effect on May 1, 2004. Among market observers and representatives of influential business associations there is a view that trade unions pushed for a draft law that was so complicated as to delay its adoption or so unattractive to employers that, if the law is adopted, they would choose to support the activities of trade unions rather than those of the worker councils in their companies.

greater rigidity than the leader in the region, the Slovak Republic. It fares better in the cost of firing (expressed in weeks of wages): the average cost of firing a worker is equal to 34 weeks' wages in Lithuania, compared with 38 in Europe and Central Asia and 40 in the high-income OECD countries. These data along with interviews conducted by the Bank team in Lithuania support the notion that the labor market strikes a fairly good balance between the interests of employers and those of employees.

Table 5.7 Rigidity of employment, selected countries and country groups, 2004

Country or country group	Difficulty of Hiring Index	Rigidity of Hours Index	Difficulty of Firing Index	Rigidity of Employment Index	Cost of firing (weeks of wages)
Slovak Republic	0	20	10	10	17
Czech Republic	44	20	20	28	22
Poland	11	60	30	34	25
High-income OECD	26	50	26	34	40
Hungary	11	80	30	40	34
Europe and Central Asia	31	51	42	41	38
Lithuania	33	60	30	41	34
Estonia	11	80	40	44	33
Latvia	78	20	50	49	42
Slovenia	28	80	50	53	47
Portugal	33	80	60	58	98
Greece	78	80	40	66	133
Spain	67	80	60	69	68

Note: The first three indexes measure how difficult it is to hire a new worker, how rigid the regulations on working hours are, and how difficult it is to dismiss a redundant worker. Each index ranges from 0 to 100, with higher values representing more rigid regulations. The Rigidity of Employment Index is the average of the first three indexes.
Source: World Bank and International Finance Corporation, Doing Business in 2005 database.

In conforming national legislation to EU law, however, Lithuania often established conditions more beneficial for employees than required. For example, the labor code sets higher requirements for night shift work than the EU directives. Although such regulation is not formally prohibited by the EU and may even provide additional security for workers, it can become a competitive disadvantage in the global market. And in conjunction with other regulatory actions (such as boosting the minimum wage and setting high standards for the health and safety of workers), it may, in the short term, reduce Lithuania's attractiveness to foreign and domestic investors alike.

Labor mobility—moving in the right direction?

EU membership is having a clear impact on Lithuania's labor market. Forecasts have suggested that up to 3 percent of the labor force may move to Western Europe, and the trend set in the first months of EU membership is consistent with those predictions. So is some anecdotal evidence. In Vilnius, for example, there are many more job openings in the labor exchange than there are registered unemployed. The most acute shortage of workers appears to be in construction, especially highly skilled blue-collar workers. Some executives report giving serious consideration to bringing in workers from, say,

Belarus. The government should heed such indications and move early to ease the hiring of foreign workers,[17] which in some segments of the economy, such as construction, may become key to maintaining competitiveness and avoiding a rapid escalation of prices. An intention to migrate is most common among young people and mid-level employees. The shrinking labor supply in the domestic market has already led to higher wages, and analysts at Vilnius Bank predict that the average wage will rise by up to 8 percent in 2005-2006.

Mobility of labor is an important ingredient in a healthy investment climate, ensuring that firms can find the workers they need. While there is a fair amount of mobility among white-collar workers in the larger cities of Lithuania, anecdotal evidence suggests that Lithuanians find it easier to move to Ireland or other promising foreign destinations than to another location in Lithuania. This situation is not unique to Lithuania, however; internal mobility is low in most countries of the region. Internal mobility in Lithuania will improve with time, supported by such factors as the development of the real estate market.

Strengthening human capital by shifting the focus in education to quality

Among the main factors determining a country's international competitiveness is the quality of the labor force and its ability to retrain, develop, and achieve higher productivity. Naturally, the quality of labor starts with the quality of education. The importance of education for a country's investment climate—and ultimately for its productivity, ability to innovate, and prosperity—is difficult to overestimate. Consider the effects of foreign direct investment, usually considered a kind of panacea for a developing economy. Often overlooked is that the response of a host economy to the positive effects of foreign direct investment depends largely on the quality of its human capital (one illustration is the growing number of foreign-owned outsourcing companies operating in India that have become locally owned).

Evidence of the importance of human capital comes from a firm-level productivity analyses of selected OECD countries. Some studies found that a large fraction of aggregate labor productivity growth is driven by what happens in each firm rather than by the market reallocation of resources from low- to high-productivity firms. This finding directly links the quality of human capital (if not all staff then at least management) in individual firms with productivity growth.

The quality of education is crucial for the Lithuanian economy for three major reasons:

- Most economic activities in Lithuania today are labor intensive. Yet at the same time Lithuania needs to move up the quality curve in the global market for goods and services, possible only by raising the quality of education.

[17] Potential sources of foreign labor include Belarus, the Russian Federation, and Ukraine, where labor is still cheaper than in Lithuania, but possibly also Poland, where unemployment of some 20 percent may lead to strong labor migration. There are reports that Lithuanian companies such as construction firms are bringing in workers from Belarus on tourist visas to avoid the quotas on foreign workers and the bureaucracy of the hiring process.

- Foreign direct investment goes where the labor force can adapt to the new standards and requirements that it introduces, while the most desired effects of foreign direct investment—spillovers of foreign technology and skills to local industry—are possible only if the labor force is receptive and of the right quality.
- Lithuanian employers face difficulties in finding the right employees despite the high unemployment rate (more than 12 percent in 2003, though lower in 2004). This situation points to high structural unemployment and a probability that the education system is off track in serving the needs of business.

Unlike in many other countries, access to education is sufficient in Lithuania (despite frequent public claims to the contrary). Enrollment rates in tertiary education are among the highest in the world and markedly higher than the OECD average: in 2003 around 70 percent of secondary school graduates were enrolled in tertiary education in Lithuania, while the OECD average was 45 percent. The number of students per 1,000 people in Lithuania reached 43 in 2001, compared with the EU15 average of 33 in 1999. Moreover, tertiary enrollment continues to rise. Spending on education is high both relative to total government spending and compared with that in other countries (table 4.8), but on a per-student basis it is comparatively low. This spending pattern contributes to the major concerns in education: low efficiency and low quality.

Table 5.8 Public spending on secondary and tertiary education, selected EU countries and EU15, 2001 (percentage of GDP)

Country or country group	Secondary	Tertiary	Total secondary and tertiary
Lithuania	3.8	1.3	5.1
Latvia	3.0	0.9	3.9
Portugal	2.5	1.1	3.6
Estonia	2.4	1.1	3.5
EU15	2.4	1.1	3.5
Hungary	2.2	1.1	3.3
Czech Republic	2.1	0.8	2.9
Slovak Republic	2.1	0.8	2.9
Spain	1.8	1.0	2.8
Greece	1.4	1.2	2.6
Poland	1.3	1.1	2.4

Source: Eurostat data.

In recent years tertiary education in Lithuania has undergone reforms, although because of the high degree of autonomy of universities the reforms did not go to the full extent as expected. The main changes have been the emergence of non-university higher education in 2000, the introduction of bachelor's and master's degrees in place of specialist diplomas, and the rise of the private sector. In addition, the system for financing tertiary education was changed considerably in 2002. Previously the state had financed 100 percent of the cost of education for about half the students in tertiary institutions, while the rest of the students in public schools and all students in private institutions paid full market price for their studies. Today half the students pay a uniform LTL 1,000 (□290) annual fee for any course at any public institution (those turning in a good performance

and proving that they need financial support are not required to pay anything), while the state covers the rest of the cost. Students in private institutions receive no support.

An earlier tendency to give more autonomy to tertiary institutions has been reversed, and regulation tightened. Institutions could be said to have gained more financial autonomy because their budgets are approved by Lithuania's parliament, the Seimas, not by the government. But a funding mechanism that dismisses all elements of the market from tertiary education has made this autonomy merely formal.

The content of education has changed markedly since the Soviet era, but the methods of teaching much less so. Study programs tend to be more specific, with fewer general programs even at universities. Programs are approved by tertiary institutions in accordance with agreements with the Ministry of Education and Science. There is still a tendency to have many programs (and students) in the social sciences and to a lesser extent in information and communications technology. Finance and management programs are also numerous and may even be producing too many students—though with inadequate preparation—when what is needed most is executive management training. Today executive management programs, which are becoming increasingly popular, are offered by only a few private institutions.

The lack of functional education observed in other new EU members is also characteristic of Lithuania. Universities still fail to teach students how to learn, how to make decisions, how to work in a group, how to cope with change and uncertainty, and how to acquire new skills needed to excel in today's global economy and information society. This problem cannot be solved by simple administrative action. Today's teachers lack these abilities themselves or avoid introducing new teaching methods because the system rejects them. For the quality of education to change, teachers have to be motivated to invest in the quality of teaching—and students motivated to demand good-quality education. One way to increase the motivation of teachers is through financial and organizational means, e.g., by offering financial rewards and promotions if the political will to do so exists. But the influence of interest groups in academia that are satisfied with the status quo poses a serious obstacle to change in the education system.

Tertiary institutions face serious staffing problems. Many professors—and almost all the best ones—do not consider teaching their main occupation; most also work in business. Staffing shortages are common—and especially severe in new, non-university institutions—and they threaten to become worse. Most professors today are above 50 or under 30. And the number of young people seeking PhD's is too small to meet the needs of universities. According to the Ministry of Education and Science, only about 200 graduates earn PhD's each year, far short of the some 500 PhD graduates needed annually to satisfy the needs of colleges and universities. "Brain drain" is also a problem in some cases.

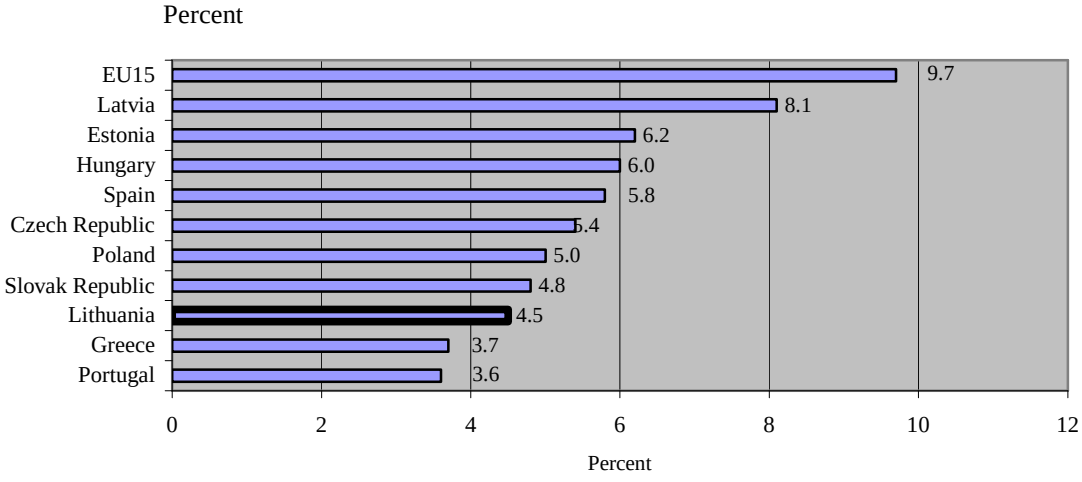
All these problems in tertiary education are reflected in recent studies of outcomes. A survey in 2004 of recent university and college graduates by the Institute of Labor and Social Research shows that only 45 percent consider their specialty to reflect market

needs (another 26 percent consider their specialty to reflect market needs more than not). A study by the Centre for Social Analysis and Consulting (2003) indicates that 70 percent of tertiary graduates do not work in their professional field. This study emphasizes the inefficiency of Lithuania's education system. It concludes that neither the study programs offered nor the skills taught correspond to market needs, with the reason being that educational institutions are preoccupied more with ensuring their existence than with ensuring the quality of education.

The result, according to the study, is an obvious skill gap in the Lithuanian labor market. (The Institute of Labor and Social Research survey shows that the number of employees with higher education fell from 339,600 in 1996 to 278,400 in 2001, or from 20.7 percent to 18.1 percent.) But despite shortages of qualified professionals in some areas, universities for the most part stick with their "production patterns." Moreover, the quality of training provided often does not match universities' claims. Another reason for the shortages is the low prestige of professional training.

Adding to the skill gap is the limited development of lifelong learning in Lithuania. Through continuous learning university graduates can improve their ability to adapt to market requirements by picking up new skills. But in Lithuania only 4.5 percent of adults were in education or training in 2003. Among the group of comparator countries Lithuania ranked third from the bottom on this indicator of lifelong learning—and far below such EU leaders as Sweden, with more than 34 percent (figure 4.6).

Figure 5.6 Share of adult population in education and training, selected EU countries and EU15, 2003



Source: Eurostat data.

Improving the quality of the education system is critical to Lithuania's competitiveness. But radical reform of tertiary education is unlikely anytime soon. Instead, gradual improvement in quality and efficiency can be expected as a result of market pressures, a natural change in staff, reforms and initiatives undertaken by individual departments, and expansion of the private education sector. Market forces could also be harnessed to bring about change, by creating a level playing field for private schools.

The commercial land market—moving from complexity toward simplicity

Land reform proved to be a prolonged and complicated process in Lithuania, largely because of lack of political will and resources. This state of affairs has inevitably translated into constraints for businesses. As shown below, for example, real estate development companies or manufacturers wishing to build a new factory face big procedural hurdles in preparing lots for development. This problem is particularly evident in the local regional municipalities, outside the major cities. Lots to be commercially developed need to have detailed development plans before they can be sold or rented by local authorities, but the authorities have neither the resources nor the incentives to prepare the plans. And private land users are unwilling to commit resources to developing the plans because they have no assurance that they will end up with the lots, which can only be offered through auctions.

In one positive development, however, the authorities have signaled an intention to simplify the procedure of changing land use classifications. As it now stands, the owner of a lot of land under a rental agreement must cancel the agreement and conclude a new agreement if the renter wishes to change the use of the lot from, say, agriculture to commercial development. This process is complicated and prevents substantial investments by such land users as construction companies. A proposed legislative amendment would give landowners more freedom in the disposition of their land.

What are the perceived problems in land for commercial use?

Issues relating to the acquisition and use of land do not rank high among the constraints to doing business identified by the Productivity and Investment Climate Survey. Yet quite a few concerns and complaints arose during discussions on land issues with representatives of academia and the private sector. These discussions highlighted problems in all links of the chain—from the acquisition and leasing of land (particularly public land) to general and detailed land use planning, change of the general and specific uses of land, the application process for building permits, and supervision of construction. The most important issues emerging from the discussions are as follows:

- ③ The laws, rules, and regulations governing land acquisition and use are deficient, conflicting, and unclear.
- ③ Officials, particularly those in small and rural communities, lack knowledge, experience, and ability in dealing with land and building permit issues.
- ③ The red tape is enormous, the waiting time for permits too long, and the predictability of the outcome of permit applications low.
- ③ The division of responsibility between counties and municipalities is confusing and causes unnecessary delays.
- ③ All these factors, coupled with a lack of transparency, are a recipe for informal practices.

The problems do not lie only with the authorities. Developers and construction companies cut corners, ignore rules, and solicit undue favors. Indeed, there has been flagrant misconduct by the private sector. In a recent case in Vilnius, for example, the authorities had to halt construction of a commercial building when it became clear that

work was proceeding on more than twice as many floors as specified in the building permit. Developers sometimes start work before completing the formalities, hoping for regulatory lenience.

What should be done to remedy the situation?

A large part of the problem lies in attitudes and practices on both sides of the fence, which will improve only with time. But that time could be shortened if the rules of the game are made clearer and easier to follow. Concrete proposals for improvements relate mostly to the legislative framework. Although a new construction law was enacted in 2002 and a new law on land planning in 2004, both laws are said to have deficiencies. Some of these have been corrected, while others remain. Following are some of the most important proposals for improvements in legislation and other areas:

- Make special efforts to ensure thorough, transparent consultations and serious consideration of feedback received. The general and persistent problem of little or no consultation with private stakeholders, academia, and nongovernmental organizations (NGOs) during the preparation of new legislation seems to be particularly pronounced for land and construction issues. When there are consultations, critics maintain that the authorities rarely take advice and suggestions into account.
- In the medium term, consider consolidating land-related legislation and concentrating jurisdiction over land issues in one ministry. Legislation relating to land, land use and planning, and construction are fragmented, and jurisdiction over these issues, including the preparation of legislation, is split among several ministries.
- Reallocate authority and responsibility for land and construction matters, now divided between counties (acting on behalf of the government) and municipalities. Concentrating authority and responsibility for urban land and for building permits and construction supervision in municipalities would greatly facilitate and accelerate the handling of such matters.

Some of the proposals put forth remedies to specific problems in legislation:

- Permit general land use plans to allow greater flexibility. General plans should include not only compulsory requirements but also recommended requirements.
- Shorten time limits for handling applications relating to land use and construction.
- Reverse the misguided move to a one-stop shop for detailed and technical land planning. With the one-stop shop, applicants must leave it to the municipality to obtain documents and signatures from different agencies (unless they receive special permission to perform these tasks themselves), leading to delay and confusion.
- Change the system of detailed land planning so that it benefits any user of a plot of land rather than just one specific user. This would speed the process and avoid situations in which investors put in much time and money only to have plans rejected, or even end up unable to buy or rent the land.

- Consider abandoning the construction committees. Most observers contend that these committees represent unnecessary bureaucracy and cause delays and that their review function could be performed just as well by municipal officials.
- Limit the now unlimited possibilities for citizens to file complaints at every stage of the process, from general land planning to even after issuance of the final building permit. This ability allows almost anyone to stop planning or construction at any time, including on grounds that are irrelevant, as in several recent cases. Clearly, citizens should have a say in the use of land of immediate interest to them and should be able to stop abuses in the planning and use of land. But limiting these rights to certain decisive stages in the process could achieve this outcome while improving efficiency.

Chapter 6 Infrastructure

Most domestic and foreign businesses operating in Lithuania do not consider infrastructure to be an obstacle to doing business or to investment. In the 2000 Business Environment and Enterprise Performance Survey 74 percent of respondents considered infrastructure to be no obstacle or only a minor one (compared with 83 percent in Estonia and Poland and 69 percent in Latvia). In the 2004 Productivity and Investment Climate Survey the share of businesses satisfied with the quality of infrastructure had increased to 88 percent. Table 5.1 below provides detailed infrastructure performance data.

Table 6.1 Infrastructure performance as reported by firms, by location, Lithuania

Indicator	All locations	Vilnius	Kaunas	Klaipeda	Siauliai	Panevezys
Frequency of power outages (average days in previous year)	1.1	1.0	1.0	1.6	0.9	1.2
Output losses among firms that experienced power outages (percentage of sales)	4.3	5.6	6.5	1.3	0.2	0.3
Share of firms with own generator (percent)	22.2	21.6	21.3	17.4	25.0	30.0
Days to obtain an electricity connection	22.2	1.5	69.6	1.3	—	—
Days to obtain a water connection	59.6	1.6	190.3	1.0	—	—
Exports as a percentage of sales	28.1	25.8	32.7	35.9	12.6	31.9

— Not available.
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

In that 2004 survey 92 percent of respondents reported that telecommunications was no obstacle or only a minor one, while 87 percent reported that this was the case for power supply, and 85 percent for transport. Indeed, among all aspects of the investment climate included in the survey, infrastructure is viewed as posing by far the least obstacle to the operation and growth of businesses.

The use of electronic communications by firms operating in Lithuania has increased rapidly in recent years. Among those surveyed in 2004, 61 percent reported regularly using email, and 62 percent regularly using a Web site, to interact with clients and suppliers. Regular use of email and Web sites is less common for communicating with government agencies—with 33 percent using email and 36 percent using a Web site for this purpose—reflecting lack of facilities on the government's side. The government is making efforts to improve its services and capabilities in this area, however, and will soon offer electronic filing of tax returns, for example.

Interviews with businesses, business organizations, local think tanks, and others confirm these indications that infrastructure supports rather than hinders investment in Lithuania today. Improvements are apparent in communications infrastructure. The wait for a fixed line telephone connection has been reduced from several months to a few days. Competition increased after the monopoly of the national fixed-line telephone company

Lietuvos Telekomas ended in 2003, leading to sharply lower international calling charges and Internet connection fees. And the mobile phone network is well developed, with penetration of mobile phones approaching 70 percent.

The supply of electricity is reliable, and its cost is relatively low, mainly because of low-cost nuclear energy. With the closing of the two Ignalina nuclear reactors (planned for 2005 and 2009), the cost of electricity is likely to approach international levels over time. But the reliability of supply is unlikely to worsen as a result of the closing, with sector plans providing for further modernization and upgrading of conventional generation capacity.

Road transport in Lithuania is better than in neighboring countries, thanks to a well-developed and well-maintained road network. Port facilities and services in Klaipeda have been developed and improved, and the port is accessible year-round. With four international airports in Lithuania, air transport is also relatively well developed. Vilnius offers air connections to all major centers in Europe, and Kaunas and Siauliai have well-placed and well-developed cargo airports.

Lithuania compares well in all areas of infrastructure with its Baltic neighbors and the other new EU members in Eastern Europe, as reflected in the perceptions of respondents to the 2002 Business Environment and Enterprise Performance Survey (table 5.2). Results from that survey show, for example, that Lithuania had the lowest incidence of power outages and the shortest wait for a fixed line telephone connection. Lithuania lags behind some of the other new EU members in the use of electronic communications, but its use of email and the Internet is increasing rapidly. The use of mobile phones by businesses is remarkably high in all the new EU members.

Table 6.2 Infrastructure performance as perceived or reported by firms, selected EU8 countries

Indicator	Estonia	Latvia	Lithuania	Poland	Slovak Republic
Share of firms considering sector a major or moderate problem (percent)					
Telecommunications	11	12	17	17	8
Electricity	15	11	14	14	15
Transport	15	10	8	15	17
Indicators of performance					
Frequency of power outages (average days in previous year)	3.8	2.7	1.4	2.2	2.6
Insufficient water supply (average days in previous year)	1.4	1.6	0.6	0.5	0.6
Days to obtain a telephone connection	2.4	2.8	2.2	7.6	2.8
Share of firms using technology in interaction with clients and suppliers (percent)					
Email	89	56	69	66	84
Internet	89	54	68	65	81
Mobile phone	96	98	95	93	99

Source: World Bank and European Bank for Reconstruction and Development, Business Environment and Enterprise Performance Survey, 2002.

Chapter 7 Regulatory burden, governance, and corruption

Regulatory burden becoming lighter

In Lithuania legal instruments treat competition as a necessary condition for economic growth. The constitution sets out basic principles of competition and minimal regulation. Article 46 states that the economic system is based on private property and freedom of economic activities, prohibits monopolization of the market, states that the law should ensure fair competition, and gives the state the right (and duty) to regulate economic activities in the interests of society's welfare. This mixed approach, emphasizing both free competition and moderate regulation, is reflected in the legal system and in regulatory practice.

The law on competition establishes the usual competition policies—based on EU treaties and regulations—prohibiting cartels, unfair competition, and the abuse of dominant position. Implementation of these rules is also based on standards arising from EU policies. But the Lithuanian competition law also has another essential feature: it prohibits government institutions from adopting any regulations (unless necessary for implementing requirements of law) which restrict or may restrict competition. The competition authority—the Competition Council—has the right to declare such regulations in violation of the competition law, in which case the regulations cannot be applied. Although, as practice shows, the Competition Council does not treat this as its primary function, the rule is used and this provision of the law plays an important role in maintaining competitive conditions.

Even a sound regulatory framework can create significant problems for businesses if the government does not have the administrative capacity to implement it properly. Indeed, as analysts and the European Commission emphasize, many of Lithuania's state and municipal regulatory agencies do lack such capacity. This has important consequences. To begin with, it means that many regulations are not implemented in the way prescribed by law. But the main consequence is that the regulatory burden becomes heavier than it otherwise would be because of a multitude of revisions, inspections, and audits. Bureaucratic procedures often are not user friendly, interpretation of regulations is inconsistent and unclear, and there are few possibilities for using modern tools of communication to obtain permits or submit information. Connected to all this is the problem of corruption or favoritism in drafting and, especially, implementing regulations.

Still, Lithuania has improved its score on regulatory burden considerably in the past few years. From a ranking at the bottom among the EU10 countries in 1999, Lithuania advanced to place among the best of these countries in the 2002 Business Environment and Enterprise Performance Survey. Compared with its closest EU neighbors, Lithuania scores well on customs and trade regulations and on business licensing and operating permits (table 6.1). It scores a bit worse on labor regulations, though the renewal of its labor code in 2003 has improved the situation. (For a broader discussion, see the section on labor regulation in chapter 4.)

Table 7.1 Regulatory burden as perceived or reported by firms, selected EU8 countries
(percent)

Indicator	Estonia	Latvia	Lithuania	Poland	Slovak Republic
Share of firms considering issue a major constraint					
Customs and trade regulations	3.8	9.4	7.9	22.3	19.5
Labor regulations	4.2	4.1	8.5	25.8	7.4
Business licensing and operating permits	11.2	9.2	8.1	14.0	17.9
Share of senior management's time spent dealing with public officials	4.1	8.5	7.5	9.5	7.0

Source: World Bank and European Bank for Reconstruction and Development, Business Environment and Enterprise Performance Survey, 2002.

Lithuania is also doing well in reducing red tape, though results of the 2002 survey show that it still lags behind some of the other new EU members (see table 6.1). The government has continually reduced the burden of red tape and of multiple and unduly long inspections for enterprises, and the situation is likely to improve further as a result of alignment with EU rules and practices and greater experience and training among officials. The trend has been toward shorter waiting times and clearer rules. The number of industries subject to licensing requirements has been reduced—and so have licensing fees, as a result of a move to a system in which fees are determined on the basis of cost rather than to provide income for the state. In March 2004 the government issued a resolution aimed at further streamlining licensing procedures, instructing ministries to review the justification and need for existing licensing and propose changes accordingly. In some areas firms still must deal with several authorities to get a license, and in some sectors, such as transport and pharmacy, more than one license is still required.

Market participants acknowledge that at least some regulatory agencies now operate satisfactorily and do not intervene unduly in firms' operations. Among the agencies cited as functioning relatively well are the telecommunications regulator and the Competition Council. Since the monopoly of Lietuvos Telekomas, the fixed line provider, came to an end, regulation of telecommunications has shifted toward securing competition and away from regulation. Regulation of agriculture, by the State Veterinary Agency, is considered more problematic. But the biggest focus of complaints by the private sector is tax administrators, construction regulators, and most regulators in the regions (as opposed to those in Vilnius and other principal cities). In general, there is a need for a more proactive stance by regulators in terms of reaching out to the markets and a better ability to advise market participants.

Financial sector regulation has been significantly developed and improved since the banking crisis in 1995–96 and in the aftermath of the Russian economic crisis in 1998. These efforts have received extensive support from the World Bank, through both lending assistance (the Enterprise and Financial Sector Assistance Project and two

Structural Adjustment Loans) and non-lending assistance (a Financial Sector Assessment Program and a training program in accounting and auditing for financial sector and other regulators). Requirements relating to Lithuania's accession to the EU have also had a significant effect on financial sector regulation, as they have on private sector regulation in general.

Regulation of accounting and auditing has also seen significant improvements in the past few years, supported by the World Bank and EU-Phare. This is an area where World Bank support may still be needed and sought, both for building institutions and for developing rules, regulations, and oversight.

Governance still problematic, though improving

Public administration in Lithuania has been undergoing constant reform. Several factors have influenced this reform in recent years, including first and foremost the privatization and downsizing of public institutions. These institutional changes were particularly supported by the Sunset Commission[18], which operated for a few years after 1999 and contributed to the public administration reform, the introduction of new management techniques (such as strategic planning, with the aid of external consultants), and the regulatory reforms related to EU accession.

The current government is continuing the reform of public administration. Among its main objectives are to increase the effectiveness of public administration, reduce public sector spending, improve the quality of public services provided by state and municipal agencies, and bring the government closer to the people. To help achieve these objectives, the government recently adopted several amendments aimed at making its decision-making more transparent and increasing the individual responsibility of public employees. It has also approved new tools—for example, introducing "one stop" services,[19] requiring impact assessments for draft legislation, broadening access to electronic services, and creating a new register with data on public institutions.

But implementation of these measures has been piecemeal and sometimes contradictory. The transparency of the central government has not improved, and the bad practice of submitting draft laws and resolutions for government approval at the last moment and without properly consulting the stakeholders and broader society continues. One reason has been the need to harmonize legislation with the EU's *Acquis communitarian*, which has created strong pressure to focus on speed in the legislative process. According to the accession monitoring reports of the European Commission, Lithuania has been among the best prepared of the new EU members to implement EU norms. But the speed of the process, and the focus on legislating rather than proper implementation, have led to much uncertainty among businesses and a potential for mistakes within the working bureaucracy.

[18] The Sunset Commission was established in 1999 by the Lithuanian Government and private market participants to identify and eliminate various types of overlapping and redundant regulatory provisions.

[19] A one-stop shop for public services, while theoretically attractive, may be less so in practice. For more discussion of this issue, see World Bank (2004).

The quality of the impact assessment, introduced in February 2003 and now mandatory for all draft legal resolutions of the government, very much depends on the institutional capacity of the public agency undertaking it. The assessment is usually treated as a mere formality, without proper consultation of the stakeholders likely to be affected by the legislation. This practice not only reduces the efficiency of public administration but also contributes to a lack of transparency in public policymaking and increases uncertainty for businesses. The significant discretion in the work of regulatory and controlling agencies—such as tax, labor, and other inspectorates—creates additional costs for businesses.

Bureaucratic delays have lessened in Lithuania. But as recently as 2002, judging from the results of the Business Environment and Enterprise Performance Survey, its businesses seemed to have less confidence in the competence of officials and the quality of public services than did businesses in many of its neighbors and other new EU members (table 6.2). The 2004 Productivity and Investment Climate Survey suggests that confidence has increased considerably, however, and by now Lithuania probably ranks among the best of the new EU members on this measure (table 6.3).

Table 7.2 Firms' perceptions of competence of officials and quality of public services, selected EU8 countries

(percent)

Indicator	Estonia	Latvia	Lithuania	Poland	Slovak Republic
Share of firms disagreeing that interpretations of regulations are consistent and predictable	45.1	71.4	61.9	66.6	55.1
Share of firms disagreeing that they have confidence in the judiciary	28.6	49.1	49.5	41.9	53.9
Share of payment disputes resolved in the courts	19.9	12.7	6.8	28.0	22.0

Source: World Bank and European Bank for Reconstruction and Development, Business Environment and Enterprise Performance Survey, 2002.

Nevertheless, many businesses still perceive the competence of officials and the quality of public services as a problem. More than a third of respondents in the Productivity and Investment Climate Survey disagreed with the statement that interpretations of regulations by government officials are consistent and predictable, and a similar share have no confidence in the functioning of the judiciary (see table 6.3). This less than full confidence in the judiciary may partly account for the fact that respondents still resolve only 10 percent of their payment disputes in court. Foreign firms have much more confidence than domestic firms.

The effectiveness of the judicial system—from the legal framework to the enforcement of court decisions—has been a problem in Lithuania, as it has in transition economies generally. But all aspects of the judicial system have been improving, and today, though many improvements are still needed, the rule of law essentially prevails in Lithuania.

Table 7.3 Firms' perceptions of competence of officials and quality of public services by type of firm, Lithuania

(percent)

Indicator	All firms	Small	Medium-size	Large	Domestic	Foreign
Share of firms disagreeing that interpretations of regulations are consistent and predictable	37.0	34.4	43.4	38.7	39.4	16.7
Share of firms disagreeing that they have confidence in the judiciary	34.0	34.6	34.0	32.3	35.5	20.8
Share of payment disputes resolved in the courts	10.6	8.4	16.3	11.7	10.6	11.9

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

The legal framework has improved considerably with its adaptation to EU laws. But private enterprises complain about frequent long delays in the preparation and adoption of secondary legislation and about the quality of this legislation. They also complain about their lack of real influence on the form and content of legislation affecting their business, and the resulting lack of functionality and unintended consequences of many laws. Also seen as a problem is the lack of impact assessment of laws, despite the recent government decree requiring this analysis for commercial legislation.

Most private sector participants view the court system as functioning satisfactorily. Waiting times for court decisions have been reduced—mainly by simplifying court proceedings in less complicated cases and by increasing the use of written proceedings—and the costs of bringing cases to court are reasonable. The fees for appeals to higher courts have been increased to discourage abuse. Voluntary dispute resolution is possible in two arbitration courts, though this route to resolving disputes is still used sparingly. The independence of the judiciary is established in theory as well as in practice, and in general court decisions are considered just and fair. In cases where the state is a party, however, courts are still seen as favoring the state.

Except for administrative courts, Lithuania has no specialized courts and judges in civil law. This, combined with deficient legislation, is causing difficulties for bankruptcy procedures and leading to long delays, particularly in restructuring cases. Despite several revisions of the bankruptcy law and the enactment in 2001 of a law on enterprise restructuring, improvement are still needed. Amendments are particularly needed for the law on enterprise restructuring, including possibly merging it with the bankruptcy law.

Enforcement of court decisions is still considered problematic by many. The system of bailiffs has improved, thanks in part to EU-funded training, but this system too is still subject to complaints about unprofessional and corrupt practices.

Corruption systemic but possibly easing

The significant discretion allowed regulatory and controlling agencies, complicated regulatory rules, and lack of transparency and accountability all contribute to the existence of corruption in Lithuania. Corruption is a systemic problem, present in all

layers of the public administration, especially the middle and lower tiers. Lithuania is not much different from its peer countries in this respect, however.

Most problems of corruption are associated with loopholes that grant excessive authority to public officials and create conditions for the abuse of official power. Legislative and institutional mechanisms for investigating and prosecuting corrupt government officials and civil servants are often applied in a formal or fragmented manner. A chain of corruption scandals that broke in 2003 reinforced concerns about the recurring cases of corruption in the country and raised questions about the government's ability to fight it.

Table 7.4 How often firms report having to pay officials to "get things done," selected EU8 countries

(percent)

Country or service	Never	Seldom	Sometimes	Frequently	Usually	Always
Estonia	43.6	24.3	20.0	8.6	2.1	1.4
Getting a business license	52.3	21.5	17.7	5.4	2.3	0.8
Getting public phone or electricity service	83.9	8.8	5.1	0.7	0.7	0.7
Dealing with courts	83.2	9.6	6.4	0.8	0.0	0.0
Latvia	45.1	12.3	24.7	8.0	6.8	3.1
Getting a business license	62.6	14.1	14.1	5.5	2.5	1.2
Getting public phone or electricity service	86.5	8.0	4.3	0.0	0.6	0.6
Dealing with courts	73.8	9.4	10.1	4.0	2.0	0.7
Lithuania	44.3	16.5	18.6	14.9	4.1	1.5
Getting a business license	74.4	14.1	8.5	2.5	0.5	0.0
Getting public phone or electricity service	93.5	3.5	2.5	0.0	0.0	0.5
Dealing with courts	85.2	8.2	4.1	1.5	0.5	0.5
Poland	36.7	19.7	25.1	11.9	5.6	1.1
Getting a business license	71.2	11.4	10.4	4.4	1.7	0.8
Getting public phone or electricity service	83.9	10.1	3.3	1.4	0.6	0.6
Dealing with courts	80.7	8.7	8.3	1.6	0.4	0.2
Slovak Republic	23.6	13.0	27.3	19.3	10.6	6.2
Getting a business license	43.0	19.0	21.5	6.3	4.4	5.7
Getting public phone or electricity service	83.1	10.0	4.4	1.9	0.6	0.0
Dealing with courts	62.3	14.4	11.0	4.1	2.7	5.5

Source: World Bank and European Bank for Reconstruction and Development, Business Environment and Enterprise Performance Survey, 2002.

In the past Lithuania has scored poorly on corruption, ranking among the worst of the EU accession countries. But in recent years its record appears to have improved. Results from the 2002 Business Environment and Enterprise Performance Survey show that on two indicators—how often and how much firms pay officials to get things done—Lithuania scores a bit worse than Estonia but better than Latvia and much better than its other two close EU neighbors, Poland and the Slovak Republic (tables 6.4 and 6.5). Indeed, on more specific measures—how often firms make informal payments to obtain a business license, get a telephone or electricity connection, and deal with courts—Lithuania scores better than any of those countries.

Table 7.5 Firms by share of sales required for informal payments, selected EU8 countries
(percent)

Country	0–5 percent	6–10 percent	11–15 percent
Estonia	100	0	0
Latvia	97.5	2.5	0
Lithuania	97.8	1.6	0.5
Poland	93.7	6.3	0
Slovak Republic	93.7	6.3	0

Source: World Bank and European Bank for Reconstruction and Development, Business Environment and Enterprise Performance Survey, 2002.

A 2002 survey conducted in Lithuania by Transparency International reported that 68 percent of businesses perceived corruption as growing and 27 percent admitted to having paid bribes in the previous year. By contrast, in the 2004 Productivity and Investment Climate Survey less than 30 percent of businesses cited corruption as a major problem. Again, it is possible that things have improved.

The signals from discussions with representatives of the private sector are mixed. Lawyers and auditors hear few complaints about corrupt practices from their (generally large) clients. But some businesses claim that state corruption is still common and increasing. Such claims come most often from firms dealing with construction and the municipal sector, the two areas where, it is generally agreed, corruption is greatest. Five members of Lithuania's parliament, the Seimas, were recently suspected of corruption relating to the municipal sector. But the Seimas voted not to lift their immunity on the grounds of insufficient evidence from the Special Investigations Office.

State procurement in general is a problem area. Supply and installation of medical equipment in hospitals, for example, is said to be difficult because of widespread corruption. Land restitution is often mentioned as a problem area. Since the time limit for applying for restitution finally expired on June 30, 2004—after many extensions—the problem in this area should resolve itself over time. Accusations of undue political influence and corruption in privatization have also been common. Since the privatization process is nearing its end, this problem too—to the extent that it exists—should be transitory.

Administrative corruption in general should be on the decline, with feedback from the market indicating that the need for informal payments to get things done or to ensure favorable decisions is diminishing. In discussions with private sector representatives far fewer complaints arose about corrupt practices—such as in the courts and in taxation and tax administration—than was the case a few years earlier. And with Lithuania's entry into the EU, customs procedures ceased to be a problem overnight at the Latvian and Polish borders.

The Special Investigations Office, responsible for fighting corruption in Lithuania, is generally regarded as ineffective. According to some private sector representatives, the office focuses mainly on insignificant cases. In the few more important cases, such as that involving members of the Seimas, political motivations and pressures are said to come into play.

A number of measures have been taken by the government to reduce corruption. The National Anticorruption Program now covers all areas (such as licensing, taxation, public procurement, and privatization) where corruption is known to exist. A new anticorruption law was adopted in 2002 that requires risk analysis in government ministries, institutions, and agencies. But implementation of this requirement and others in the law is said to be lagging. A new law on public procurement was enacted in 2003, aimed mainly at reducing corruption in this area. But while the law includes many improvements, many problems and vague concepts are said to still exist, not least in procurement practices. Tender requirements reportedly are still often "tailor-made" for specific bidders.

In addition, a new law on state governance, enacted in 2003, makes public servants liable for offenses against the institutions for which they work and for offenses against third parties. It also makes state institutions responsible for offenses against third parties by people working for those institutions. The penalties for offenses against third parties are up to nine months' salary for material offenses, and dismissal and prohibition from taking public office for five years for major offenses. According to many observers, however, the law remains unclear on many points. It does not clearly state what kinds of offenses are covered, leaving it unclear, for example, whether failure to make a decision or serious delay in making a decision are considered offenses. Nor does it relate the penalties to the consequences of and damage caused by offenses.

Chapter 8 Special investment climate issues

Several issues in the investment climate warrant special attention. One is tax administration, a universal sore spot for the Lithuanian private sector. Another is tax competition, an issue that has attracted much attention in the EU in recent years, especially as countries with lower tax rates have become new members. And a third is the question of how EU accession will affect the business environment in Lithuania, an issue generating much interest among the country's firms. This chapter attempts to highlight the most pressing questions relating to each of these issues.

Tax administration a universal sore spot

Tax administration has been universally acknowledged by the Lithuanian private sector as the most problematic area in the public-private nexus, with a major adverse effect on the business climate. Tax administrators allegedly have unnecessarily large powers to interpret tax laws and regulations and apply those laws and regulations unevenly. Legitimate businesses, particularly small and medium-size enterprises (which cannot afford expensive tax consulting or legal defense), are easy targets for the taxman and tend to bear the brunt of the problems. Meanwhile illegitimate businesses can easily evade taxes because of the tax administrators' unwillingness to go after them. This situation inevitably leads to bureaucratic corruption and encourages businesses to adopt tax avoidance schemes, some legitimate and some less so. Compounding the problems are missing or unclear secondary tax legislation and regulations and frequent changes in tax regulations.

A history of World Bank evaluations and recommendations

In recent years the World Bank has several times evaluated, and recommended improvements in, tax administration in Lithuania.

World Bank policy notes. In 1997–98 the World Bank prepared a set of policy notes in anticipation of a second structural adjustment operation. The policy notes, published under the title *Lithuania: An Opportunity for Economic Success* (World Bank 1998), included a note on tax administration and one on recent developments and perceived constraints in the private sector. This second note, based on an extensive enterprise survey in 1997, identified tax-related regulations and tax administration and collection as among the main constraints to firms' future operation and growth.

Research and interviews for the note on tax administration revealed concerns among businesses about several aspects: unknowledgeable, untrained, and unhelpful tax inspectors; a strong emphasis on form rather than substance by tax inspectors and authorities; deficient appeal procedures; unclear and frequently changing tax regulations and consequent inconsistency in tax rulings; and large penalties for insignificant formal mistakes in accounts and accounting documentation. The note's main recommendations included moving to a voluntary compliance system; simplifying tax administration by introducing a minimum tax, presumptive taxation, and audit selection techniques;

establishing independent tax appeal tribunals; and integrating the administration and collection of tax, customs duties, and social security contributions.

Foreign Investment Advisory Service study. A Foreign Investment Advisory Service (FIAS) study on administrative barriers to investment prepared in 1999 noted that most of the problems in tax administration identified by the policy notes remained. It also pointed out that the Lithuanian government was incurring tremendous costs by maintaining an unnecessary level of control over taxpayers. In doing so, the government was also imposing big expenses on enterprises, driving some, particularly small ones, out of business and driving otherwise legal enterprises underground. These expenses came from exceedingly long tax audits, large—often extremely large—fines for minor infractions, exorbitant requirements for accounting documentation and procedures, and inconsistent interpretations of tax laws and regulations.

Noting that most of the recommendations in the World Bank policy notes were still valid, the report called for concerted efforts to implement a voluntary compliance strategy and to end the "ruthless campaign" approach, particularly for small and medium-size enterprises. It also urged that the government make greater efforts to simplify and streamline tax legislation and related implementing regulations, lift the requirement to use government-issued invoice paper for sales and transport, and substantially reduce the requirements for record keeping, for example, by transferring the burden of ensuring proper documentation practices and record keeping to the private sector (public audit firms).

Second Structural Adjustment Loan. Measures by the Lithuanian government to improve tax administration were among the requirements for release of funds under the Second Structural Adjustment Loan, approved by the World Bank's Board of Executive Directors in 2000. Three measures were required: a policy decision by the minister of finance on the State Tax Inspectorate's strategic plan, which included as a key feature the adoption of a voluntary tax compliance approach; a decision to implement a program aimed at improving tax administration; and progress in implementing the program. The Implementation Completion Report on the loan, issued in May 2003, noted that the measures had been implemented (World Bank 2003a). But a major overhaul of the tax administration law, required to move decisively toward a voluntary tax compliance system, was passed by the Seimas only in April 2004, becoming effective on May 1, 2004.

Focus group discussion. A focus group discussion was conducted with a small group of Lithuanian business owners and managers as background for the Early Warning System survey conducted by the World Bank in countries of Europe and Central Asia, issued in September 2003. This discussion pointed to accounting rules for taxes as by far the most severe regulatory problem for businesses. According to the group, rules were unclear and officials unable to explain them. The problem probably also had to do with the fact that, in preparation for EU accession, accounting legislation and regulation for general-purpose financial reporting had been changing to comply with EU directives and international accounting standards. These changes moved business accounting further

away from tax accounting and may have been the reason that the group thought the situation had changed considerably for the worse in the previous two years.

More generally, the group perceived frequent changes to rules and regulations and unpredictable requirements imposed by officials as other important adverse features of the business environment. The results of earlier surveys suggest that these complaints related largely to tax rules and regulations and tax officials. Participants considered the first problem to have become much worse, while they believed that officials had become somewhat more predictable. They did not consider corruption among tax officials to be a problem, a notable improvement over earlier perceptions.

Productivity and Investment Climate Survey. The Productivity and Investment Climate Survey, done in April–May 2004, and interviews conducted during the same period with businesses, business organizations, NGOs, and government ministries and agencies largely confirm the results of the focus group discussion. More than two-thirds of survey respondents consider the tax burden to be a major or severe constraint to doing business in Lithuania, and more than 90 percent perceive it as at least a minor or moderate constraint. And 30 percent of respondents see the tax burden as the most severe constraint, far more than for any other constraint. The interviews with businesses and business organizations suggest, however, that part of the discontent with the tax burden is in fact discontent with tax administration (interpretation of tax regulations, imposition of additional tax, interest, and penalties, and the like), even though the survey included separate questions relating to that issue. Respondents consider tax administration itself to be the third most severe constraint to doing business, with about 37 percent viewing it as a major or severe constraint and 36 percent as a minor or moderate constraint. Thus despite many improvements in the legal framework and in practice, taxation and its administration is still considered by far the main impediment to a good business environment and a favorable investment climate.

Within tax administration an area of particular concern is the frequency of changes in rules and rates, considered by 85 percent of respondents to be an obstacle to doing business and by 60 percent to be a major or very severe obstacle. About half the respondents consider completing tax forms and filing an obstacle, while few perceive treatment by tax authorities, availability of information on tax requirements, and severity of penalties as problems. Among respondents, 13 percent said that they had been assessed fines by tax authorities; only 4 percent claimed to have been asked or expected to make informal payments to tax authorities in the previous 12 months.

Complementary interviews by the investment climate assessment team. In discussions and interviews with enterprises and organizations, the attitudes and perceived ignorance of tax authorities emerged as the most troublesome issue for businesses. Enterprises are still assumed to be guilty unless and until they can present proof to the contrary. Small and medium-size enterprises perceive tax authorities as “out to kill” rather than “out to inspect.” By contrast, large enterprises do not consider tax administration in general or tax inspections to be a major issue. Moreover, there is a distinct difference in perception between enterprises in large cities and those in small cities and rural areas. Tax officials

and inspectors in large cities, particularly in Vilnius, are said to be considerably more knowledgeable and sophisticated. The tax administration includes around 800 officials and inspectors providing information to taxpayers. But according to many interviewees, quantity is not matched by quality.

Despite declarations of a shift toward voluntary compliance, tax authorities are still said to follow a practice of telling rather than listening. For example, the Vilnius tax office recently sent out requests to representative offices of foreign enterprises asking them to register as permanent establishments, which would effectively make them taxpayers in Lithuania. Such requests have no legal basis unless a representative office has acted in violation of the regulations applying to such offices.

Corruption involving tax inspectors as well as court officials seems to have decreased in the case of large enterprises, but remained at the same level or even increased in the case of smaller enterprises. Courts are still perceived as biased in favor of the state.

A new law on tax administration—one step forward, one step back?

A new, amended law on tax administration, passed by the Seimas on April 13, 2004, and effective on May 1 of that year, includes several improvements that favor taxpayers. Yet some of the changes are said to tighten procedures and to expand the powers of tax administrators. The law is too new for its effects to be reflected in the results of the Productivity and Investment Climate Survey. But comments from observers and market participants are not encouraging. There are doubts about the possibility of the hostility between taxpayers and tax administrators easing in the short term. Moreover, secondary legislation has not yet been prepared, and there are fears that the detailed rules and regulations will contradict or effectively eliminate some of the improvements in the law.

Improvements

- Tax administration policy and its implementation have been separated. Policy issues are now clearly confined to the Ministry of Finance, while the role of the State Tax Inspectorate is limited to implementation.
- The law introduces the concept of voluntary tax compliance. But this strategy is not expected to be turned into practice in the near term.
- The law requires that where rules or regulations are unclear or contradictory, interpretations be made in favor of taxpayers. Thus in principle the burden of proof has been shifted to the tax authorities. But the text of the law does not clearly bear this out. Moreover, taxpayers are cynical and do not expect the practice to change in their favor.
- Changes to tax laws cannot take effect until at least six months after being passed by the Seimas—a clear improvement. There is no such stipulation for secondary legislation, however.
- The law ends the obligation to use government-printed invoice paper, a major cause of complaints by investors, accountants, and lawyers. But some private sector representatives complained about onerous new requirements for information to be included in invoices.

- Penalties for formal mistakes have been reduced, and interest is no longer charged on unpaid penalties. Extensions of the filing deadline for tax returns are allowed under certain circumstances. Tax returns can now be submitted electronically. Taxpayers must be informed of tax inspections two weeks in advance. And repeat inspections must be approved by the State Tax Inspectorate.

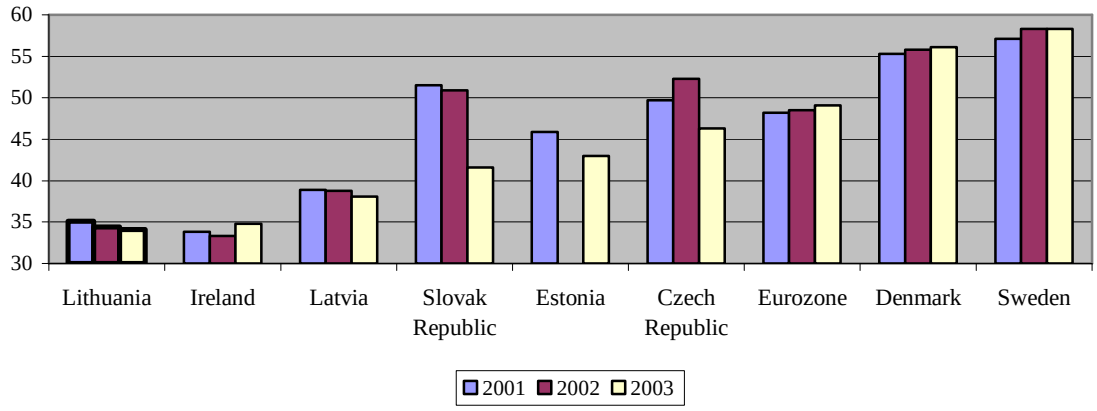
Remaining deficiencies

- It still is not possible to obtain binding advance rulings on tax matters. According to the State Tax Inspectorate, taxpayers can ask for, and it will issue, interpretations, which normally will be adhered to. But most taxpayers believe that getting such interpretations is difficult and that there is no certainty that the opinions will hold. Lithuania could follow the example of Poland, where a new law requires the local tax authority to issue binding rulings on tax matters.
- Taxpayers are still liable for nonpayment of value added tax by counterparts due to fraud or insolvency, even if the counterparts are registered with the State Tax Inspectorate and there is no reason to doubt their legality.
- As noted, the new minimum period of six months before changes take effect applies only to tax laws, not to government decrees and ministerial and State Tax Inspectorate decisions relating to such laws. These decrees and decisions often come into effect only after long delays, sometimes after changes in the law have become effective. Thus these delays may effectively eliminate much or all of the time that taxpayers have to prepare for the changes. According to the State Tax Inspectorate, it usually issues its decisions in one to two months.
- The maximum duration of tax inspections is still 90 days. This is a long period, and in practice it can be extended considerably. The stipulations relating to repeat inspections are broad and thus can in effect also lead to inspections being extended beyond 90 days.
- The Tax Appeals Commission reportedly is functioning relatively well. But with all its members from the civil service and appointed by the Ministry of Finance, the commission cannot be considered neutral and independent. According to the new law, taxpayers can now bring appeals directly to the courts without first going to the commission. This is a curious change, suggesting that the commission is considered an unnecessary intermediate step rather than a fast and cheap way to get independent tax rulings without having to go to court. Yet this notion seems to be countered by statements from both tax authorities and taxpayers about the commission's function. The new law's definition of the cases in which a decision by the commission can be appealed to the courts is unnecessarily broad.
- Taxpayers are still obligated to report transactions (such as opening and closing bank accounts) that bear little relation to tax obligations and could, if necessary, be covered during tax inspections.

Tax competition—or tax dumping?

Taxes are an important factor in a country's competitiveness. Tax breaks and holidays have long lost their appeal in developing countries, but a low overall tax burden and a simple tax system—factors that apply equally to everyone and are more likely than individually targeted tax breaks to be sustained—are appreciated by investors. Lithuania has the lowest overall tax burden in the EU, measured by budget expenditures as a share of GDP, having surpassed Ireland on this front for the first time in 2003 (figure 7.1). Given Lithuania's level of national income, this policy appears to be sensible and should be maintained.[20] Lithuania also has the lowest nominal and average effective profit tax rate in the EU—a feature of the investment climate strongly considered by foreign investors in seeking business locations.

Figure 8.1 Fiscal expenditures as a percentage of GDP, selected EU countries and Eurozone, 2001–03



Source: Eurostat data.

The tax competition debate

Tax competition is receiving much attention in the EU. The influx of new member countries intensified the debate over the competition at the highest levels of members' fiscal authorities. The new members are seen as bringing nimbler business environments—in particular, lower statutory and average effective corporate tax rates—into the fray. The high-income EU members are concerned that their corporations will increase outsourcing and job exports to take advantage of the new members' much lower tax rates (and wages).

Among the EU15, whose statutory profit tax rates range from 12.5 to 35.4 percent,[21] only Ireland has a rate that is competitive with those in the EU8 countries, which range from 15 percent in Lithuania to 28 percent in the Czech Republic. Indeed, Ireland offers the lowest rate in the EU, at 12.5 percent, and is largely credited with initiating the

[20] One school of thought suggests that developing countries should not try to emulate high-income countries in public revenue and spending relative to GDP. Keeping these measures lower avoids overburdening their relatively weak economies with taxes and facilitates private sector development, which should be the main development priority of lower-income countries.

[21] KPMG and Ernst & Young data.

competitive tax cutting across the EU and the hot policy debates that followed.[22] But the competition is intensifying still further. In August 2004, for example, Greece and the Netherlands announced that they would gradually lower their corporate tax rates over the next few years. Austria is on the same track. Latvia plans to further reduce its corporate tax rate—to 12.5 percent, to match that of Ireland. Statutory tax rates are also being slashed outside EU borders. The Russian Federation has a 13 percent rate. Serbia and Montenegro announced that it will go to 10 percent. And that is probably not the end of it.

Income tax rates present a similar picture. Rates among the EU15 range from 40 percent in Greece, Portugal, and a few other countries to 59.6 percent in France. In the EU8, meanwhile, the range goes from 19 percent in the Slovak Republic to 50 percent in Slovenia, with most countries setting rates below 40 percent.

A study by Devereux, Lockwood, and Redoano (2002) finds that statutory corporate tax rates in industrial countries have fallen substantially over the past 20 years or so. In the early 1980s the average rate among OECD countries was nearly 50 percent; by 2001 it was less than 35 percent. With tax competition presumed to lie behind the declining rates, high-income countries intensified international coordination in an attempt to maintain revenue from corporate taxation. Both the EU and the OECD introduced initiatives in the late 1990s designed to combat what they see as "harmful" tax competition. The EU Code of Conduct on Business Taxation of 1999 was the official starting point. The "harmonization" initiative continues, with pressure from high-income—and high-tax—EU members to introduce a harmonized tax base, and eventually a harmonized rate, across the EU.

Table 8.1 Statutory tax rates, Lithuania and EU, 2003/04
(percent)

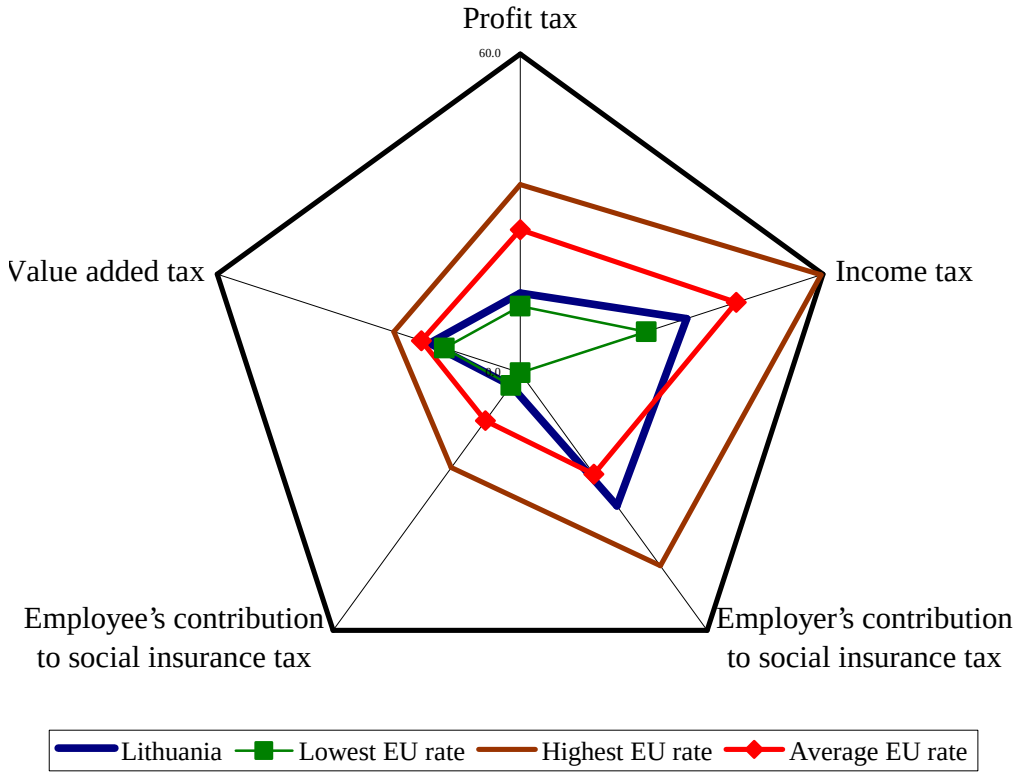
	Profit tax	Income tax	Employer's contribution to social insurance tax	Employee's contribution to social insurance tax	Value added tax
Lithuania	15.0	33.0	31.0	3.0	18.0
EU25					
Lowest	12.5	19.0	0.0	3.0	15.0
Highest	35.4	59.6	45.0	22.1	25.0
Average	26.9	42.1	23.7	11.2	19.4
EU15 average	30.7	48.2	23.0	10.7	19.6
EU10 average	21.3	33.0	24.8	11.8	19.1
EU8 average	20.4	33.1	28.8	12.9	20.1

Note: Averages are mathematical.
Source: KPMG and Ernst & Young data.

[22] Estonia has a "restricted" statutory rate of 0 percent for reinvested profits; the regular, "unrestricted" rate is 26 percent.

Lithuania, with its low statutory profit tax rate, falls squarely on the front line of the tax competition debate. Moreover, a study by Ernst & Young and ZEW[23] confirms that Lithuania's average effective profit tax rate, at around 13 percent, is the lowest in the EU, lower even than Ireland's. Only in the employer's contribution to the social insurance tax does Lithuania exceed the EU average (table 7.1; figure 7.2). For all other important taxes Lithuania's rate is between the lowest rate and the average rate.

Figure 8.2 Comparison of Lithuanian tax rates with EU rates, 2003-2004



Source: KPMG and Ernst & Young data.

The EU Code of Conduct prohibits unfair tax competition among its members. But fiscal policy is the only major policy tool left for national governments that have adopted the euro or, like Estonia and Lithuania, have currency board arrangements. These governments should be able to use fiscal policy to derive advantages for their economies. Deciding where a rational and pragmatic policy ends and unfair competition begins is difficult, however. The opposition to the spiraling trend of lowering corporate tax rates comes primarily from France and Germany. Their governments argue that the new member states are unfairly reducing their tax rates to levels below the reach (at least for now) of the old EU members, attracting businesses—and draining jobs—from these

[23] Ernst & Young and Centre for European Economic Research (ZEW), *Company Taxation in the New EU Member States* (2004)

countries. At the same time Germany and France—presently the two biggest offenders against the fiscal deficit cap based on Maastricht rules—–are making the largest contributions to the EU budget, from which the same new members are to derive the largest benefits.

The case for business-friendly taxation

The smaller countries, including Lithuania, are right to defend their low corporate tax rates. The EU internal market commissioner, Frits Bolkenstein, recently supported tax competition in the EU, pointing out that company taxes across the world are going down, not up All things equal, a lower rate is more attractive to investors—and tax competition is all about attracting more investors. Moreover, anecdotal evidence suggests that lowering corporate tax rates does not lead to significantly lower fiscal revenue, because it encourages investment and reduces incentives for businesses to avoid taxes. The Russian Federation provides a good example of this phenomenon. In Lithuania the corporate profit tax accounted for an insignificant share of national budget revenue in 2003, only 6.7 percent (table 7.2). Still, the share had grown since the reduction of the statutory tax rate to 15 percent in 2001, supporting the notion that reducing corporate tax rates does not necessarily reduce the revenues from this source.

Table 8.2 Revenue from corporate profit tax, Lithuania, 2001–04

Year	Profit tax revenue (thousands of litai)	Profit tax revenue as a percentage of national budget
2001	259,216	2.81
2002	307,698	2.93
2003	784,884	6.70
2004 First Half	306,884	5.22

Source: Lithuania, Ministry of Finance data.

More business-friendly taxation generates economic growth, which results in more profits and more tax revenue, not only from profit taxes but also from consumption taxes. Iceland provides an excellent example of the positive economic effects of cutting tax rates as a big part of a broader fiscal reform package. Iceland cut its corporate income tax rate from 50 percent in the early 1990s to 30 percent, then to 18 percent. Treasury revenue and economic growth increased as a result. State debt is forecast at 15 percent of GDP in 2005, down from 50 percent in 1995, and Iceland's international credit rating has never been better. This success, according to Icelandic officials, has been achieved not despite the extensive tax cuts but largely because of them.

In Lithuania tax policy was reviewed by a working group of representatives from the government, the Bank of Lithuania, and the private sector, put together by the prime minister in October 2003 to analyze and provide suggestions for improving the country's investment competitiveness. The working group recognized that taxes are not the most important instrument for attracting investment. Investment-related tax exemptions are often viewed by the targeted investors as short term and unsustainable. But all else more or less equal, the tax environment—particularly profit and income taxes—can provide certain competitiveness advantages.

The working group came up with several important conclusions, welcomed and supported by the investment climate assessment team. First, taxation of corporate profits in Lithuania is business friendly and supports the country's regional investment competitiveness. Second, the findings of studies such as that by Ernst & Young and ZEW should be used more widely to market Lithuania as having a friendly business and investment climate. And third, personal income tax and social insurance contribution rates are relatively high, reducing Lithuania's competitiveness for investments and the competitiveness of its businesses in global markets.

The high personal income tax and social insurance contribution rates, as well as the lack of a cap on social insurance contributions, will continue to cause a brain drain and undermine incentives to invest in knowledge-intensive industries. Ways should be found to reduce the personal income tax rate and, more important, the payroll tax (social insurance)—such as through a broader base for property taxes. In addition, a cap should be set on social insurance contributions. The high demographic pressure, though still a few decades away, may appear to be less worrisome in the near term if the pension reform of 2003 and continuing economic growth bring their desired results. That outcome would allow a reduction in social insurance contributions, lowering labor costs in Lithuania.

How will EU accession affect the business environment?

How EU membership can be expected to affect the business environment in Lithuania, and especially the competition faced by particular industries, is a question generating obvious interest in business circles. With only a short time as an EU member under its belt, Lithuania has yet to experience all the variety and complexity of the rules that EU membership brings.

Lithuania started to transpose the EU *Acquis Communautaire* into its legal system in the mid-1990s, long before its membership formally began on May 1, 2004. Thus the start of formal membership found Lithuania already living with a largely EU-compatible legal system—so much so that in the fall of 2004 Lithuania ranked first among all EU members in the transposition of EU directives, having transposed 2,510 of the 2,516. Spain ranked second, and Finland third.

The changes can be observed mostly in customs and taxation. EU-wide trade tariffs took effect in Lithuania on May 1, 2004. The new value added tax law, based on the VI Directive of the EU, also came into effect in 2004.

New challenges for the public sector

Lithuania's important regulatory institutions—such as the Competition Council, Public Procurement Agency, and State Veterinary Agency—have been sculpted into EU-compatible agencies staffed by young, foreign language–speaking personnel who have been and still are being offered substantial training on EU regulations and the role of their agencies in implementing the single-market rules. Even so, it would probably be fair to say that most regulatory agencies still face a steep learning curve before they will be fully ready to implement the *Acquis*. The EU Commission noted that "the administrative capacity of the CRA [Communications Regulatory Agency] was increased in April 2002. Nevertheless, it is still not sufficient to implement and enforce the legislation needed to comply with the Acquis. More resources are also needed to work on economic and legal aspects of regulation in an efficient and independent way"[24]. Similar evaluations could be given for other agencies. Without taking any credit away from them for their continuous efforts to improve, the Communications Regulatory Agency and others should still be considered works in progress. Resources should be allocated to them for further building their institutional capacity.

The Lithuanian authorities have received heavy criticism from the private sector for shortcomings (haste, lack of broad public consultation, retroactive application of important legal provisions for businesses, and the like) in the legislative and policymaking process. Part of the criticism has certainly had good cause, as elected politicians and civil servants alike lacked experience in democratic policymaking. But it ought to be recognized that the public sector faced big pressure in the run-up to EU membership. With much of the *Acquis Communautaire* now transposed, the legislative and policymaking process is likely to slow, allowing greater public consultation and more lead time for the business community to prepare for changes.

[24] http://europa.eu.int/scadplus/leg/en/lvb/e21105.htm

With the *Acquis* as large as it is, however, one question is whether Lithuanian institutions are ready to work in the new single-market environment. Public officials generally seem to lack adequate capability to interpret and explain the new business regulations. Yet businesses appear to face no major immediate obstacles in dealing with regulatory and supervisory agencies. The massive training for regulators offered before EU membership is paying off in a growing customer orientation in these agencies. In addition, specialized training continues to be available from the Lithuanian Public Administration Institute. The institute—which provided highly focused training to public officials participating in the EU membership negotiations, including the management and top-level staff of regulatory agencies—has positioned itself in the local market as a prime source of continued training for public servants.

Intensifying competition for the private sector

EU membership will undoubtedly impose new costs on Lithuanian businesses, such as through tougher quality, environmental, and consumer protection standards. And competition will intensify as businesses from the rest of the EU are able to offer their services more freely in Lithuania. Will these costs deter new local and foreign investments? That's unlikely. The local business community, or at least its core, understands the new competitive pressures well and will respond with appropriate investments to strengthen its position in the single market. While Lithuania will no longer be able to offer the extraordinary returns that could be expected early in the transition period (and that attracted adventurous investors with high tolerance for risk and uncertainty), it will offer more opportunities for risk-averse investors that favor more certainty and stronger rule of law. Developments in the financial services sector serve as a good example: since the start of formal EU membership in May 2004 a number of big financial services companies—such as Merrill Lynch, Morgan Stanley, J. P. Morgan, HSBC, and CSFB—have announced their intention to peruse the EU regulations allowing such companies to offer services in any EU member without opening a separate branch there.

Still, accession to the EU generally raises fears in new members that while becoming part of the large internal market will bring many opportunities to their businesses, it will also constrain the dynamism and growing competitiveness of those same businesses—through Brussels-imposed regulations and a generally uninspiring investment climate. Indeed, the accession of new members has often been viewed as a clash of cultures and priorities. The old EU was thought to have different development priorities than the new members and to be geared more toward preserving its expensive and hardly business-friendly welfare system than toward promoting dynamic business growth through fewer regulations and lower taxes.

The Lisbon Strategy was supposed to dispel those fears, helping the EU to become more competitive and innovative in the face of the challenges of globalization and sluggish economic growth at home. Halfway through the term of the Lisbon Strategy, however, progress toward its goals is questionable, with some market observers already calling it an outright failure. Dismantling the rusty structures of the welfare states and the

entrenched interests of traditional industries such as agriculture, so as to shift resources toward promoting innovation and competitiveness, has proved to be a difficult task.

But such developments will have no major adverse effects on the Lithuanian business sector. As competitive pressures on the EU from such countries as China, India, and the United States grow, the regulatory environment in the EU is likely to become by necessity more business friendly. Indeed, Lithuania and the other new members may well set the tone for these improvements. Lithuania is set to benefit from the movement of capital from West to East—and from the movement of good business environment ideas and practices in the opposite direction.

Greater lending and equity investment by the European Investment Bank, especially for small and medium-size enterprises, along with EU structural funds, present an opportunity for Lithuania to support areas needing big or risky investments, such as education, worker training, physical infrastructure, and research and development. Lithuania has improved its strategic planning skills for public investment, yet the size of the available financing and the breadth of the investment possibilities pose a big challenge to the public sector's ability to absorb the resources quickly and efficiently. Studies of the needs for such investments and of global best practices in undertaking them—studies like those the World Bank has performed around the world—could provide strong support and guidance in facing the challenge.

Chapter 9 Recommended actions for improving the investment climate

Lithuania has made serious efforts in recent years to improve its investment climate. This report has attempted to capture as much as possible the achievements of those efforts as well as the shortcomings that remain. The general picture in 2004 was of impressively rapid progress in the previous two to three years. Yet Lithuania remains unable to attract significant amounts of greenfield foreign direct investment. Its small market with limited purchasing power, and its record as a slow reformer in the 1990s compared with peer countries, may be objective constraints. More important, however, are such qualitative issues as the innovation capability of the country, the level and quality of education of its labor force, and the complexity of business regulations (such as those relating to land use and firm entry). Tackling such issues should help attract greater investment. Nor should Lithuania overlook the potential of more assertively advertising its achievements and its welcoming investment environment.

Following is a set of principal recommendations for improving Lithuania's investment environment that reflects these critical notions. Other, more specific recommendations based on the report's findings are outlined in table 8.1, with priority recommendations highlighted in boldface.

Principal recommendations

- *Ensure that Lithuania's achievements in improving its business environment are properly marketed among investors worldwide.*
- *Benchmark Lithuania's competitiveness and its innovation infrastructure against those of peer countries and global leaders.*
- *Promote a focus on the quality of products and services by supporting ISO certification of companies through grant programs.*
- *Promote early-stage (seed) finance for innovative start-ups through innovation financing schemes with public participation.*
- *Establish an online window for company registration and further improve the process by raising its speed and lowering its cost.*
- *Overhaul the law and practice of company rehabilitation to make this a desired solution when companies run into financial difficulties.*
- *Undertake the substantial changes needed in tertiary education to shift the focus from quantity to quality.*
- *Promote on-the-job training through matching grants to employers.*
- *Consider a nationwide lifelong learning campaign to encourage middle-aged Lithuanians to take up new learning opportunities.*
- *Overhaul the legislative and administrative framework for commercial land development—at a minimum, clearly allocating land management tasks among the authorities—to simplify land use and improve the public sector's performance on issues relating to land use and development.*
- *Explore options for reducing labor taxes and select the one most appropriate.*

- *Introduce into law an unequivocal obligation of the State Tax Inspectorate to respond to requests for clarification of tax matters with binding rulings.*
- *Develop, possibly through a public-private partnership, a central credit bureau offering access to credit information on Lithuanian companies to all financial intermediaries.*

Table 9.1 Other recommended actions for improving Lithuania's investment climate

Area	Recommended action
Company landscape (chapter 3)	• Refine business support services by improving the coordination and professionalism of the business information centers, ensuring their adequate funding, and considering public-private partnerships for setting up and running such centers. • Make expanding entrepreneurship in Lithuania an explicit, overarching goal of the business information centers and the rest of the small business support system.
Competitiveness and innovation (chapter 3)	• **Encourage private sector R&D spending and innovation-related learning through matching grant programs.** • Further strengthen the protection of intellectual property rights to encourage patents and commercialization of research outputs.
Company entry (chapter 3)	• Introduce a single registration number for enterprises. • Consider abolishing the minimum capital requirement.
Company exit (chapter 3)	• **Amend the enterprise restructuring law, along with related secondary legislation, to better serve its purpose. In the process, consider merging this law with the bankruptcy law.** • Introduce a framework for regulating bankruptcy administrators. • **Strengthen the court's expertise in resolving bankruptcies by instituting specialized judges.** • **Ensure that the remuneration of bankruptcy administrators is closely linked to maximization of value.** • Revise relevant rules and practices to enable public sector creditors, including the Social Insurance Agency (SODRA) and the State Tax Inspectorate, to participate in company restructurings on a pari passu basis with private creditors.
Access to finance (chapter 4)	• Further strengthen the legal protection of creditors in collateral resolution by reducing the possibilities for debtors to unreasonably contest their cases.
Commercial payments and contract enforcement (chapter 4)	• Further limit the possibilities and procedures for debtors to appeal in cases of late payment. • Ensure proper judicial enforcement of the new law on preventing late payments.
Labor regulations (chapter 4)	• Reduce the required severance pay for redundancy.
Human capital (chapter 4)	• Further strengthen state-sponsored training programs, especially for the unemployed, focusing on a rapid supply response to the needs of the economy. • Ease the hiring of foreign workers for certain jobs and industries by accelerating procedures for immigration and work permits. Such changes would also make it easier for foreign firms to locate their headquarters in Lithuania.

Commercial land development (chapter 4)	③ **Permit general land use plans to allow greater flexibility.** ③ **Shorten time limits for handling applications relating to land use and construction.** ③ Reverse the misguided move to a one-stop shop for detailed and technical land planning. ③ **Change the system of detailed land planning so that it benefits any user of a plot of land rather than just one specific user.** ③ Consider abandoning the construction committees. • Limit the now unlimited possibilities for citizens to file complaints at every stage of the process, from general land planning to even after issuance of the final building permit.
Infrastructure (chapter 5)	• Ensure further deepening of telecommunications by maintaining liberal regulations for the industry. • Ensure that the privatization of major utilities, such as the electricity transmission network, does not result in the utilities imposing big cost increases on market participants.
Regulatory burden, governance, and corruption (chapter 6)	• Require no more than one license for firms in industries subject to licensing, and streamline licensing procedures. • Institute specialized judges in civil law and, in the longer term, consider instituting specialized courts. • **Amend and clarify as needed decrees and decisions relating to the law on public procurement, and amend the law if necessary to further improve rules and practices in public procurement to reduce corruption in this area.**
Tax administration (chapter 7)	• **Extend coverage of the minimum six-month period before new tax laws and amendments can take effect to secondary legislation (government decrees and ministerial and State Tax Inspectorate decisions).**
Tax competition (chapter 7)	• Maintain the low overall tax burden on the economy. • Market Lithuania's business-friendly tax environment.
Impact of EU membership (chapter 7)	• Continue the training of regulatory staff and officials. • Strengthen the Public Administration Institute to maintain it as the premier educational institution for public servants. • Ensure easy access by the private sector to comprehensive (technical and non-technical) summaries of the effect of EU membership on different areas of business regulation. • **Further strengthen the institutional capacity of public agencies responsible for absorbing EU financial aid.**

Appendix 1 Country tables

Table A1.1 Sample structure of Lithuania Productivity and Investment Climate Survey

Sample population		*Sample population*	
Firm size		*Firm activity*	
Small	154	Textiles	58
Medium-size	54	Food	68
Large	31	Construction	33
		Furniture	32
		Transport	30
		Other	18
Market orientation			
Exporter	93		
Nonexporter	146		
Firm ownership		*Firm location*	
Domestic	212	Vilnius	97
Foreign	24	Kaunas	75
State	3	Klaipeda	23
		Siauliai	24
		Panevezys	20

Table A1.2 Globalization of markets and inputs by type of firm, Lithuania
(percent)

	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Disposition of sales										
Sold domestically	71.9	79.2	62.5	54.2	28.2	99.7	73.9	51.0	75.5	69.7
Exported directly	17.6	13.1	16.0	40.0	44.8	0.2	15.6	36.9	15.2	18.7
Exported indirectly	10.6	7.7	21.5	5.8	27.0	0.1	10.5	12.1	9.2	11.6
Source of inputs and supplies										
Domestic sources	68.1	72.0	65.4	52.3	55.6	76.0	69.5	53.7	76.2	64.8

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.3 Firms' evaluation of general constraints to operation by type of firm, Lithuania

(percentage of firms evaluating constraint as major or very severe)

Constraint	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Tax rates	66.5	71.9	59.3	54.8	69.9	64.4	69.3	41.7	64.6	67.7
Regulatory policy uncertainty	40.6	42.5	33.3	45.2	46.2	37.0	41.5	33.3	46.8	38.1
Tax administration	36.8	39.2	33.3	32.3	41.9	33.6	38.2	29.2	34.2	36.8
Anticompetitive or informal practices	35.6	35.9	29.6	45.2	32.3	37.7	35.8	29.2	44.3	31.0
Skills and education of available workers	30.1	31.4	27.8	29.0	37.6	25.3	32.1	16.7	32.9	28.4
Corruption	27.6	27.5	27.8	29.0	28.0	27.4	28.8	20.8	25.3	28.4
Access to finance	26.8	30.7	25.9	9.7	29.0	25.3	28.8	8.3	34.2	23.2
Cost of finance	26.4	28.8	24.1	19.4	20.4	30.1	27.8	12.5	26.6	25.8
Macroeconomic instability	25.9	24.8	27.8	25.8	39.8	17.1	26.4	25.0	24.1	26.5
Legal system or conflict resolution	20.5	21.6	18.5	19.4	25.8	17.1	20.8	20.8	15.2	22.6
Access to land	17.2	16.3	18.5	16.1	19.4	15.8	17.9	12.5	12.7	18.7
Crime, theft, and disorder	15.9	17.0	11.1	19.4	17.2	15.1	17.0	4.2	16.5	16.1
Customs and trade regulations	15.5	11.1	18.5	32.3	25.8	8.9	14.2	29.2	13.9	16.1
Labor regulations	15.5	12.4	14.8	32.3	26.9	8.2	15.6	16.7	13.9	16.8
Business licensing and operating permits	13.4	14.4	13.0	9.7	11.8	14.4	13.7	12.5	13.9	12.3
Electricity	7.5	7.8	7.4	6.5	7.5	7.5	7.5	8.3	10.1	6.5
Transport	5.4	4.6	5.6	6.5	6.5	4.8	5.2	8.3	11.4	1.9
Telecommunications	2.5	3.3	1.9	—	2.2	2.7	2.4	4.2	2.5	2.6

— Not available.

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.4 Infrastructure performance as reported by firms, by location, Lithuania

Indicator	All locations	Vilnius	Kaunas	Klaipeda	Siauliai	Panevezys
Frequency of power outages (average days in previous year)	1.1	1.0	1.0	1.6	0.9	1.2
Output losses among firms that experienced power outages (percentage of sales)	4.3	5.6	6.5	1.3	0.2	0.3
Share of firms with own generator (percent)	22.2	21.6	21.3	17.4	25.0	30.0
Days to obtain an electricity connection	22.2	1.5	69.6	1.3	—	—
Days to obtain a water connection	59.6	1.6	190.3	1.0	—	—
Exports as a percentage of sales	28.1	25.8	32.7	35.9	12.6	31.9

— Not available.
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.5 Infrastructure performance as reported by firms, by type of firm, Lithuania

Indicator	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Frequency of power outages (average days in previous year)	1.2	0.7	1.0	1.1	1.1	1.0	1.4	0.9	1.1
Output losses among firms that experienced power outages (percentage of sales)	4.5	5.3	0.6	1.1	6.4	4.7	0.4	2.4	5.2
Share of firms with own generator (percent)	20.9	24.1	22.6	32.3	15.8	22.6	20.8	20.3	22.6
Days to obtain an electricity connection	21.8	2.0	45.5	23.5	21.9	24.2	1.0	1.4	31.3
Days to obtain a water connection	64.5	—	1.0	3.0	69.9	70.3	1.0	180.8	5.8
Exports as a percentage of sales	20.8	37.5	45.8	71.8	0.3	26.1	49.0	24.5	30.3

— Not available.
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.6 Sources of finance by type of firm, Lithuania

(percent)

	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Sources for working capital										
Retained earnings	57.8	59.2	59.4	48.5	50.8	62.4	57.2	56.9	59.0	57.3
Banks and other financial institutions	7.9	6.6	5.9	17.1	12.3	5.0	7.0	16.5	10.5	6.7
Trade credit	6.9	6.2	7.4	9.6	5.5	7.9	6.7	10.2	5.4	7.1
Equity	17.5	18.0	20.3	10.5	17.8	17.3	18.7	9.5	16.0	18.4
Informal sources	0.4	0.1	1.5	0.0	0.8	0.2	0.5	0.0	0.4	0.4
All others	9.5	9.8	5.4	14.2	12.8	7.4	10.0	6.9	8.7	10.0
Sources for new investments										
Retained earnings	50.6	53.3	51.8	39.1	44.7	55.0	50.5	48.9	57.2	47.3
Banks and other financial institutions	12.0	10.0	10.6	21.4	16.2	8.9	12.5	10.7	11.1	12.5
Trade credit	3.4	2.6	6.2	1.7	4.2	2.7	3.7	1.6	0.2	5.0
Equity	12.9	12.3	19.6	4.3	12.2	13.4	13.4	11.9	11.5	13.6
Informal sources	0.2	0.1	0.5	0.0	0.3	0.2	0.2	0.2	0.2	0.2
All others	20.9	21.7	11.3	33.6	22.4	19.8	19.8	26.7	19.8	21.4

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.7 Credits, loans, and liabilities by type of firm, Lithuania

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Share of firms with overdraft or line of credit	25.9	15.0	31.5	67.7	37.6	18.5	24.5	37.5	25.3	25.8
Share of credit currently unused	28.8	24.9	39.5	24.2	26.6	31.6	25.7	38.3	29.2	29.3
Share of firms with a loan from a bank or other financial institution	33.5	24.2	37.0	71.0	50.5	22.6	30.7	58.3	30.4	34.2
For the most recent loan or overdraft										
Share requiring collateral	87.5	81.1	95.0	90.9	95.7	75.8	92.3	71.4	83.3	88.7
Average value of collateral required as a percentage of the loan	114.1	104.8	109.0	135.4	115.3	111.7	113.7	116.9	130.0	107.4
Average interest rate on the loan	5.9	6.3	6.0	4.9	5.3	6.7	5.9	6.0	5.4	6.1
Average duration of the loan (months)	39.9	32.1	43.6	50.4	42.8	35.7	34.6	61.1	35.9	42.4
Share of total borrowing denominated in foreign currency	13.2	3.8	17.4	51.5	25.4	5.4	9.7	43.9	10.8	14.2
Long-term liabilities (one year or more) as a share of total liabilities	38.3	42.1	38.1	30.9	41.9	34.8	37.3	39.5	32.5	41.2
Short-term liabilities as a share of total liabilities	66.7	70.2	58.7	67.7	62.2	70.8	66.5	68.7	73.4	63.5

— Not available.
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.8 Auditing and property rights indicators by type of firm, Lithuania

(percent, except where otherwise specified)

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Share of firms with audited financial statements	28.5	15.7	35.2	80.6	34.4	24.7	23.6	62.5	27.8	29.0
Land										
Share owned	17.0	18.3	14.4	17.1	15.5	18.1	17.8	12.5	16.4	16.8
Share leased or rented	82.2	80.5	85.3	82.9	84.5	80.5	81.3	87.5	83.6	81.9
Average length of lease or rental (months)	636.7	480.2	682.2	955.4	677.4	602.8	600.0	823.6	536.8	714.3
Buildings										
Share owned	52.1	41.2	64.5	81.0	58.5	47.7	51.3	56.8	56.5	50.1
Share leased or rented	47.3	58.1	35.5	17.8	41.1	51.6	48.0	43.2	43.5	49.0
Average length of lease or rental	49.0	32.9	108.8	51.3	36.5	55.8	51.2	27.0	40.4	54.9

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.9 Regulatory burden and administrative delays by type of firm, Lithuania

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Share of firms disagreeing that interpretations of regulations are consistent and predictable (percent)	37.0	34.4	43.4	38.7	36.3	37.5	39.4	16.7	44.9	32.7
Share of senior management's time spent dealing with regulations (percent)	27.1	25.8	30.6	28.4	30.2	25.1	26.9	29.2	25.9	28.3
Share of revenue typically paid to officials to "get things done" (percent)	2.7	3.6	1.9	0.7	1.3	3.7	3.1	0.2	6.8	1.1
Share of revenue typically reported for tax purposes (percent)	18.4	22.7	11.8	10.7	12.9	22.3	19.5	6.2	21.3	16.5
Inspections										
Days spent in inspections or required meetings with officials in previous year	40.5	39.2	35.6	56.5	48.0	35.7	40.8	39.3	39.5	40.9
Cost of fines or seized goods (percentage of sales)	8.2	8.7	7.8	6.7	7.2	8.9	8.9	4.6	7.0	7.7
Share of interactions in which informal payment requested (percent)	17.2	15.7	22.2	16.1	19.4	15.8	17.0	20.8	21.5	14.8
Value of informal in previous year (percentage of sales)	24.2	33.6	16.0	2.6	7.1	31.3	29.3	7.6	16.6	29.5
Import clearance										
Average wait to clear customs (days)	5.8	7.1	2.0	5.6	4.1	8.6	6.6	3.1	3.7	6.7
Longest wait to clear customs (days)	9.0	11.1	4.2	7.9	6.0	14.0	9.3	8.1	7.2	10.1
Export clearance										
Average wait to clear customs (days)	4.5	4.4	6.6	2.8	4.7	2.8	5.2	1.0	1.4	5.4
Longest wait to clear customs (days)	6.8	7.3	7.7	5.3	7.2	4.8	8.0	2.0	2.3	8.2

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.10 Indicators of uncertainty and corruption by type of firm, Lithuania
(percent)

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Uncertainty										
Share of firms disagreeing that interpretations of regulations are consistent and predictable	37.0	34.4	43.4	38.7	36.3	37.5	39.4	16.7	44.9	32.7
Share of profits reinvested in the firm	—	—	—	—	—	—	—	—	—	—
Share of firms disagreeing that they have confidence in the judiciary	34.0	34.6	34.0	32.3	34.8	33.6	35.5	20.8	45.6	28.6
Share of payment disputes resolved in the courts	10.6	8.4	16.3	11.7	15.9	7.1	10.6	11.9	14.6	8.8
Corruption										
Share of revenue needed for informal payments	2.7	3.6	1.9	0.7	1.3	3.7	3.1	0.2	6.8	1.1
Share of firms reporting requirement for gift or payment										
For a construction permit	5.6	5.5	2.2	13.0	2.5	7.5	5.6	6.7	6.9	5.1
For an electricity connection	2.8	2.0	4.3	4.2	2.4	3.0	3.0	0.0	2.7	2.9
For an operating license	8.2	8.8	8.5	4.2	4.8	10.2	8.9	0.0	6.8	8.5
For an import license	0.9	0.0	0.0	8.3	2.4	0.0	1.0	0.0	0.0	1.4
Share of revenue typically reported for tax purposes	18.4	22.7	11.8	10.7	12.9	22.3	19.5	6.2	21.3	16.5

— Not available.
Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.11 Technology indicators by type of firm, Lithuania (percent)

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Share of firms with ISO certification	29.3	18.3	42.6	58.1	39.8	22.6	27.8	41.7	36.7	25.8
Share of firms with technology innovations in previous year										
Developed a major new product line	27.6	19.6	27.8	64.5	39.8	19.9	25.0	50.0	25.3	29.0
Upgraded an existing product line	57.7	51.6	63.0	77.4	75.3	46.6	56.6	70.8	60.8	57.4
Introduced new technology that has substantially changed the way the main product is produced	26.8	26.1	22.2	38.7	28.0	26.0	27.4	20.8	27.8	26.5
Discontinued at least one product line	31.0	27.5	22.2	61.3	29.0	32.2	30.2	33.3	41.8	25.8
Agreed on a new joint venture with a foreign partner	3.3	0.7	7.4	9.7	8.6	0.0	2.8	8.3	2.5	3.9
Obtained a new licensing agreement	5.9	2.6	11.1	12.9	5.4	6.2	4.2	16.7	6.3	5.8
Share of firms rating form of technology acquisition as first, second, or third most important										
Embodied in new machinery or equipment	47.3	48.2	51.4	36.0	56.9	39.5	49.6	40.0	37.0	52.0
Hiring key personnel	4.8	3.6	8.1	4.0	4.6	4.9	4.9	5.0	8.7	3.1
Licensing or turnkey operations from international sources	3.4	0.0	10.8	4.0	1.5	4.9	2.4	10.0	2.2	4.1
Licensing or turnkey operations from domestic sources	3.4	3.6	2.7	4.0	1.5	4.9	2.4	10.0	6.5	2.0
Developed or adapted within the establishment locally	16.4	19.3	13.5	12.0	10.8	21.0	17.1	10.0	19.6	15.3
Transferred from parent company	2.7	1.2	2.7	8.0	1.5	3.7	0.8	15.0	2.2	3.1
All others	21.9	24.1	10.8	32.0	23.1	21.0	22.8	10.0	23.9	20.4

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Table A1.12 Labor and training by type of firm, Lithuania

(percent, except where otherwise specified)

Indicator	All firms	Small	Medium-size	Large	Exporter	Nonexporter	Domestic	Foreign	Low capacity	High capacity
Labor composition										
Share of workers who are permanent	96.6	97.5	94.0	96.0	96.6	95.5	95.5	97.3	96.1	96.7
Share of permanent workers who are female	51.9	51.9	46.6	62.4	51.5	56.1	58.5	47.6	61.2	48.6
Share of temporary workers who are female	44.1	47.5	31.8	62.4	40.2	73.3	64.5	27.9	67.4	36.2
Share of permanent skilled workers who are foreign nationals	0.2	0.1	0.1	0.5	0.1	1.2	0.3	0.1	0.1	0.2
Labor turnover										
New employees hired during the last 12 months as a share of total	24.5	22.4	28.0	29.1	25.0	22.8	26.5	23.3	19.5	26.5
Employees who left during the last 12 months as a share of total	35.7	35.6	39.0	30.2	36.6	31.1	34.6	36.5	32.8	36.8
Average time to fill a skilled technician vacancy (weeks)	3.2	3.5	2.4	3.2	3.2	2.6	2.0	4.3	3.6	3.0
Average time to fill a production or service worker vacancy (weeks)	3.0	3.3	2.1	2.9	3.1	1.9	1.7	4.3	2.5	3.4
Desired workforce as a percentage of current workforce	102.6	103.9	104.4	93.2	102.7	101.7	106.2	100.3	101.1	103.3
Training and education										
Share of workforce with less than 6 years' schooling	0.5	0.3	0.8	1.3	0.5	0.5	0.6	0.5	0.4	0.6
Share of workforce with more than 12 years' schooling	30.4	33.8	22.4	28.8	29.7	39.7	25.6	33.2	23.7	34.0
Share of skilled workers receiving training	11.9	5.6	17.2	28.3	11.6	14.5	13.5	10.9	14.1	10.9
Share of firms offering formal training	57.0	50.7	68.5	66.7	55.7	70.8	59.8	55.2	60.3	53.9
Labor unrest										
Days lost to labor disputes or civil unrest in previous year	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0

Source: World Bank, Productivity and Investment Climate Survey, Lithuania, 2004.

Appendix 2 Determinants of productivity

The purpose of this appendix is to identify the main determinants of productivity in Lithuania. The availability of similar surveys for Lithuania and other Eastern European countries makes it possible to compare the performance of firms across countries.

To measure firm performance, the total factor productivity of firms is estimated using a comprehensive, firm-level data set collected by the World Bank. Differences in total factor productivity across firms at a given point in time are those differences in output that cannot be explained by differences in the firms' use of intermediate goods and the factors of production labor and capital. Firms with higher total factor productivity are generally considered to be more efficient, as they are able to produce greater value with the same or fewer inputs.

In a second stage of analysis total factor productivity is regressed on different investment climate variables. The analysis focuses on indicators covering a wide range of areas, including finance, governance, corruption, the quality of infrastructure, the quality of the labor force, and the internationalization of firms.

The data

The data used in the analysis are from the Productivity and Investment Climate Survey conducted by the World Bank in Lithuania in 2004 and the Enhanced Business Environment and Enterprise Performance Surveys conducted jointly by the World Bank and the European Bank for Reconstruction and Development in the Kyrgyz Republic, Moldova, Poland, Tajikistan, and Uzbekistan in 2003. The Enhanced Business Environment and Enterprise Performance Survey collects balance sheet information and data on investment climate indicators in a way comparable to the World Bank's core investment climate survey. The two surveys use similar questionnaires and methodologies. They are administered to business managers through face-to-face interviews by trained enumerators. The richness of the fields covered and of the investment climate data collected makes them a unique source of information for analyzing the factors determining firm productivity.

While the Enhanced Business Environment and Enterprise Performance Surveys were conducted across the five countries at the same time and collected information for 2002, the Lithuania survey collected information for 2003. The consumer price index was used to convert 2003 Lithuanian prices to 2002 prices, and nominal exchange rates to convert local currency units to U.S. dollars.

The original sample includes more than 1,300 firms. From this sample are excluded firms that do not operate in manufacturing, as well as manufacturing sectors for which data for only a small number of firms were available. The two-digit NACE sectors included in the final sample are food and beverages (48.6 percent), wearing apparel (34.5 percent), textiles (11.3 percent), and furniture (5.5 percent).

Estimating total factor productivity

To estimate total factor productivity for each firm, an aggregate production function is estimated by pooling data from the different countries and sectors. This allows more precise estimates of the effects of the factors of production on output. But it comes at the cost of assuming a common elasticity across sectors for the factors of production. To make this assumption less strong, the sample is reduced to the more homogeneous group of sectors mentioned above.

The aggregate production function is assumed to be log linear so that the reduced form is given by:[25]

$$\ln S_i = \alpha + \beta \ln I_i + \delta \ln E_i + \lambda \ln K_i + \phi H_i + \sum \gamma_s s_i + \sum \gamma_c c_i + \mu_i \qquad (A2.1)$$

where S is the total sales of firm i at time t, I is the firm's intermediate inputs, E is the total number of its employees, K is its stock of physical capital, and H is its stock of human capital. To control for differences in productivity across sectors, the regression includes a set of sector fixed effects, s_i, as well as country fixed effects, c_i. The remaining heterogeneity across firms is the unobserved firm productivity, μ_i.

The intermediate goods include raw materials and the cost of electricity, fuel, and other energy sources. The stock of physical capital is measured as the net book value of machinery and equipment (including transport) multiplied by the firm's rate of capacity utilization. The stock of human capital at a point in time is a function of the knowledge of the firm's workforce. To capture this, the average years of schooling of the workforce and a measure of on-the-job training are included as explanatory variables in the regression.[26] The average years of schooling are a weighted average of the years of education of the workforce. The incidence of training is captured by a dummy variable that takes the value 1 if the firm offers on-the-job training, whether internal or external.

[25] The time subscript is omitted because all the variables are in units of the same period, 2002.

[26] Strictly speaking, a measure of past on-the-job training should also be included. But because of lack of data, only current training is included as a determinant of the firm's productivity, equivalent to assuming that skills fully depreciate in one period.

Table A2.1 reports the results of estimating equation A2.1 using ordinary least squares. Lithuania is the reference country, and manufacturing of food and beverages the reference sector. Standard errors are corrected for heteroskedasticity. Model 1 includes controls for country differences in productivity, while model 2 also includes controls for sector differences in productivity.

Table A2.1 Determinants of firm-level productivity: regression results

Variable	Model 1	Model 2
Ln intermediate inputs	0.775	0.770
	(0.035)***	(0.036)***
Ln (capital * capacity utilization)	0.059	0.056
	(0.024)**	(0.023)**
Ln (employment)	0.199	0.208
	(0.023)***	(0.025)***
Ln (average years of schooling)	0.068	0.077
	(0.058)	(0.061)
Training	0.080	0.083
	(0.033)**	(0.035)**
Poland	–0.023	–0.032
	(0.082)	(0.106)
Moldova	–0.250	–0.273
	(0.093)***	(0.114)**
Tajikistan	–0.305	–0.330
	(0.106)***	(0.126)***
Uzbekistan	–0.496	–0.528
	(0.099)***	(0.121)***
Kyrgyz Republic	–0.421	–0.449
	(0.098)***	(0.116)***
Sector dummy variables		
Textiles		–0.107
		(0.078)
Wearing apparel		–0.036
		(0.025)
Furniture		–0.081
		(0.117)
Observations	374	374
R^2	0.98	0.98

* Significant at the 10 percent level.
** Significant at the 5 percent level.
*** Significant at the 1 percent level.

Note: The specification estimated is in equation A2.1. The dependent variable is the logarithm of sales. Standard errors are in parentheses.

Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Survey, Lithuania, 2004; and World Bank and European Bank for Reconstruction and Development, Extended Business Environment and Enterprise Performance Surveys, 2003.

As expected, the coefficients on the inputs, labor, and capital used in production are positive and significant. Firms with a more educated workforce are more productive, though the coefficient is not statistically significant at conventional significance levels. Firms that offer internal or external training also are more productive.

With differences in the use of the different factors of production controlled for, firms in Lithuania outperform those in most other countries in the group. Average total factor productivity in Lithuania does not differ significantly from that in Poland (the coefficient on the Poland dummy variable in the production function is negative but statistically significant). But firms in the other four transition economies are less efficient than those in Lithuania. Firms in Moldova are 25 percent less efficient, for example, and those in Uzbekistan 49 percent less efficient (figure A2.1).

There are no significant differences in productivity across the sectors in the analysis. At standard levels of significance the hypothesis that sector dummy variables are zero cannot be rejected.

Figure A2.1 Productivity gaps relative to Lithuania, selected transition economies

Note: All differences in total factor productivity are statistically significant except that for Poland.
Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Survey, Lithuania, 2004; and World Bank and European Bank for Reconstruction and Development, Extended Business Environment and Enterprise Performance Surveys, 2003.

Total factor productivity is estimated for each firm by summing the estimate for the country dummy variable and the residual of regression A2.1, $\hat{\mu}_i$. In other words, total factor productivity is the part of total sales that is unexplained by sector affiliation, intermediate inputs, or stock of physical or human capital.

Estimating the effects of the investment climate

In this second part of the analysis the estimates of total factor productivity are regressed on different measures of the investment climate facing firms. The reduced form equation chosen is the following:

$$TFP_i = \alpha + \beta X_i + \gamma IC_i + \varepsilon_i \qquad (A2.2)$$

where TFP_i is the total factor productivity of firm *i*; X_i is a set of firm characteristics such as size, export intensity, and foreign ownership; and IC_i is an indicator of the investment climate facing firm *i*. The investment climate variables used in the analysis are aimed at capturing the business environment of the firm in several areas:

- *Access to bank credit* (a dummy variable that takes the value 1 if the firm has access to a bank loan or line of credit).
- *Business regulation, bureaucratic burden, and bribes* (the number of days spent in required meetings with officials, a dummy variable that takes the value 1 if the firm reports having made gifts or informal payments to public officials to "get things done," and the share of sales reported for tax purposes).
- *Infrastructure* (the total number of hours in the previous year that the firm experienced interruptions in power and water service).
- *Competition* (the number of competitors faced in the domestic market).

By definition, the investment climate facing a firm is a very broad concept. To restrict the analysis to a reasonable set of indicators, variables were selected on the basis of data quality and factors identified as important in other transition economies. Including multiple investment climate variables simultaneously in the regression would mean losing some observations, since some firms did not respond to all survey questions. To avoid this problem and the high correlation between some of the investment climate variables, the effect of each variable on total factor productivity is estimated individually. (Moreover, the interpretation of coefficients is clearer when only one investment climate measure is introduced at a time.) However, selecting only some variables to proxy for the investment climate makes it likely that other variables that might determine productivity would be left aside (omitted variable bias). To mitigate this problem, the vector X_i, which captures differences across firms in size, export intensity, and nationality of capital, is included in the regression.

Regression results without investment climate variables

As a first step equation A2.2 is estimated with no investment climate variables, using ordinary least squares. The results are reported in table A2.2.

Table A2.2 Firm characteristics and productivity: regression results

Variable	Coefficient
Size: 51–250 employees	–0.025
	(0.047)
Size: > 250 employees	–0.109
	(0.062)*
Exports	0.079
	(0.042)*
Foreign ownership	0.069
	(0.077)

* Significant at the 10 percent level.

Note: The specification estimated is in equation A2.2 without investment climate variables. The dependent variable is total factor productivity. Exports is a dummy variable that takes the value 1 if the firm exports more than 10 percent of total sales, and foreign ownership is a dummy variable that takes the value 1 if the firm has more than 10 percent foreign capital. Standard errors are in parentheses.

Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Survey, Lithuania, 2004; and World Bank and European Bank for Reconstruction and Development, Extended Business Environment and Enterprise Performance Surveys, 2003.

Size. The size of a firm is often argued to be an important determinant of its productivity. In the sample there are no statistically significant differences in productivity between firms with 50 or fewer employees and firms with 51–250 employees. On average, very large firms (those with more than 250 employees) tend to have lower total factor productivity than smaller firms do. The average size of firms in Lithuania is similar to that in the Kyrgyz Republic and Moldova (around 120 employees). The average size in Poland is smaller (around 60 employees), while in Uzbekistan it is slightly larger (around 140).

Exporting. In general, a firm's ability to compete in export markets is a strong indication that it is efficient. Indeed, that exporting firms in developing countries are more efficient than non-exporting firms is almost a stylized fact. Although the higher efficiency of exporters could be due to a learning effect, it could also be due to the fact that more efficient firms self-select into exporting activities. Although these effects cannot be disentangled, the data suggest that exporters have higher total factor productivity than nonexporters. On average, firms in Lithuania reported exporting a larger share of total sales (21 percent) than those in the other transition economies (in Poland, for example, the average export share is 8 percent).

Foreign ownership. Foreign ownership is often associated with more advanced technology and therefore with higher total factor productivity. But there is also some

evidence that foreign investors are "picky" about the firms they choose to buy. Thus it is difficult to determine whether the causality runs from foreign ownership to productivity or the other way around. In the sample there is evidence that foreign-owned firms tend to have higher productivity (a firm is considered foreign owned if 10 percent or more of its capital is owned by foreign investors). But this difference is not significant at conventional significance levels.

Regression results with investment climate variables

A serious problem in regressing total factor productivity on each investment climate variable so as to be able to make statements of causality is that this approach requires a strong assumption—that is, that shocks to total factor productivity at the firm level are contemporaneously independent of all the explanatory variables in equation A2.2. In other words, it requires the assumption that, for example, firms that perform better in the market (those with high total factor productivity) are not better able to overcome particular investment climate obstacles. To overcome this endogeneity problem, the less stringent assumption is made that firms are not able to influence a certain investment climate obstacle in their country, sector, region, and firm size class. This solution involves regressing total factor productivity not on the investment climate measure reported by the firm but on the average of the measures reported by the firms operating in the same country, sector, region, and size class.[27]

The results of estimating equation A2.2 using least squares for different investment climate measures are presented in table A2.3.

Access to bank credit. That financial sector development is an important determinant of growth is well known: firms operating in a country with a well-developed financial system tend to grow faster than those in countries with less-developed systems. The data provide evidence consistent with this: firms with access to a bank loan or line of credit tend to have higher total factor productivity. In Lithuania 34 percent of firms reported having access to bank credit. This share is similar to that in the Kyrgyz Republic and Uzbekistan, but smaller than that in Poland (64 percent) or Moldova (59 percent).

Business regulation, bureaucratic burden, and bribes. The institutional structures governing the relationship between firms and the government are also known to affect economic performance. To see how governance relates to productivity, the analysis looks first at the regulatory burden as measured by the number of days firm managers reported spending in required meetings with officials in the previous year. The burden of regulation is slightly higher in Lithuania than in Poland: while firm managers in Lithuania spent around 8 days in meetings with officials, those in Poland spent 6.7 days on average. The burden in the Kyrgyz Republic is quite significant, averaging around 15 days. The regression results show that the contact with officials has a negative effect on total factor productivity, though the effect is not statistically significant at conventional levels.

[27] When the number of firms in each cell is less than four, the data are recoded as missing.

Table A2.3 Investment climate and productivity: regression results

Variable	Observations	Coefficient	
Bank credit	304	0.121	
		(0.072)	*
Inspections by government officials	304	–0.004	
		(0.003)	
Power	304	–0.003	
		(0.001)	***
Water	296	–0.009	
		(0.006)	
Competition	300	0.005	
		(0.001)	***
Bribes	303	0.331	
		(0.092)	***
Sales declared for taxes	290	–0.004	
		(0.001)	***

* Significant at the 10 percent level.
** Significant at the 5 percent level.
*** Significant at the 1 percent level.
Note: The specification estimated is in equation A2.2. The dependent variable is total factor productivity. Controls for size, exports, and foreign ownership are included in each regression, but coefficients are not reported. Bank credit is the proportion of firms with access to a bank loan or line of credit . Inspections by government officials is the number of days spent in required meetings with officials. Power and water are the total number of hours that the firm experiences interruptions in power and water service. Competition is the number of competitors faced in the domestic market. Bribes is the proportion of firms reporting having made gifts or informal payments to public officials to "get things done." Sales declared for taxes is the proportion of total sales reported for tax purposes. Standard errors are in parentheses.
Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Survey, Lithuania, 2004; and World Bank and European Bank for Reconstruction and Development, Extended Business Environment and Enterprise Performance Surveys, 2003.

All the firms in the Lithuanian sample reported having made gifts or informal payments to public officials to "get things done"—a far larger share than in the other countries. The regression results show a positive correlation between the payment of bribes and the level of total factor productivity.

Infrastructure. To see what effect infrastructure has on productivity, the analysis looks at the total number of hours of interruptions in power or water service in the previous year. Firms in Lithuania reported less frequent power outages than those in other transition economies—an average of 1.1 days of outages, compared with 1.9 in Poland and 2.9 in Moldova. But firms in Lithuania reported more frequent interruptions in water service (an average of 1.5 days) than those in Poland (0.2) and Moldova (1.1)—though less frequent interruptions than in Tajikistan (2.1), Uzbekistan (2.2), and the Kyrgyz Republic (3.0). Not surprisingly, these differences in the reliability of infrastructure services matter, with regression results showing that interruptions in power and water service have a negative effect on total factor productivity.

Competition. The competition faced by the firm is measured by the number of its competitors in the domestic market. By this indicator Lithuanian firms face far less competition than Polish firms. Firms in Lithuania reported an average of 36 competitors in the domestic market, while those in Poland reported an average of 62 competitors. The only country where firms face less competition in the domestic market than those in Lithuania is the Kyrgyz Republic, where firms reported an average of 26 competitors. The regression results suggest that firms facing greater competition in their region and sector tend to have higher productivity.

Appendix 3 Determinants of productivity in textiles—comparing Lithuania and China

The textile industry is among Lithuania's most important sectors in terms of exports, employment, and value added. But the industry's share of the country's exports has been falling in recent years, and the ongoing changes in the global market represent a significant threat. The competition from China and other global players in the same market segments threatens the industry in the European Union as well as in Lithuania.

This appendix compares the performance of textile and apparel firms in Lithuania with those in China, probably their most important threat in the global market (Table A3.4 below also provides comparison of the textile sectors of Lithuania, China, India and Poland on some of the investment climate parameters). The analysis uses data from investment climate surveys conducted in the two countries by the World Bank. The empirical strategy is very similar to that used in appendix 2 (see that appendix for most of the methodological details). Total factor productivity in the textile sector is estimated by pooling information across countries, and in a second stage this measure of productivity is regressed on different investment climate variables.

Table A3.4 Selected indicators of the investment climate for the textile sector, selected countries
(percent, except where otherwise indicated)

Indicator	China	India	Lithuania	Poland
Access to finance				
Share of firms reporting that they have a loan or line of credit	24.1	55.6	15.5	—
Share of firms reporting that loan requires collateral	72.3	58.8	86.9	—
Value of collateral as a percentage of loan	77.5	99.5	119.0	—
Human resources				
Share of workforce with 6–9 years of schooling	—	29.7	11.3	31.2
Share of workforce with 10–12 years of schooling	—	25.0	65.7	53.0
Share of workforce with more than 12 years of schooling	—	14.7	22.4	5.6
Schooling of the firm's top manager (years)	3.9	4.4	4.5	4.1
Perceptions on anticompetitive practices				
Share of firms reporting that anticompetitive practices are a major or very severe obstacle	—	20.3	27.6	46.8

Source: World Bank, Productivity and Investment Climate Surveys, China (2003), India (2002), Lithuania (2004), and Poland (2003).

The original sample includes all the firms surveyed in Lithuania and China that operate in the textile sector, including garments—58 firms in Lithuania and 353 firms in China. The assumptions made on the production function are the same as those in appendix 2.[28] The only difference is that here sector fixed effects are not included, since the sample is

[28] The aggregate production function is assumed to be log linear so that the reduced form is given by equation A2.1 in appendix 2.

restricted to firms operating in textiles. The definitions of the variables included are identical to those in appendix 2.

Estimating total factor productivity

The Chinese textile firms in the sample have annual sales averaging $4.46 million, around 3 times the average sales of the Lithuanian textile firms. But the Chinese firms also employ 3.6 times as many staff on average (366 employees, compared with 100 in Lithuania), suggesting that sales per employee differ little between the two countries. The Chinese firms also have more capital per employee ($1,200, compared with $700 for the Lithuanian firms).

Table A3.1 reports the results of estimating equation A2.1 in appendix 2 using ordinary least squares for the sample of textile firms. Standard errors are corrected for heteroskedasticity. The regression controls for differences across firms in inputs and factors of production.

Table A3.1 Determinants of firm-level productivity in textiles: regression results

Variable	Coefficient
Ln intermediate inputs	0.535
	(0.050)***
Ln (capital * capacity utilization)	0.192
	(0.043)***
Ln (employment)	0.380
	(0.056)***
Ln (average years of schooling)	0.019
	(0.044)
Training	0.082
	(0.161)
China	–0.393
	(0.197)**
Observations	304
R^2	0.89

* Significant at the 10 percent level.
** Significant at the 5 percent level.
*** Significant at the 1 percent level.
Note: The specification estimated is in equation A2.1 in appendix 2. The dependent variable is the logarithm of sales. Standard errors are in parentheses.
Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Surveys, Lithuania (2004) and China (2002).

Just as in the analysis for all sectors, the coefficients on the inputs, labor, and capital used in production are positive and significant. Firms with a more educated workforce and firms that offer their workers internal or external training are more productive, though the coefficients are not statistically significant. With differences in the use of the factors of

production controlled for, the regression results show that the average total factor productivity of textile firms differs significantly between China and Lithuania: those in China are 39 percent less efficient than those in Lithuania.

Total factor productivity is estimated for each firm by summing the estimate for the country dummy variable and the residual of regression A2.1, $\hat{\mu}_i$.

Estimating the effects of the investment climate
In this second part of the analysis the estimates of total factor productivity are regressed on different measures of the investment climate facing firms. Recall that the reduced form equation chosen is the following:

$$TFP_i = \alpha + \beta X_i + \gamma IC_i + \varepsilon_i$$

where TFP_i is the total factor productivity of firm *i*; X_i is a set of firm characteristics such as size, age, export intensity, and foreign ownership; and IC_i is an indicator of the investment climate facing firm *i*.

Regression results without investment climate variables

The equation above is first estimated with no investment climate variables, using ordinary least squares, to measure the effect of the control variables included in X_i on TFP_i. The results are reported in table A3.2.

Size. Smaller textile firms (those with 50 or fewer employees tend to be more efficient than larger firms. On average, very large firms (those with more than 250 employees) tend to have lower total factor productivity than medium-size firms. The average size of firms in Lithuania (around 100 employees) is smaller than that in China (around 366).

Age. The age cohort of a firm is often associated with the firm's productivity. Older firms in the sample tend to be less productive, though the difference is not statistically significant.

Exporting. The sample data suggest that firms that export have higher total factor productivity than firms that do not. Textile firms in Lithuania more frequently reported that they export (65 percent) than did those in China (35 percent). Moreover, firms in Lithuania reported exporting a larger share of total sales (an average of 58 percent) than firms in China (28 percent).

Table A3.2 Firm characteristics and productivity in textiles: regression

results

Variable	Coefficient
Size: 51–250 employees	–0.2
	(0.106)*
Size: > 250 employees	–0.276
	(0.122)**
Age	–0.045
	(0.070)
Exports	0.2
	(0.081)**
Foreign ownership	0.301
	(0.139)**

* Significant at the 10 percent level.
** Significant at the 5 percent level.
*** Significant at the 1 percent level.

Note: The specification estimated is in equation A2.2 in appendix 2 without investment climate variables. The dependent variable is total factor productivity. Age is a dummy variable that takes the value 1 if the firm is more than three years old. Exports is a dummy variable that takes the value 1if the firm exports more than 10 percent of total sales. Foreign ownership is a dummy variable that takes the value 1if the firm has more than 10 percent foreign capital. Standard errors are in parentheses.
Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Surveys, Lithuania (2004) and China (2002).

Foreign ownership. The sample provides evidence that firms with foreign participation tend to be 30 percent more productive than domestically owned firms. Unlike in the analysis in appendix 2, this difference is significant at conventional significance levels. Around 15 percent of textile firms in both countries reported having some of their capital in foreign hands. But firms in Lithuania tend to have higher levels of foreign ownership (12.3 percent on average) than those in China (9.5 percent).

Regression results with investment climate variables

The indicators used to study the effect of investment climate were determined by the questions in each survey and the quality of the responses. As before, one indicator is regressed at a time to avoid collinearity problems, and for each firm the average value of indicators for its country, city, and size class is used to avoid endogeneity problems. The estimation results are in table A3.3.

Access to bank credit. In Lithuania 30 percent of textile firms reported having access to bank credit, while in China 23 percent did. Textile firms with access to a bank loan or line of credit tend to have higher total factor productivity, though the difference is not statistically significant.

Business regulation, bureaucratic burden, and bribes. Textile firms face a substantially smaller regulatory burden in Lithuania than in China. While firm managers in Lithuania reported spending around 8 days in meetings with officials in the previous year, those in

China reported spending an average of 19 days in such meetings. The regression results again show that the contact with officials has a negative effect on total factor productivity, though it is not statistically significant at conventional levels.

In the Lithuanian sample 45 percent of firms reported having made gifts or informal payments to public officials to "get things done," compared with only 22 percent in the Chinese sample. The regression results show a positive correlation between the payment of bribes and the level of total factor productivity.

Table A3.3 Investment climate and productivity in textiles: regression results

Variable	Observations	Coefficient	
Bank credit	304	0.144	
		(0.213)	
Inspections by government officials	304	–0.004	
		(0.003)	
Power	304	–0.0003	
		(0.007)	
Competition	304	–0.002	
		(0.002)	
Bribes	304	0.297	
		(0.217)	
Export customs	287	–0.016	
		(0.008)	**
Innovation	304	0.580	
		(0.202)	***

* Significant at the 10 percent level.
** Significant at the 5 percent level.
*** Significant at the 1 percent level.
Note: The specification estimated is in equation A2.2 in appendix 2. The dependent variable is total factor productivity. Controls for size, exports, age, and foreign ownership are included in each regression, but coefficients are not reported. Bank credit is the proportion of firms with access to a bank loan or line of credit Inspections by government officials is the number of days spent in required meetings with officials. Power is the total number of hours that the firm experiences interruptions in power supply. Competition is the number of competitors faced in the domestic market. Bribes is the proportion of firms reporting having made gifts or informal payments to public officials to "get things done." Innovation is a dummy variable that takes the value 1 if the firm engaged in any type of innovation process. Standard errors are in parentheses.
Source: Authors' calculations based on data from World Bank, Productivity and Investment Climate Surveys, Lithuania (2004) and China (2002).

Infrastructure. The effect of infrastructure on productivity is assessed by looking at the number of days with an interruption in power supply in the previous year. Textile firms in Lithuania reported power outages occurring less frequently—an average of 0.7 times in the previous year—than did Chinese firms (7.9 times). This difference contributes to higher total factor productivity in Lithuania, since power outages have a negative, though not statistically significant, effect on total factor productivity.

Because an important part of the textile sector's output is exported, the analysis also looks at the effect on productivity of customs quality. Firms in Lithuania reported that

exported goods take an average of one day to clear customs, while firms in China reported that clearance takes six days. This difference also contributes to higher total factor productivity in Lithuania. The greater the average number of days it takes for exported goods to clear customs, the lower is firm productivity.

Competition. Textile firms in Lithuania face less competition than those in China. Lithuanian textile firms reported an average of 47 competitors in the domestic market, while Chinese textile firms reported an average of 72. There is evidence that firms facing greater competition in their region and sector tend to have lower productivity, though the effect is not statistically significant in this sample.

Innovation. A firm's innovation strategy is often argued to be among the most important determinants of its future productivity and therefore of its growth. Innovation is measured using a dummy variable that takes the value 1 if the firm introduced new products (or services) in its existing line of business, entered a new line of business in its market, introduced a new process improvement, or established new management techniques or quality controls in production. While 72 percent of textile firms in Lithuania reported such innovation, only 64 percent in China did. Innovation tends to be significantly associated with the higher productivity of the firms in Lithuania.

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