



DIRECTIONS IN DEVELOPMENT
Private Sector Development

Fostering Entrepreneurship in Azerbaijan

Smita Kuriakose, Editor



THE WORLD BANK

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THE WORLD BANK
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Abbreviations

ASAN	State Agency for Public Services and Social Innovation
ECA	Europe and Central Asia
GDP	gross domestic product
IFC	International Finance Corporation
KISED	Korea Institute of Startup and Entrepreneurship Development
OECD	Organisation for Economic Co-operation and Development
R&D	research and development
SME	small and medium enterprise
UN	United Nations

All dollar amounts are U.S. dollars unless otherwise indicated.

Overview

A dynamic and vibrant private sector is crucial to economic growth, with firms making new investments, creating jobs, improving productivity, and promoting growth. Entrepreneurial activity is pivotal to the continued dynamism of the private sector, as the generation of new businesses fosters competition and economic growth. This is particularly relevant for Azerbaijan, whose government faces a central challenge to create conditions that will facilitate growth in nonoil tradable sectors.

This study uses data from the new 2012 World Bank Entrepreneurship Survey to gauge new firm growth in the formal sector in Azerbaijan and data from World Bank Enterprise Surveys to analyze innovative activity in existing firms. It includes detailed case study analyses to complement these findings and to highlight the determinants of high-growth entrepreneurs.

Entrepreneurship in Azerbaijan

Survey results indicated the following information about Azerbaijani entrepreneurs:

- *Founder Characteristics.* The majority (90 percent) of surveyed firms had only one founder. Only about 3 percent of the founders of surveyed firms were women. The most common education level among founders was a bachelor's degree (62 percent), followed by a postgraduate degree (27 percent). Firms in high-tech sectors¹ had a larger share of founders with a postgraduate degree, and firms in non-high-tech sectors had a larger share of founders with technical education.
- *Founders' Motivation.* The top two reasons cited for founding a business were sensing an opportunity to make more money and wanting to be one's own boss. Not finding a suitable job was cited by more than half of business owners. Fearing loss of one's job was the least common reason. These patterns are in

line with trends in the rest of the developing world and in Europe and Central Asia (ECA).

- *Firm Characteristics and Strategy.* The average size of surveyed firms was 44 full-time employees. The largest firm in the sample had 1,600 employees, and 30 percent had fewer than 10 employees. The majority (97 percent) of surveyed firms had no research and development (R&D) expenditures in the previous five years and did not envision spending on R&D in the next two years. Some 96 percent of businesses drew funding from their founders' own savings.
- *Perceived Obstacles.* The top three cited obstacles in setting up or operating a firm were difficulty finding the necessary funding, large initial investment, and difficulty finding business partners. The most commonly cited legal and regulatory constraints were continually changing taxation regulations and bankruptcy legislation making the cost of failure immense.
- *Innovative Activity.* Only 12 percent of the respondents indicated that they had introduced a new or substantially improved product or service in the previous three years. The main objective behind introducing a new product or service was to diversify the firm's product mix for the domestic market. Increasing foreign sales was not cited by any respondents as an important objective.
- *Sources of Knowledge.* The most important sources of knowledge for new business opportunities were clients or customers and market research through sales in the domestic market and other competitors. Universities, technical institutes, R&D firms, and external commercial labs were among the least important sources of knowledge, indicating both the nature of innovative activities in these enterprises and the lack of industry-relevant information from research and training institutions.

Policy Recommendations

The core objectives of Azerbaijan's development strategy are to diversify the economy away from the oil sector and sustain high employment and growth. Encouraging high-growth entrepreneurship can help Azerbaijan achieve these goals as it moves toward new opportunities in value added and tradable sectors.

This study shows that high-growth entrepreneurialism is low in Azerbaijan and that innovative activity among firms is very low. Several factors hinder business growth and entrepreneurship:

- Lack of competition, especially among smaller firms.
- Financial systems that are not conducive to business development. Companies cite high interest rates and risk-averse lending policies (requiring high levels

of collateral) as substantial hindrances to expansion. In addition, risk capital is in short supply. Few entrepreneurs reported receiving funding from the domestic financial system; most relied on their own resources to support the development of their business.

- Lack of industry-relevant skills.

The government could play an important role by removing bottlenecks that impede entrepreneurialism in the general business environment as well as by designing new financial policy instruments that foster entrepreneurship and innovation. In doing so, the government needs to exercise care that the design and management of these instruments prevent capture or corruption and promote efficiency.

Increased Competition

Lack of competition is an issue in Azerbaijan, particularly for small and medium enterprises (SMEs), which face uneven treatment within the enterprise sector. Government ownership of companies as a share of total companies (3 percent) remains pervasive and is more than twice the ECA average (1.1 percent). This is compounded by information gaps in the ownership of banks and selected enterprises as well as by gaps in the disclosure of financial information that prevent increased competition. The government, together with international donors such as the U.S. Agency for International Development, has been working since 2011 to draft a competition code that unifies the separate individual laws and legislative acts on unfair competition and antimonopoly activity into a single code and conforms to international best practices. In addition, there is a need to undertake an analysis of other legislation that affects the competition environment in the country and undermines the level playing field for businesses (for example, tax exemptions, subsidies, and so on).

A competition code that is subject to an independent external assessment and conforms to international best practices should be finalized and enacted, and an independent antimonopoly agency should be established to enforce it.

Increased Access to Information

Several organizations and programs provide support services and access to preferential credit for SMEs. However, entrepreneurs lack adequate information on these agencies and programs. Further, while the Ministry of Economic Development has aggregate data on the use of the National Entrepreneurship Fund, information on firms that have previously benefitted from these funds would be informative for future policy and would serve as a good demonstration effect for new entrepreneurs. These data would also be useful for assessing the effectiveness of these funds and their impact on beneficiaries, thus informing future policy interventions.

Information on existing programs, including clear eligibility criteria and target beneficiaries that have accessed the funds, should be better disseminated.

Legal and Regulatory Simplification

Over the last few years, the government has embarked on reforms to facilitate business entry, such as the introduction of the one-stop-shop reform for business registration. While the one-stop shop greatly simplified the licensing and permits system, the government can make additional improvements, particularly in implementing more advanced tools such as an improved business registry, online application forms, and automatic registration. The permit system is not precise, and application decisions are still subject to ad hoc decisions. The newly established State Agency for Public Services and Social Innovation (ASAN), a single window agency for public service delivery, could be used as a platform by expanding its mandate and providing business-related services of issuing permits in an efficient way.

While inspections are important, frequent and arbitrary inspections can stifle entrepreneurship in a big way. No legislation regulates inspections in a systematic manner. There have been improvements in the legal framework of permits and inspections such as the introduction of the new centralized e-registries of inspections (<http://www.yoxlama.gov.az>) and of permits and licenses (<http://www.iceseler.gov.ua>), which are both supported by the International Finance Corporation (IFC). However, progress has been slower than anticipated.

Greater transparency and certainty must be ensured. The government should ensure that the number of inspections a firm is subjected to and the methods applied for selecting the companies for inspection are transparent and publicly available to all enterprises.

Further, expansion of e-services through data sharing between ministries should be facilitated to increase efficiency in issuing permits and conducting inspections by reducing discretion.

Access to Finance

Financial systems are not conducive to business development. Companies cite high interest rates and risk-averse lending policies (requiring high levels of collateral) as major hindrances to expansion. In addition, risk capital is lacking. As a result of a lack of borrowing opportunities, SMEs must rely on owners' capital or on retained earnings for investments, which greatly impedes their growth.

Secured transactions, particularly for movables, are important for SMEs, which have more trouble accessing credit. Though Azerbaijani law permits the creation of security interests in both movable property and immovable property, in practice, banks rarely extend finance secured by movable property, except registered movable property such as vehicles, ships, and securities. A nonpossessory security interest, which allows the borrower to keep the equipment and use it as collateral, is a basic feature of a modern secured transactions framework, which is undeveloped in Azerbaijan due to the lack of a collateral registry and supporting legal framework.

Security interests in all types of movable property should be allowed to be registered, and an electronically searchable collateral registry should be created for both

movable and immovable assets. The registry should be authoritative—that is, parties should not be able to circumvent registry priority.

Access to Early-Stage Risk Capital

During the early stages of new innovative companies, which usually have few or no sources of revenue and require large initial capital investments to develop their products, loan payments have a high opportunity cost. The role of early-stage risk capital is highly relevant for innovative startups and SMEs. Two public programs that facilitate access to finance are:

- The National Fund for Entrepreneurship Support, with an aim to support more diverse growth by developing nonoil businesses.
- The Azerbaijan Investment Company, established to develop nonoil businesses through equity investments.

The government can establish favorable financing programs for SMEs by developing early-stage risk capital. A thorough evaluation of the efficacy of existing programs would inform future policy interventions and identify ways to strengthen current programs.

Public Support Instruments to Access Export Markets

Openness to trade is an important source of knowledge transfer. “Learning from exporting” often takes place when exporting firms are under pressure to meet quality standards, including safety and environmental regulations, established by their customers or the regulatory authorities of destination countries. Such pressures can either strengthen incentives for exporting firms to upgrade their technology or hinder other firms that lack the requisites for exporting to more sophisticated markets.

Given the government’s emphasis on diversifying the economy, it could focus on three priority areas:

- Introducing instruments of financial assistance to defray a portion of the cost that firms incur to acquire the requisite capacity. These could include matching grants that defray some of the costs of entering new markets through business development services.
- Providing basic infrastructure to enable firms to adhere to international standards. By building accredited control laboratories, the government could support firms in industries such as food processing, which is a key priority sector for the economy and one in which adhering to global standards is a prerequisite for surviving in the global market. The World Bank is working closely with the European Commission in relation to the new agriculture project to provide this infrastructure.
- Formulating policies to promote backward links between foreign firms and the domestic economy by acting as a facilitator and gathering information

on possible opportunities for links;² assisting in identifying partners (and arrangements) by matching suppliers' capabilities and buyers' needs (legal assistance, fairs, missions, conferences and exhibitions, and so forth); and providing economic incentives in the form of tax exemptions and subsidies to promote training and technology transfer from buyer firms to local supplier firms.³

Skills Development

Stakeholders repeatedly cited inadequate skills as a key hindrance to developing local industry. The higher education curriculum is outdated, and the higher education system is unable to produce industry-relevant skills to support the economy's new strategic priority sectors. Despite initial government efforts, drastic reforms need to be made to address the existing skills gap in the economy.

Medium- to long-term policies need to reorient the higher education system to produce more industry-relevant skills especially for the new priority sectors that have been identified by the government. In addition, more emphasis must be given to industry-relevant vocational training and education courses that cater to the technical needs of the various priority sectors identified by the government.

Increasing Industry-Research Collaboration and In-Firm R&D

There is virtually no industry-research collaboration in Azerbaijan. Furthermore, R&D is limited even among high-growth firms. Synergies need to be built between the industry and research communities, and firms must be incentivized to conduct more in-house R&D.

The government can provide incentives for industry and researchers to effectively collaborate.

Technology Transfer

Organizations can facilitate knowledge transfer from research institutions to SMEs through collaborative research and technology programs as well as through staff exchanges and secondments (by researchers and engineers placed in firms).

Enhancing in-house R&D capabilities is fundamental. The government should introduce policy instruments that foster R&D and innovation in the private sector, including direct funding (grants and subsidies), matching grants, and R&D tax credits.

Facilitating Firm Exit and Restructuring

Lowering barriers to exit and enabling restructuring of viable firms are important means of fostering entrepreneurship. "Insolvency" in Azerbaijan is legally defined as the inability of a debtor to pay its debts as they become due but does not include a situation in which the sum of a debtor's liabilities exceeds the sum of its assets. It is therefore possible that a viable business with cash flow problems may be pronounced insolvent and forced into bankruptcy. At present, no mechanism incentivizes post-petition financing. Further, a debtor may not initiate insolvency proceedings in cases of pending or potential insolvency. This means

that a debtor cannot be proactive at an early stage of financial difficulties, which could reduce the chances of saving a distressed yet viable business.

The insolvency law should be changed to include incentives that motivate the banking sector to provide post-petition financing.

Raising Awareness

Governments elsewhere have also played a key role in raising awareness of the private benefits of undertaking entrepreneurial activities. In the United Kingdom in 1979, the government's idea was to change the social attitudes of the U.K. population away from what the government perceived as a "dependency culture," in which workers relied on large organizations and the state for employment, to an attitude among individuals of striving to start their own businesses and creating an "enterprise culture."

School curriculum in Azerbaijan needs to factor in prerequisites that encourage innovative thinking. Showcasing successful entrepreneurs could go a long way in fostering the entrepreneurship culture in society.

Summary of policy recommendations and timelines

<i>Policy measure</i>	<i>Timeline</i>
<i>Facilitating business entry and increasing efficiency</i>	
Facilitate the expansion of e-services through data sharing between ministries to increase efficiency in issuing permits and conducting inspections by reducing discretion.	3–6 months
Ensure that the number of inspections a firm is subjected to and the methods applied for selecting the companies for inspection are transparent and publicly available to all enterprises.	0–3 months
<i>Increased competition and access to information</i>	
A competition code that is subject to an independent external assessment and conforms to international best practice should be finalized and enacted, and an independent antimonopoly agency should be established to enforce it.	3–6 months
Better disseminate information on existing programs, including clear eligibility criteria and target beneficiaries that have accessed existing funds.	0–3 months
<i>Increased access to finance</i>	
Allow security interests in all types of movable property to be registered, and create an electronically searchable collateral registry for both movable and immovable assets.	6–12 months
Conduct a thorough evaluation of the efficacy of existing programs to inform design of new support programs that finance early-stage risk capital.	0–3 months
<i>Increased access to markets</i>	
Introduce financial instruments to defray a portion of the cost that the firm would have to incur to acquire the requisite capacity to export to more sophisticated markets (for example, matching grants to buy business development services).	6–12 months
Provide basic infrastructure to enable firms to adhere to international standards by building accredited control laboratories.	6–12 months
Formulate policies to promote backward links between foreign firms and the domestic economy.	6–12 months
<i>Develop skills</i>	
Reorient higher education programs to produce more industry-relevant skills for priority sectors identified.	Greater than 1 year
Emphasize industry-relevant vocational training programs.	6–12 months

table continues next page

<i>Policy measure</i>	<i>Timeline</i>
<i>Increasing firm level R&D and industry-research linkages</i>	
Provide incentives for industry and researchers to effectively collaborate.	6–12 months
Introduce programs and policies that foster R&D in the private sector (such as direct funding, matching grants, and R&D tax credits).	6–12 months
<i>Facilitating firm exit and restructuring</i>	
Change the insolvency law to include incentives that motivate the banking sector to provide post-petition financing.	6–12 months
<i>Raising awareness</i>	
Increase awareness of entrepreneurship by showcasing successful entrepreneurs.	0–3 months
Introduce changes to the school curricula that encourage innovative thinking.	6–12 months

Notes

1. Chemical industry, manufacture of basic pharmaceutical products, manufacture of computer and other electronic equipment, manufacture of electrical equipment, and information and communication.
2. Either directly or by supporting private institutions, governments promote the creation of information exchanges that could range from lists of inputs and materials available locally—which might include prices and qualities—to names, locations, and profiles of local suppliers.
3. By exempting exporters from a value added tax, governments encourage the use of local inputs; by treating costs incurred in the creation of links as tax-deductible expenses from corporate income tax, governments promote their creation.

The Drivers of Entrepreneurship and Economic Growth

Introduction

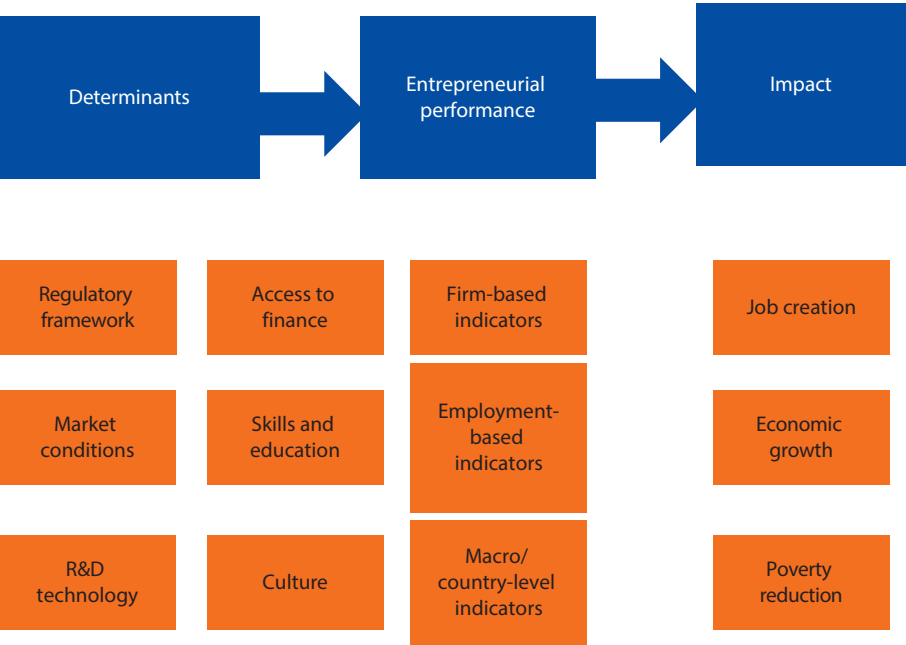
Job creation and productivity growth are at the forefront of today's global development agenda. The 2013 World Development Report on jobs identified entrepreneurship as an important tool in addressing these dual goals.

Increased productivity occurs due to the reallocation of new products and services entering markets toward profitable uses. The Organisation for Economic Co-operation and Development (OECD)–Eurostat Entrepreneurship Indicator Program (OECD 2009) established the following definitions building on past theoretical contributions in the literature:

- *Entrepreneurs* are those persons (business owners) who seek to generate value through the creation or expansion of economic activity by identifying and exploiting new products, processes, or markets.
- *Entrepreneurial activity* is an enterprising human action in pursuit of the generation of value through the creation or expansion of economic activity by identifying and exploiting new products, processes, or markets.
- *Entrepreneurship* is the phenomenon associated with entrepreneurial activity.

These definitions take into consideration several important issues. First, by distinguishing between entrepreneurs and entrepreneurial activity, these definitions recognize that while entrepreneurs engage in entrepreneurial activity, such activity does not necessarily require the actions of entrepreneurs. That is to say, the definitions recognize the possibility of entrepreneurial activity within extant businesses by individuals who do not have a stake in the company (employees). Second, not all businesses—in fact, not all new businesses—are entrepreneurial in the sense of identifying or creating new products, processes, or markets. Third, rather than concentrating on entrepreneurial individuals or companies that succeed, the definitions broaden the scope of analysis to those that seek to generate value through such activity. Fourth, the notion of value is left open to include the

Figure 1.1 Conceptual Framework



Source: OECD 2009 with some modifications.
Note: R&D = research and development.

traditional objective of economic growth as well as other objectives such as increasing employment, decreasing inequality, and tackling environmental problems. But the importance of entrepreneurship goes beyond firm entry and relates to the introduction of new products and process innovation, which enables firms to enter new markets.

This study uses the entrepreneurship model put forth in the OECD-Eurostat Entrepreneurship Indicator Program (OECD 2009), with minor modifications (figure 1.1). The model comprises various determinants that policy can affect and that in turn influence entrepreneurial performance, or the amount and type of entrepreneurship that takes place. The model then refers to the impact of entrepreneurship on higher level goals such as economic growth, job creation, and poverty reduction. This study focuses on determining the level of entrepreneurship in Azerbaijan and analyzes the role of each determinant in both fostering and constraining entrepreneurial activity.

Motivations for Entrepreneurs

Entrepreneurs view opportunities in the economy by measuring their profit-making potential; that is their first motivation. Entrepreneurs will not pursue a societal need unless they can successfully make a profit. They are motivated by the accumulation of wealth but also by the need to achieve (Shane, Locke, and Collins 2003). Despite being risk takers, they may not seek out the riskiest

opportunities, but they are willing to take on some risk. Entrepreneurs evaluate opportunities in the marketplace differently depending on how they perceive the level of risk and assess the capacity for mitigating it. Several external factors influence the level of risk, such as environmental regulations, political attitudes, industry regulation, industry health, state of technology, market size, and availability of resources, including venture capital and skilled labor (Hayter 2011).

Entrepreneurs may be pushed into self-employment and starting a business by necessity—that is, the lack of other employment options and the need for income. Alternatively, they may be pulled into starting a business because they recognize opportunities and choose to pursue them. Necessity-driven entrepreneurship is expected to be more prevalent in less developed and developing (factor-driven) economies. The importance of necessity as a motivator gradually decreases with greater economic development, while that of opportunity increases (Kelley, Singer, and Herrington 2012).

Determinants of Entrepreneurship

As the conceptual framework in figure 1.1 shows, a host of factors determine the propensity of an individual or a firm to engage in entrepreneurial activities. It must be recognized at the outset that the determinants highlighted in this framework are in no way independent of each other.

The overall regulatory framework encompasses numerous elements, including the number of days required to start a business, insolvency and bankruptcy laws that determine firm survival and exit, and factors such as the extent of red tape. The overall regulatory framework thus impacts both firm entry and firm exit. Klapper and Love (2012) analyzed the World Bank Entrepreneurship database (World Bank 2008a), which collects data on total and newly registered businesses in more than 100 industrial and developing countries. Their analysis shows that a strong business and regulatory environment can encourage entrepreneurial activity. Capture and corruption also determine the level of productive entrepreneurial activity, as they directly influence the expected payoffs associated with undertaking entrepreneurial activities.

Lowering bankruptcy costs is another important step in enabling new firms to enter the market, especially in industries with naturally high entry rates (Klapper, Laeven, and Rajan 2006). Bankruptcy law and reform deeply affect entrepreneurs who are subjected to external risks when starting and running their businesses. An effective bankruptcy system can provide the possibility of a “fresh start” if the first effort fails and can limit entrepreneurs’ losses in bankruptcy. A forgiving personal bankruptcy law and ready availability of limited liability can stimulate entry by “latent” entrepreneurs who would otherwise be too risk-averse to start their own business (Armour and Cumming 2008). Countries with high or unlimited exemptions in personal bankruptcy law attract 25 percent more entrepreneurial activity than those with low exemptions (Fan and White 2003; Mathur 2009), although increasing the cost of credit (Berkowitz and White 2002).

Access to finance is an important determinant of innovative activity for both new and existing firms. Impediments to accessing finance are often larger for small and medium enterprises (SMEs) and stem partly from the demand side of financial markets. Credit is more readily available to businesses that have immovable property (land and buildings) to be used as collateral than to those having movable assets, as banks strongly prefer immovable property to secure a loan. Insufficient suitable collateral is often cited among the top reasons for difficulty accessing credit, especially for small firms. Other obstacles to expanding access to finance include insufficient or inadequate financial and other information on SMEs available to bankers, who therefore find it difficult to make an informed credit decision. In addition to finance from banks, venture capitalists and angel investors can foster entrepreneurial activity.

Market conditions, which are determined largely by the overall regulatory framework, include such factors as the level of competition in factor and product markets. Market structure and competition are likely to affect a firm's ability to innovate or undertake other entrepreneurial activities. In theory, the relationship between competition and innovation by incumbent firms is ambiguous (Aghion and others 2005). On the one hand, firms that are far behind the technological frontier may reduce investment in innovation in the face of competition from new entrants because innovation is very costly to them and competition would erode rents obtained from innovating. On the other hand, firms that are close to the technological frontier need to spend relatively little to stay ahead of new entrants; competition, therefore, would create greater incentives for them to spend on innovation. The level of competition is in turn influenced by an economy's openness to trade and foreign direct investment, which increase exposure to foreign competition and induce the adoption of more advanced technologies in both export- and import-competing firms (see Schiff and Wang 2006). Furthermore, participation in export markets enables firms to become more productive, a phenomenon referred to as "learning through exporting." Firms can absorb technology by exporting to customers who will provide signals in meeting standards and requirements to access global markets. Lederman (2009), using firm-level data from enterprise surveys in several countries, finds that a firm's exporting status (that is, whether it exports more than 10 percent of its sales) is positively correlated with the probability that it innovates. Historical accounts of the rise of East Asian export industries stress the role of advanced country buyers as conduits of technological and managerial knowhow to developing country firms (Pack and Westphal 1986).

Research and development (R&D) capacity is a crucial determinant of a firm's ability to innovate. Lederman (2009), using firm-level data, finds evidence that R&D is significantly and positively correlated with the probability that a firm innovates. R&D has a role in developing a firm's ability to identify, assimilate, and exploit knowledge from the environment—that is, to enhance the entrepreneurial capacity of the economy. Here it is important to employ a broad definition of R&D: the inclusion of improvements in existing processes or products as well as the imitation and adoption of knowledge. Hence, R&D is not restricted to

original innovation. While R&D investment oriented toward “new-to-the-world” innovations predominates in developed economies, developing economies need R&D to be able to absorb new technologies and keep up with existing global technological trends, a phenomenon that Cohen and Levinthal (1989) refer to as the “second face of R&D.”

A vital determinant of entrepreneurial activity is the accumulation of human capital and the skill level of the workforce. An educated workforce can be considered a precondition for a country to have the capacity for knowledge acquisition and adaptation, especially in an environment in which firms face competitive pressures that call for frequent changes in product mix and production technology (Kuriakose and others 2011). In addition to education levels, evidence suggests a relationship between the level of training and technological adaptation. Higher levels of training and skills typically lead firms to identify new technologies that need to be mastered to increase competitiveness. Yet the firm’s decision to acquire a certain technical competency often necessitates training and changes in the workforce’s skill composition. For example, training in Russian enterprises is highly correlated with indicators of innovativeness such as R&D or licensing of patents and knowhow, introduction of new production technologies, and high-technology exports (Tan and others 2007). Diaspora and other networks can serve as a source of skills, entrepreneurial ability, and business and marketing expertise. The diaspora can also contribute to entrepreneurship by strengthening trade and investment links (World Bank 2008b).

Entrepreneurship also depends on various social and individual characteristics of gender and culture. It involves taking risks, and potential entrepreneurs cannot be risk-averse. The recent European Bank for Reconstruction and Development’s (2011) *Life in Transition Report* suggests that despite the fact that women in transition economies have similar levels of education, training, and skills as men, they are less likely to become entrepreneurs, with one of the reasons cited being the fact that women are more risk-averse.

Rather than an inborn skill, entrepreneurship is largely a product of environment. It involves a complex of economic and social behaviors. Entrepreneurship can flourish only in the right environment. Social values, culture, government policies, the political system, technology, economic conditions, customs, and laws influence entrepreneurship. Iyer and Schoar (2010) explored the importance of culture in determining contractual outcomes through field experiments in India and found that entrepreneurs from different communities vary in how they conduct business and negotiate contracts.

Cultural values deeply affect entrepreneurship and economic development. Culture affects the entrepreneurial process and focuses on the discovery and interpretation of opportunities. It trains people along particular lines. It nurtures enterprising and risk-bearing behavior. Starting with Max Weber, sociologists have argued that entrepreneurship is most likely to emerge in a specific social culture. According to them, social sanctions, cultural values, and role expectations are responsible for the emergence of entrepreneurship. Some cultures are enormously supportive of entrepreneurship. Others may not regard it so favorably.

These differences go a long way toward explaining why some societies are vibrant and progressive and others stagnate.

High-Growth Entrepreneurship

An important distinguishing factor among SMEs is their rate of growth. The OECD defines “high-growth enterprises” as firms that have annualized growth in number of employees above 20 percent over a three-year period and have at least 10 employees at the beginning of the measurement period (OECD 2009). Analysts see high-growth enterprises as a source of entrepreneurial vitality that are promoted as important drivers of economic growth and job creation. An especially important subset of high-growth enterprises is firms that are less than five years old. These young high-growth firms—often referred to as “gazelles”—account for less than 1 percent of all firms in most countries throughout the world but are responsible for a much larger percentage of new jobs and economic growth.

Recent studies have alerted policy makers to the importance of high-growth firms as job creators. Henrekson and Johansson’s (2010) review of the literature finds that, despite many differences in measures of growth, time periods, industries, firm sizes, firm ages, methods of analysis, and geographical coverage, there is agreement on several facts:

- A few rapidly growing firms—gazelles—generate a disproportionately large share of all new net jobs compared with non-high-growth firms. This is more pronounced in a recession, when gazelles continue to grow.
- Gazelles tend to be younger than average. Age seems to be the most important differentiating factor, more important than size.
- Gazelles are of all sizes. Small firms dominate in terms of numbers, but larger gazelles are important contributors of jobs, especially a small subgroup called supergazelles. Supergazelles are both large firms and major net job creators.
- Gazelles are spread over all industries. They are not overrepresented in high-technology sectors as is sometimes hypothesized. If anything, they appear to be overrepresented in service sectors.

Regarding the “mice against gazelles” debate—whether the entry of many new firms (mice) or the rapid growth of a few firms (gazelles) generates employment growth—the literature suggests that the two views are complementary. The continuous entry of new firms is required for net job creation. The evidence indicates that a high inflow of new firms increases the likelihood of generating young gazelles, which tend to contribute more to employment than do older gazelles.

Finally, Henrekson and Johansson (2010) argue strongly that net employment growth must be viewed in the perspective of Schumpeterian creative destruction, in which net employment growth is the result of considerable churning and restructuring in a dynamic process of firm entry, expansion, decline, and exit. While some firms may be more important than others in creative destruction,

a prerequisite for their growth is that creative destruction works so that efficient, new, and expanding firms attract resources from inefficient firms released through contraction and exit. In other words, turbulence in the sense of firm entry and exit is necessary to boost job creation. An employment-enhancing policy should lower the barriers for firm entry and exit, thus supporting the experimental process that allows repeated trials and increases the chances of establishing new gazelles.

Role of Government

A fundamental question stemming from analyzing these determinants of entrepreneurship is how to design effective public policy that promotes innovative firm creation and enables existing firms to catch up, improve productivity, and grow. Experiences from Asian countries and developed economies have shown that innovative SMEs and knowledge-based firm creation have played a major role in the development of new national economic advantages. In this context public policy is pivotal in creating an enabling environment that helps alleviate the market failures that inhibit firm growth.

Emerging markets have other environmental conditions that are not present (or are less prevalent) in developed markets, and investors considering investing in emerging markets will face added risk as a result. Given the increased risk (or even uncertainty) that investors may face when taking a stake in a company in an emerging market, the government may need to intervene by subsidizing financing or by absorbing some of the investment risk. Its possible actions include:

- Supporting companies at the seed stage, when market-based mechanisms for funding tend to fail.
- Mitigating the costs of failure so that entrepreneurs can recover from a failed business.
- Ensuring that everyone plays by the same rules.
- Training competent business managers and tying government support to requirements for monitoring and management assistance.
- Being selective and using meritocratic criteria in choosing which companies to fund.
- Systematizing seed and venture capital financing.

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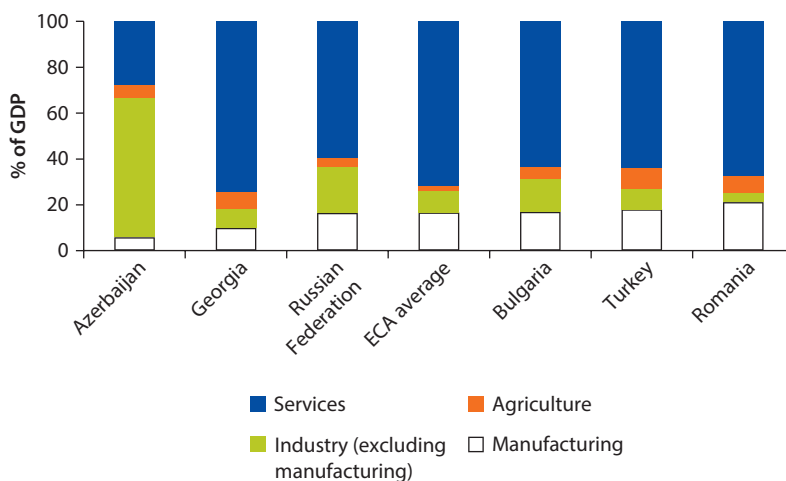
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Azerbaijan's Economic Structure and the Role of Entrepreneurship

Motivation

The central challenge today for the government of Azerbaijan is to create conditions that facilitate growth in the nonoil tradable sectors. Azerbaijan's economy has developed around its strong natural resources base, which accounts for over half of gross domestic product (GDP) (figure 2.1) and 90 percent of exports. Although Azerbaijan has experienced rapid oil-driven growth over the last decade, this has not spilled over systematically into other areas of the private sector. Nonoil growth has been dominated by nontradable sectors led by construction, which accounts for about 60 percent of nontradables.

Oil production in Azerbaijan declined 10.8 percent in 2011 and 7.1 percent in the first half of 2012, due mainly to planned maintenance on several oil fields. By contrast, natural gas production grew 3.1 percent in the first half of 2012, compared with a 2.2 percent decline in 2011. To sustain strong improvements in economic activity and to provide well paying jobs for the population, Azerbaijan will need new sources of export-led growth in the nonoil sector. Diversification is thus important for three reasons. First, while forecasts of oil and gas production are subject to uncertainty, Azerbaijani planners must face the prospect of natural resource revenues flattening over 5–10 years and then eventually declining. Developing nonoil exports now will reduce the effect of that eventuality on employment and incomes. Second, less reliance on oil and gas revenue will reduce the vulnerability of the economy to price fluctuations in these volatile commodities. Third, while oil and gas generate the lion's share of revenues for the economy, the sector is directly responsible for few jobs. The nonoil economy is the main employer; increasing its export competitiveness is therefore key to job creation today.

Figure 2.1 Breakdown of Value Added, 2011

Source: World Bank 2013.

Note: ECA = Europe and Central Asia; GDP = gross domestic product.

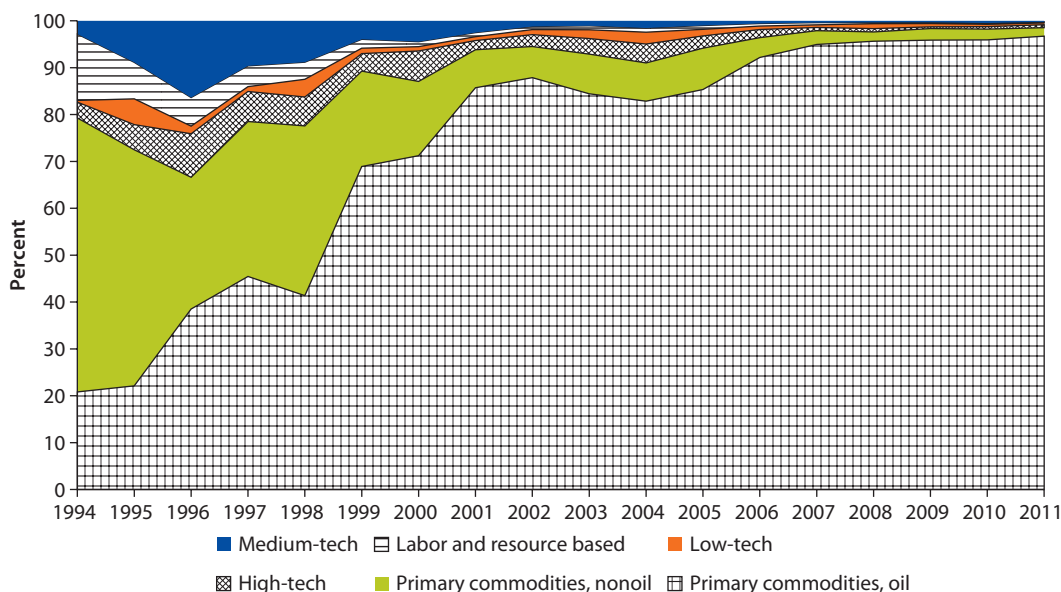
Recent Economic Performance

Trade Structure

Azerbaijan has a high trade-to-GDP ratio, averaging 64 over 2004–11 and thus revealing a high openness to trade. However, high economic growth has materialized due mainly to oil exports, which accounted for 95 percent of total exports in 2011 (figure 2.2; see appendix B for a description of categories). Other exports included precious metals (0.3 percent of total exports), polyethylene (0.3 percent), hazelnuts (0.2 percent), and iron ores and concentrates (0.1 percent). Exports of high skill and technology intensive products (0.6 percent) and low skill and technology intensive products (0.4 percent) have been decreasing. The high concentration of exports of oil resources makes the economy extremely volatile and dependent on the global oil price and other economies' performance. Exports of services such as transportation (31.2 percent of total services exports), travel (30.1 percent), and services not allocated¹ (23 percent) also featured double-digit figures in 2011, but these were mostly related to the hydrocarbon (oil and gas) sector growth. Diversifying exports is particularly critical and remains an issue today.

In contrast with its export basket, Azerbaijan's import basket is quite diverse. Important importable commodities include capital goods, coming mainly from China, Germany, Italy, the Russian Federation, and Turkey. Machinery and electrical technological equipment accounted for 31 percent of imports in 2011, followed by vehicles at 17 percent (see figure 2.3).

Trade is still dominated by large, often state-owned, enterprises. Small firms and entrepreneurs rarely participate in international trade. A 2009 survey of small and medium enterprises (SMEs) found that only 2 percent of surveyed entities participated in exports and 2 percent in imports. After Uzbekistan,

Figure 2.2 Composition of Exports by Level of Technology, 1994–2011

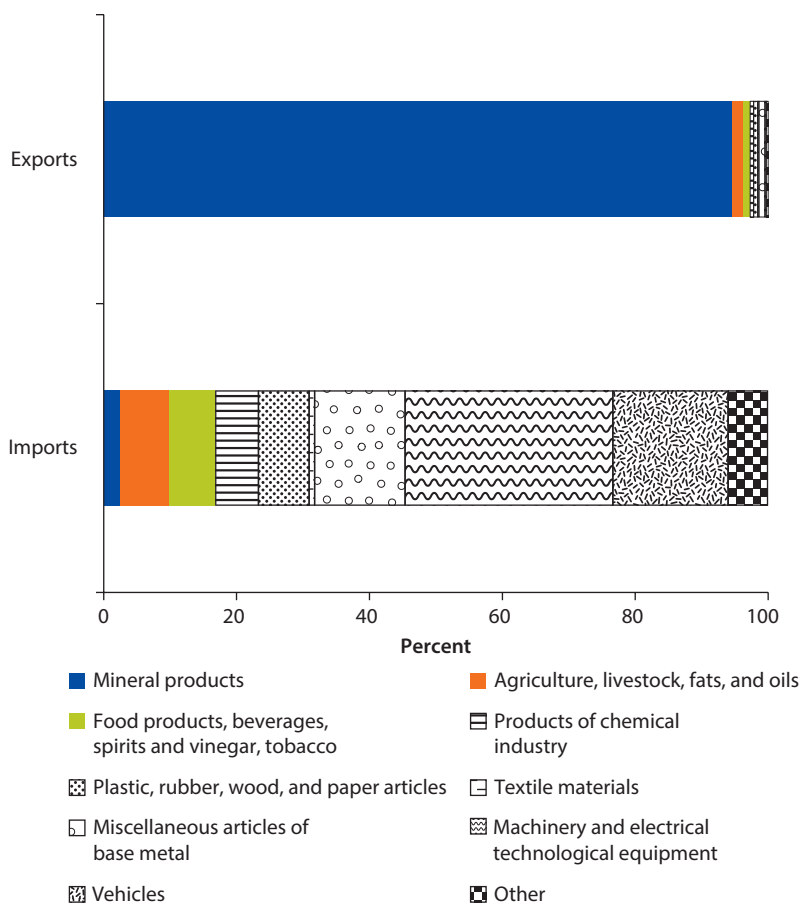
Source: UN Comtrade database 2012.

Azerbaijan has the smallest proportion of exporters in Europe and Central Asia (ECA). The percentage of exporting firms is only 4 percent, well below the ECA average of 22 percent. While large firms on average export 5.6 percent of their output, small firms export less than 0.1 percent (World Bank 2011).

Employment

Although unemployment in Azerbaijan is not as high as in neighboring countries (figure 2.4), a large share of its labor force is in the declining agriculture sector and in wholesale and retail trade (figure 2.5). To move toward greater economic diversification and industrial production, skills and labor must be refocused into the manufacturing sector.

In Azerbaijan, individual entrepreneurs account for the majority of the SME sector, with State Committee for Statistics data suggesting that 93 percent of local entrepreneurs register as an individual entrepreneur² (IFC 2009). An SME survey conducted by the International Finance Corporation in 2009 found that it is simpler for entrepreneurs to operate in the formal economy as individual entrepreneurs than as legal entities for several reasons: the registration process is simpler for an individual entrepreneur than for a legal entity; registration, licensing, and permitting is cheaper for an individual entrepreneur than for a legal entity; and legal entities face more inspections by the government than individual entrepreneurs, who are not registered with national ministries or central government agencies and are inspected only by local or regional branches of the inspection services. Individual entrepreneurs operate mainly in retail trade, transportation, and storage, with only 2 percent in the industrial sector (figure 2.6).

Figure 2.3 Import and Export Composition by Commodity, 2011

Source: Azstat 2012.

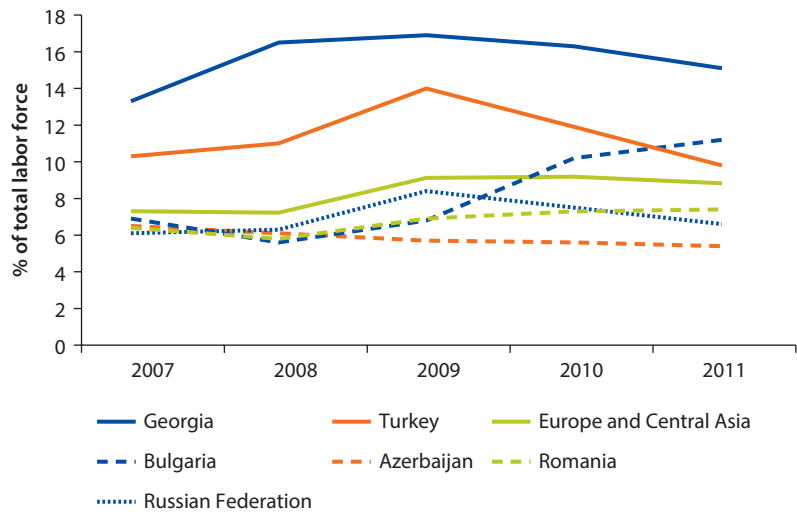
However, these individual entrepreneurs do not contribute a large share to GDP or job creation. The core objective of Azerbaijan's development strategy is to diversify the economy away from the oil sector and sustain high employment and growth. Encouraging high-growth entrepreneurship can help Azerbaijan achieve these goals as it moves toward new opportunities in value added and tradable sectors.

Empirical Analysis

This study analyzes both entrepreneurial activity by individuals (measured by the creation of a new legal entity in the formal sector) and entrepreneurial activity by existing firms (measured by the introduction of new products or new processes or by entrance into new export markets).

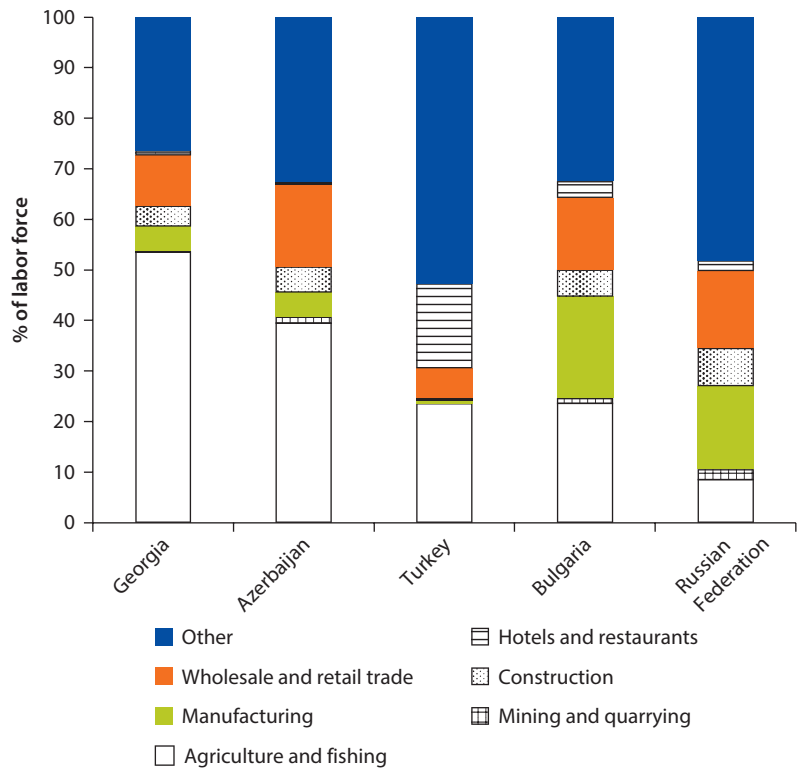
For entrepreneurial activity by existing firms, the study looks at "new-to-the-world" innovative activity, which is the development and commercialization of

Figure 2.4 Unemployment Rates



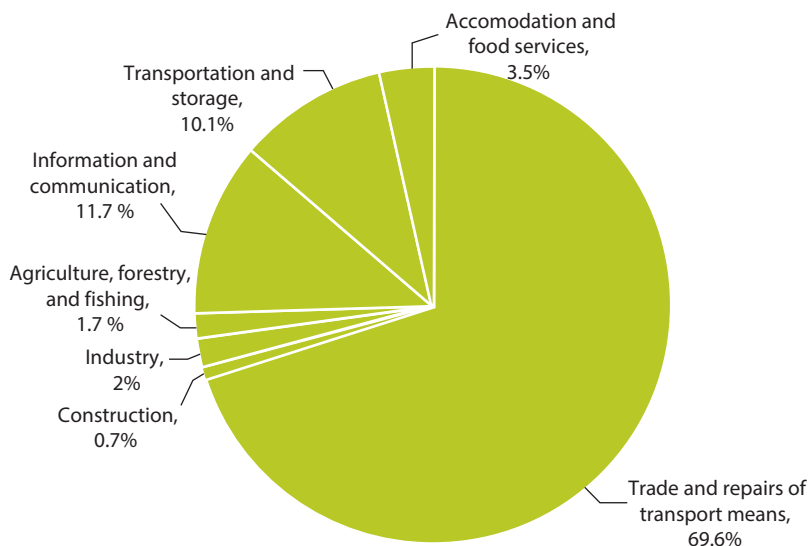
Source: World Bank 2013.

Figure 2.5 Sectoral Composition of Labor Force



Source: ILO 2012.

Note: Data for Bulgaria are for 2006, data for Georgia are for 2007, and data for all other countries are for 2008.

Figure 2.6 Composition of Individual Entrepreneurship by Sector, 2011

Source: Azstat 2012.

new unproven technologies and untested processes and products, and “new to the country/market” innovative activity, which is the application of existing technologies, processes, and products in a new environment in which the processes have not yet been tested and the markets and commercial applications are not fully known. For developing countries, most technological progress originates from the adoption of technologies first discovered elsewhere, with firms adapting to local market conditions (Goldberg and others 2008).

Notes

1. Repair, maintenance, and the like.
2. An individual entrepreneur is a person (sole owner), who is involved in entrepreneurial activity without forming a legal entity and has unlimited liability.

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Entrepreneurship and New Firm Growth

Introduction

This chapter describes entrepreneurial activity by individuals as measured by the creation of a new legal entity in the formal sector. The analysis uses an existing dataset, the Gallup World Poll Dataset,¹ and a new survey covering 300 entrepreneurs that was conducted specifically for this study. In addition, case studies highlight the evolution of many entrepreneurial endeavors and the characteristics important in the formation of these enterprises and their subsequent growth.

Entrepreneurship Landscape

Firm Entry Density

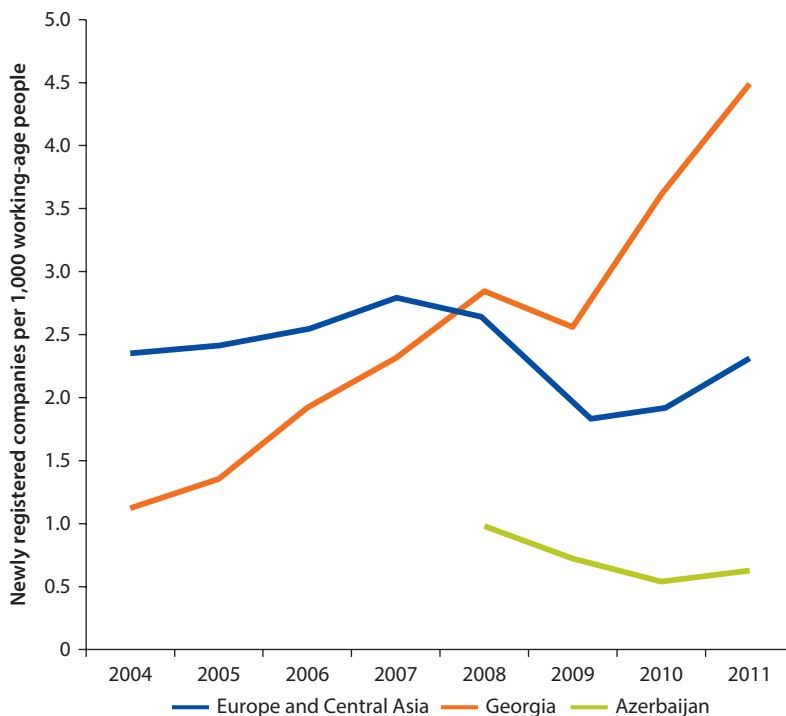
The World Bank Entrepreneurship database provides data on formal firm entry density. “Entry density” is the number of newly registered companies per 1,000 working-age (ages 15–64) population. The database does not account for informal firms and measures only private, formal companies with limited liability. Firm entry density varies among Azerbaijan, Georgia, and Europe and Central Asia (ECA) as a whole. Georgia stands out with a mostly increasing trend over time, sharply since 2009 and well above the ECA average since 2007 (figure 3.1). Entry density in Azerbaijan remains below the ECA average.

General Trends in Entrepreneurship

Business ownership in Azerbaijan remains lower than the ECA and developing country averages. According to the 2011 Gallup World Poll, 15 percent of individuals in developing countries reported owning a business, compared with 6 percent in ECA and 5 percent in Azerbaijan (figure 3.2).

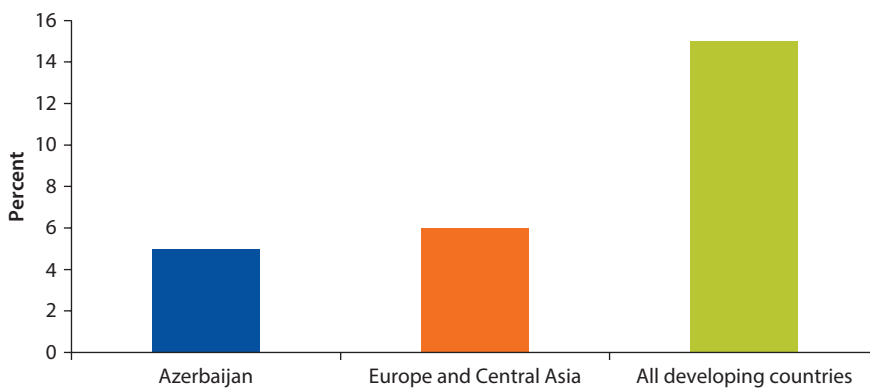
Latent Entrepreneurship

Another measure of interest is the pool of potential entrepreneurs known as “latent entrepreneurs”—those who are not actual entrepreneurs but want to be.²

Figure 3.1 Firm Entry Density for ECA and Southern Caucasus Countries, 2012

Source: World Bank Entrepreneurship database 2012a.

Note: Entry density for Europe and Central Asia (ECA) is calculated with population-weighted averages for working-age (ages 15–64) population, using data from World Bank (2013). Averages are based on countries with full data coverage for 2004–11.

Figure 3.2 Business Ownership in Europe and Central Asia, 2011

Source: Gallup World Poll 2011.

Data from the 2010 Life in Transition Survey is used to analyze this pool of entrepreneurs.

Azerbaijan compares unfavorably with other ECA countries. Only about 10 percent of the labor force and 5 percent of the wage-employed can be considered latent entrepreneurs, far below the ECA average of 27 percent of the labor force and 22 percent of the wage-employed.

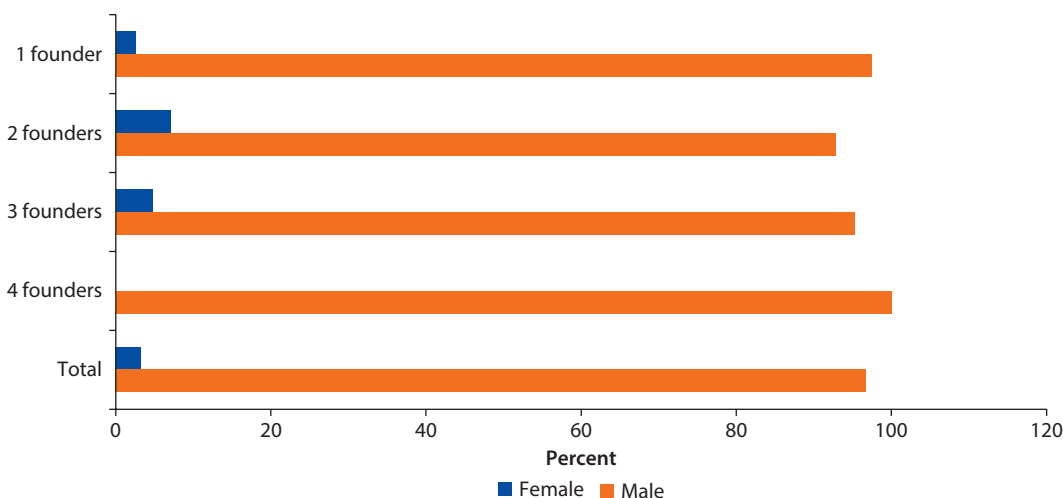
Econometric analysis of latent entrepreneurs suggests that a few individual characteristics are important correlates³: women are less likely to be latent entrepreneurs, consistent with gender patterns of actual entrepreneurial activities. Among men, latent entrepreneurs tend to be married and have larger households, which suggests that preference for self-employment may partly reflect a desire for the greater flexibility afforded by entrepreneurship and self-employment. At the same time, higher per capita income, which may serve as a proxy for wealth, is associated with a greater likelihood of latent entrepreneurship, consistent with the literature. The literature on entrepreneurship has explained low rates of entrepreneurship as a function of social values and attitudinal characteristics, and at least one dimension of trust (trust in foreign investors) is strongly related to latent entrepreneurship for the sample as a whole and for the separate samples of men and women. But trust in people is a statistically significant correlate of latent entrepreneurship only among women. Meanwhile, there are no discernible statistical links with educational attainment.

The 2010 Life in Transition Survey data also provide information on previous attempts to start a business. In Azerbaijan, only about a third of those who attempted to start a business succeeded; by contrast, in the ECA region as a whole, about two-thirds of those who attempted to start a business succeeded. In other words, in Azerbaijan, few people want to become entrepreneurs, few attempt to start a business, and few succeed at doing so.

The correlates of the few successful attempts are instructive: per capita income and general satisfaction with one's financial situation again play a role. Access to finance—as proxied by being able to borrow money—is a statistically significant correlate of successful business startups. Interestingly, although women are less likely to be latent entrepreneurs, when they attempt to start a business, they are just as likely to succeed as men are.

Survey Results

This section is based on the 2012 World Bank Entrepreneurship Survey, which was conducted for this study and is complemented by the findings from the Gallup Survey where relevant. The survey aimed to capture the sources of financing, education levels of the owners and managers of firms, the business environment constraints that firms face, and whether firms have used government programs to help firm startup and growth. The sample of firms consisted of 300 firms between 2 and 10 years old.

Figure 3.3 Gender and Number of Founders in Sample

Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

Founder Characteristics

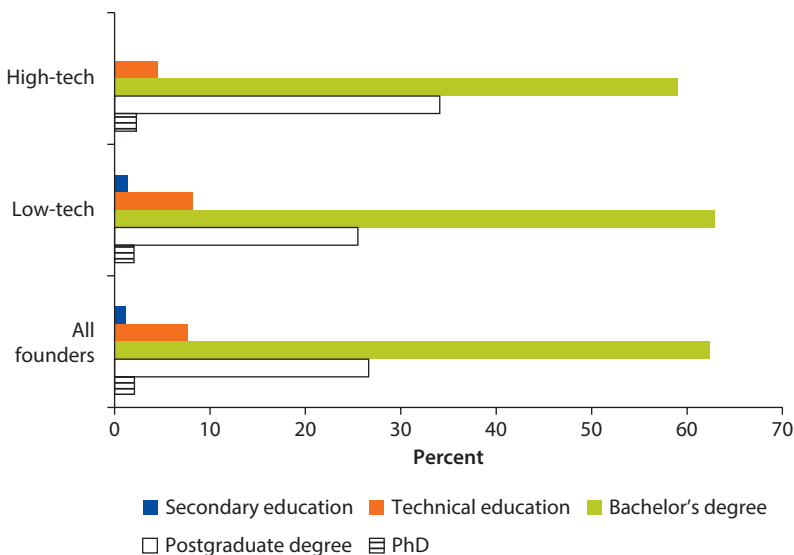
The majority (90 percent) of surveyed firms had only one founder (7 percent had two founders and 2 percent had three). Only about 3 percent of the founders of surveyed firms were women (figure 3.3)—less than in Georgia (18 percent of all founders were women). According to the Global Entrepreneurship Monitor (2011), the ratio of female to male entrepreneurs varies considerably across the global sample: from 1:5 in the Republic of Korea to 6:5 in Ghana. The report also finds that, across the 59 economies studied, only one economy, namely Ghana, had proportionately more women than men entrepreneurs, and only a handful had equal proportions of women and men. The most common education level among Azerbaijani firm founders was a bachelor's degree (62 percent), followed by a postgraduate degree (27 percent). Firms in high-tech sectors⁴ had a larger share of founders with a postgraduate degree, and firms in non-high-tech sectors had a larger share of founders with technical education (figure 3.4).

Most of the surveyed entrepreneurs in Azerbaijan had worked previously in the same industry in which they founded their new firm. Founders averaged nearly nine years of experience in the same sector, higher than in Georgia (six years). Founders in high-tech sectors had a larger share previously employed by universities or research institutes. Two-thirds of all founders were more than 40 years old.

Founders' Motivation

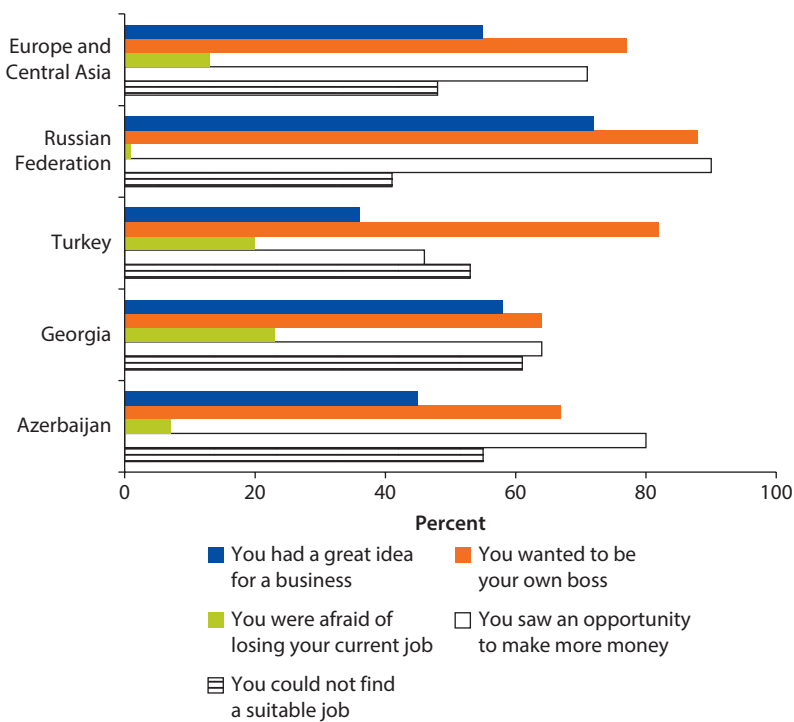
The Gallup World Poll asked business owners why they started their business. Business owners in Azerbaijan reported the top two reasons as sensing an opportunity to make more money and wanting to be one's own boss (figure 3.5 and box 3.2). Not finding a suitable job was cited by more than half of business owners. Fearing loss of one's job was the least common reason. These patterns are in

Figure 3.4 Education Levels of Founders, by Sector



Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

Figure 3.5 Reasons for Starting a Business



Source: Gallup World Poll 2011.

line with trends in the rest of the developing world and in ECA. The desire to be self-employed is not driven by necessity or at least not by necessity alone (so-called survival entrepreneurship). In fact, many of those already in the labor force or already wage-employed prefer to run their own business. The survey data also show that men are considerably more likely than women to cite wanting to be one's own boss as an important reason for starting a business. Respondents with tertiary education or higher are more likely than those with secondary education to cite having a great idea for a business.

The World Bank 2012 Entrepreneurship Survey asked entrepreneurs to cite the importance of the following factors in the formation of their company:

- Work experience in the current activity field.
- Technical/engineering knowledge in the field.
- Design and software knowledge.
- Knowledge of the market.
- Availability of finance.
- Networks built during previous career.
- Opportunities in a public procurement initiative.
- Existence of a large enough customer base.

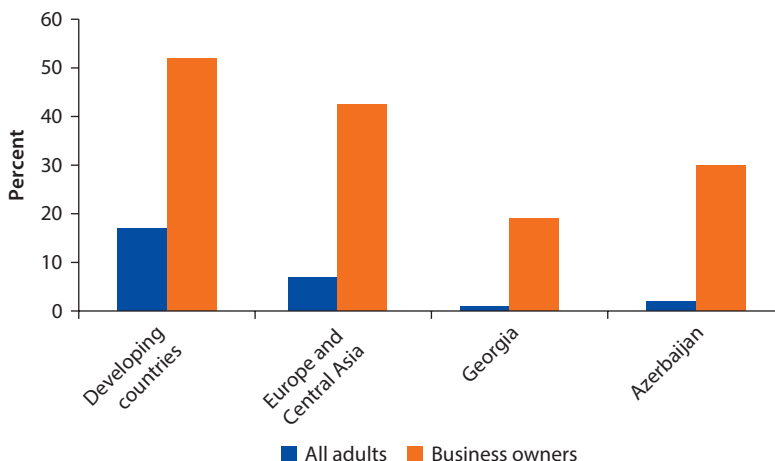
Availability of finance, existence of a large enough customer base, and work experience in the current activity field were ranked the highest in importance among all factors in Azerbaijan. In Georgia, the existence of a large enough customer base, availability of finance, and knowledge of the market were ranked most important.

Firm Characteristics and Strategy

The average size of surveyed firms was 44 full-time employees. The largest firm had 1,600 employees, and 30 percent had fewer than 10 employees. The majority (97 percent) of surveyed firms had no research and development (R&D) expenditures in the previous five years and did not envision spending on R&D in the next two years.

The vast majority of products or services produced at firm inception were modifications of existing products or services. Some 96 percent of businesses drew funding from their founders' own savings. Around 30 percent of surveyed firms also drew on funds from banks. Business owners have higher levels of savings than the adult population as a whole (figure 3.6), which is in line with findings from the Entrepreneurship Survey, in which a majority of founders financed their entrepreneurial activity using their own savings (see box 3.1).

The most important factors for firms to maintain their competitive advantages were capability to offer novel products/services (see box 3.3), capability to offer high-quality products/services, and capacity to adapt products/services (figure 3.7). The least important factors cited were marketing and promotion activities, and networking with scientific research organizations.

Figure 3.6 Percentage of Adults Who Reported Saving

Source: Gallup World Poll 2011.

Box 3.1 Case Study: OFKO LLC—The First Private Specialized Eye Clinic in the Country

General information about the founder and formation

After completing postgraduate studies and spending time at the Eye Microsurgery Complex, the leading ophthalmologic center in the Russian Federation, Dr. Cingiz Yarullazada returned to Baku in 2000 and founded his own eye clinic, OFKO (ophthalmology complex). The startup required an initial investment of \$100,000, which he funded from personal savings to rent space and purchase the equipment for eye microsurgeries. The practice was small, with four paramedics and administrative staff, managed by one of his sons, who had recently received a master's in business administration from the United States. His younger son, who recently completed his medical education in the United States, has since joined as a surgeon.

Company strategy

OFKO was the first private specialized eye clinic in the country. The Research Institute of Eye Diseases was the only specialized hospital for eye disease; almost every state hospital had a department of ophthalmology, and district clinics had an eye specialist. Medical care at state medical institutions was officially free of charge, but patients normally made an informal payment to the doctor for every visit. Eye clinics had outdated technology that gave an advantage to OFKO, which offers full eye examination, all types of microsurgeries for different types of diseases, and orbital and reconstructive surgeries.

Dr. Yarullazada says that market demand patterns are changing as well: 10 years ago, the majority of patients undergoing eye surgery had almost lost their eyesight; today, the vast majority of patients just want to improve their vision.

Dr. Yarullazada's reputation and networking capabilities and word-of-mouth marketing were the main tools that built OFKO's branding. The company kept media and print

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Box 3.1 Case Study: OFKO LLC—The First Private Specialized Eye Clinic in the Country *(continued)*

advertising costs low in favor of investments in advanced technologies and personnel training. OFKO has positioned itself as a leader in the medium- to high-end market segment, pricing surgeries at manat 300–manat 1500 (\$400–\$2,000). It also serves the low-end segment, delivering services free of charge to the low-income population.

Innovation and business models

The doctors at OFKO keep up with the latest developments in their field and are members of the American Ophthalmology Society and various European ophthalmology societies. Dr. Yarullazada regularly publishes in leading medical research journals. As a market leader, OFKO must be at the forefront of innovative treatments. At OFKO, cataract surgery is performed on an outpatient basis, and the surgery is sutureless to optimize rapid visual recovery. Doctors must constantly travel abroad to attend conferences, seminars, and meetings with colleagues. Sometimes they invite foreign specialists to consult with patients.

Perceived role of the government

Dr. Yarullazada thinks that cataracts are the leading cause of low vision today and that patients come to the clinic when it is too late and the cost of treatment often exceeds their ability to pay. Early treatment would thus save sight and reduce costs, which is why many countries conduct cataract awareness campaigns. In addition, the government could consider co-sponsoring eye examinations, which a person should have once in two years.

Box 3.2 Case Study: Turbo.az LLC—Finding a Niche Market*General information about the founders and formation*

After having worked in a multinational automotive company for a few years, Elnur Baimov decided to change sectors and start his own information technology firm. He hired two programmers and a designer and started to develop Internet portals. Their first two portals were the news site day.az and the car dealership site turbo.az. Initially turbo.az offered a free service for car owners to post a description of a car they wanted to sell or purchase. A potential buyer could reserve a car online that they intended to buy. As the number of daily hits on the site increased, car dealers started to advertise links to their own websites and volunteered to give daily updated information on the availability of cars at their dealerships. Currently, the site has 1 million hits a day and is the biggest specialized automobile portal in Azerbaijan. In 2005, as the site started to generate income, Mr. Baimov registered the company as Turbo.az LLC.

Company strategy and business model

Azerbaijan's Internet industry is dynamic and rapidly growing. The competitive advantage that turbo.az developed due to its first-mover advantage was complemented by the quality of the site, which was fast, well designed, and regularly updated. The success of turbo.az inspired a second portal, boss.az, a recruitment site, and a third, bina.az, a property and real estate site.

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Box 3.2 Case Study: Turbo.az LLC—Finding a Niche Market *(continued)*

With these three sites, Mr. Baimov has covered three important markets: automobile, labor, and real estate. He has also introduced a social networking site, *disput.az*, which was developed before Facebook came to Azerbaijan and has managed to survive since Facebook's arrival. *Disput.az* has 114,000 registered users and combines social networking and news streaming. In addition Turbo.az LLC holds three news portals: *new.az* in English, *gun.az* in Azerbaijani, and *armenia.az* in Armenian. These seven portals position Turbo.az strongly in Azerbaijan's Internet advertising market.

The ultimate goal and the business model that Mr. Baimov pursues is an increased market value for the company in order to eventually sell it to an investor. The company's revenues correlate with the launch of every new successful portal, with success measured by the number of hits and visitors. However, the poor competitive environment in the country directly affects the advertising business. According to Mr. Baimov the company would have 10 times more revenue if it were in an economy with a high level of free competition. While Azerbaijan has 20,000 registered domains, only a handful are fully functional; companies do not feel compelled to compete, so they are less inclined towards pursuing Internet marketing.

Information technology services are another important business line, accounting for 25 percent of the company's revenue. Turbo.az specializes in adapting enterprise resource planning solutions for local companies. Mr. Baimov says that the company does not have the capacity to expand its information technology services because it has only 10 software engineers, who work predominantly on developing software for their own needs and on maintaining the company's portals. Azerbaijan lacks enough information technology specialists, and the good ones are very expensive to keep. Thus, the company outsources the bulk of enterprise resource planning development to Belarus while retaining front office functions: client interaction and adaptation of software to client's needs.

Perceived role of the government

Mr. Baimov sees the positive potential role of the government in facilitating the modernization of information technology education in Azerbaijan. Outdated infrastructure, the current curricula, and university faculty do not keep pace with the global developments, resulting in graduates who are ill-equipped to work in the industry.

Market Environment

Azerbaijani firms do not have many competitors, with more than 50 percent citing only a few competitors, compared with two-thirds in Georgia citing many business competitors. Nearly all the surveyed firms (98 percent) sold to the local/regional market (figure 3.8). These businesses sell about two-thirds of their products to the local/regional market (figure 3.9). Only 7 percent of businesses sell internationally.

Perceived Obstacles

Entrepreneurial activity requires a degree of risk taking due to uncertainties. To obtain insights into the perceived obstacles facing entrepreneurs, the survey

Box 3.3 Case Study: Ali and Nino—Turning a Passion for Reading into the First Book Store Chain in the Country*General information about the founders and formation*

Ali and Nino is a company that runs a chain of bookstores, book cafes, and a publishing house. Its sole owner is a young and dynamic woman Nigar Kocharli. She was always an avid reader and spent a lot of time and money on books. She decided to buy \$600 worth of books in the Russian Federation and distributed them in bookstores in Baku. With the initial profits reinvested into the business, she hired salespeople and imported more books. In 2001, after two years of working out of her home, Ms. Kocharli opened her first bookstore, a small space rented in another store. By 2005 she had already expanded to four bookstores, at which time she registered the company as Ali and Nino LLC, a name derived from the title of one of the most famous love stories in the South Caucasus about an Azerbaijani youth who falls in love with a Georgian princess. Currently Ali and Nino has 52 employees and annual turnover of more than manat 600,000 (\$765,000). It is the first and only bookstore chain in Azerbaijan.

Company strategy

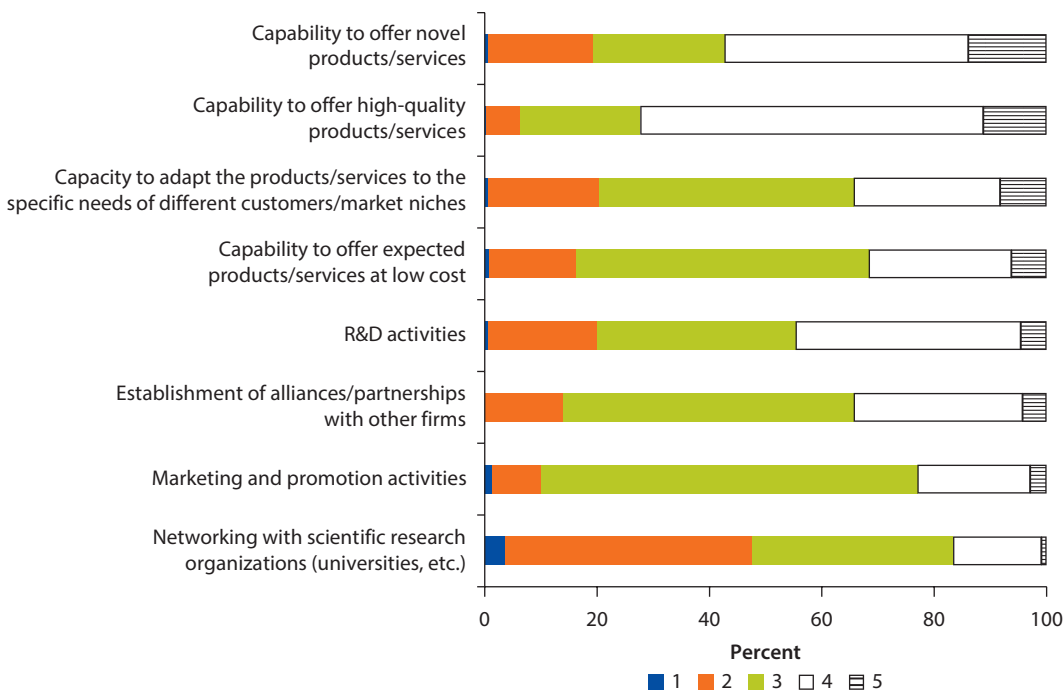
The market for books in Azerbaijan is very small, and demand is highly unstable and underdeveloped, which Ms. Kocharli blames on the weak education system and a lifestyle that neglects reading and discussion of books. There are only a few publications in the local language, and only one publishing and printing house, Ganun, sells fiction in Azerbaijani. Other publishing houses cater predominantly to state orders, printing textbooks for education institutions and literature on law and politics. Ali and Nino LLC developed an important strategic partnership with Ganun. They cooperate in selecting authors that should be translated into the local language; share the costs for translation, publishing, and sales; and share the profits.

There are only 10 bookstores in Baku, and five of them are Ali and Nino locations. The company expanded gradually into a chain. As a result of this expansion, the company has developed a brand name that is unrivaled by any other bookstore. It carries more than 30,000 titles of classical and modern literature from all over the world. The company developed business relations with 40 of the largest Russian publishing houses, from whom they get a permanent supply of books.

To survive, the company tries to make visiting its bookstores an experience. Locations host seminars and events to educate, and local musicians and artists performances to entertain and attract shoppers. The company's strategic development includes hiring employees who have a passion for books so that employee turnover is reduced to a minimum.

Three years ago the company opened two book cafes: Ali and Nino and Bookcafe. They are designed according to the novel by Kurban Said in a Baku's 20th century interior design style and decorated with vintage furniture, old photos, and antiquities. The cafes became popular places for friends to meet and for events to be hosted. The book cafes developed their own signature recipes for cocktails and food. The company is planning to grow by capturing a new market segment: the expatriate community in Azerbaijan.

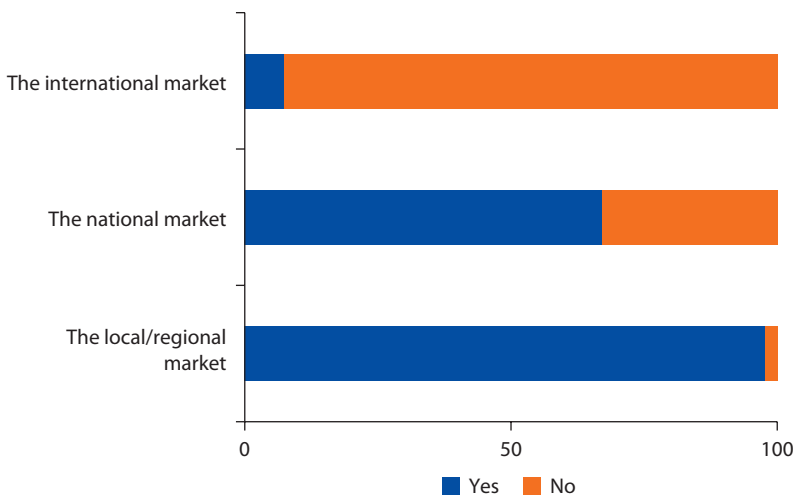
Figure 3.7 Contribution in Creating and Sustaining the Competitive Advantage of the Company



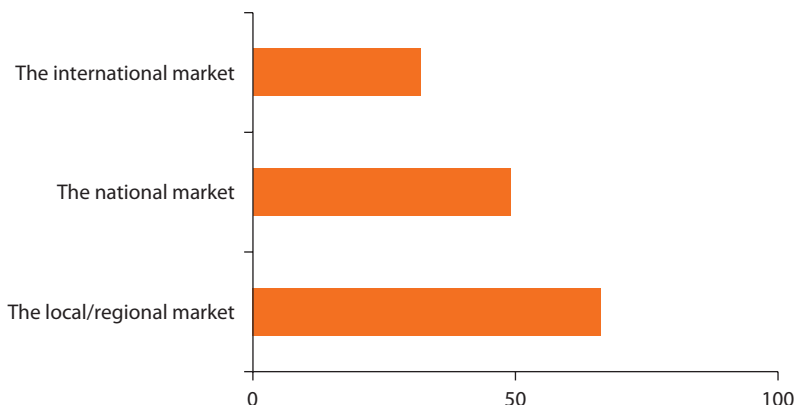
Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

Note: R&D = research and development. 1 = no impact, 5 = huge impact.

Figure 3.8 Market Distribution of Sales



Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

Figure 3.9 Share of Total Sales When Product Is Sold to Market Type

Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

asked respondents to rate whether the following factors were obstacles in setting up or operating a firm:

- Technology risk/uncertainty.
- Market risk/uncertainty.
- A large initial investment.
- Difficulty finding the necessary funding.
- Difficulty finding business partners.
- Difficulty recruiting highly skilled employees.
- Lack of technological know-how.

The top three cited obstacles were difficulty finding the necessary funding, a large initial investment, and difficulty finding business partners. In Georgia, the top three perceived obstacles were market risk/uncertainty, technological risk/uncertainty, and difficulty recruiting highly skilled employees.

The survey also asked respondents about their perceived legal and regulatory constraints, which included

- Continually changing taxation regulations.
- High tax rates.
- Time-consuming regulatory requirements for issuing permits and licenses.
- Poorly enforced competition law to curb monopolistic practices.
- Poorly enforced property rights and copyright and patent protection.
- Strict property, copyright, and patent protection.
- Government officials favoring well connected individuals.
- Bankruptcy legislation making the cost of failure immense.
- Rigid labor market legislation.

In Azerbaijan, the most commonly cited constraints were continually changing taxation regulations and bankruptcy legislation making the cost of failure

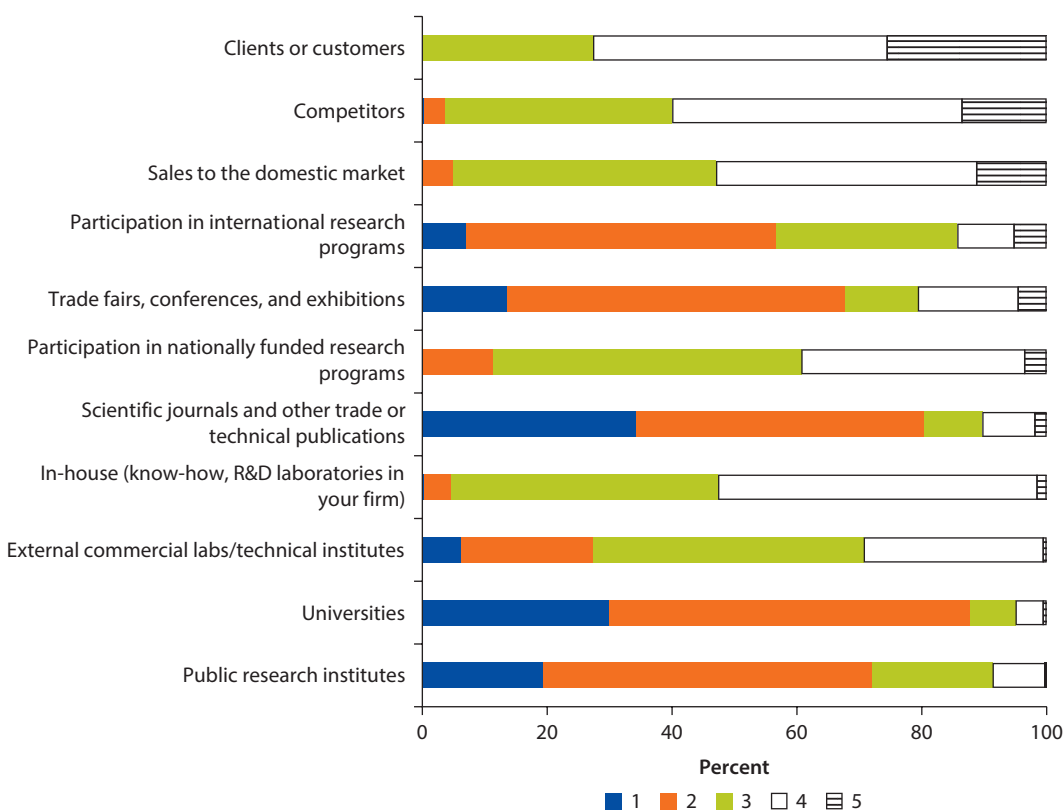
immense. In Georgia, in addition to continually changing tax regulations, high tax rates were the additional constraint.

Innovative Activity

To gauge the level of innovative activity by businesses, the survey asked respondents whether they had introduced a new or substantially improved product or service in the previous three years. Only 12 percent of the Azerbaijani respondents indicated that they had. The main objective behind introducing a new product or service was to diversify the firm's product mix for the domestic market. Increasing foreign sales was not cited by any respondents as an important objective. The most common area for introducing new products or services was in methods of manufacturing, and the least common areas were logistics, supply chain, and delivery and improved knowledge management systems.

The most important sources of knowledge for new business opportunities were customers, competitors, and market research through sales in the domestic market (figure 3.10). Universities, technical institutes, R&D firms, and external

Figure 3.10 Importance of the Following Sources of Knowledge for Exploring New Business Opportunities for the Company



Source: World Bank Entrepreneurship Survey for Azerbaijan 2012b.

Note: R&D = research and development. 1 = not important, 5 = extremely important.

commercial labs were among the least important sources of knowledge, indicating both the nature of innovative activities in these enterprises and the lack of industry-relevant information from research and training institutions. This was further corroborated in the detailed case studies. Industry-relevant skills are not available, and little R&D is conducted, even in high-growth firms.

Testing Hypotheses

Using the survey data collected in both Azerbaijan and Georgia, a few hypotheses were tested using a model to explain the determinants of firm innovation that used a probit regression (see box C.1 in appendix C for specifications).

The following hypotheses were tested:

H1: Younger, smaller firms innovate more.

H2: Firms in high-tech sectors and firms undertaking R&D innovate more.

H3: Founders' expertise at firm setup is an important indicator of the firm's propensity to innovate. Founders' education background, especially in technical and engineering fields, is positively related to company innovativeness.

H4: Exposure to international markets is strongly connected to firm innovation propensity.

H5: Favorable outlook toward R&D and the formation of strategic partnerships with other organizations, including universities, research institutes, and private sector firms, are strong predictors of higher propensity to innovate.

H6: Strategy to offer unique products and exploit opportunities in new market niches goes hand-in-hand with higher propensity to innovate.

Regression results are shown in table C.1 in appendix C.

For Azerbaijan, firm age and size were statistically significant variables. Younger firms and firms with more employees were positively correlated to the innovative propensity of firms. Further, strategic alliances with other companies, and a strategy to offer unique products/services or exploit new market niches, were also positively related to firm innovative propensity. Firm innovation was also higher in sectors with higher average rates of innovation.

For Georgia, only three variables besides the control were statistically significant: R&D intensity, founders' general management experience, and networking with research organizations. All were positively related to the innovative propensity of the firm. There was a positive correlation between firm innovation and R&D activity being considered an important factor in creating and sustaining competitive advantage. Similarly, there was a positive correlation between innovative activity and when firm founders considered partnerships with research organizations such as universities an important factor in creating and sustaining competitive advantage. And firm innovation was higher in sectors with higher average rates of innovation.

The next chapter looks at entrepreneurial activity in existing firms by analyzing the extent of innovation in the sample of surveyed firms in the World Bank Business Enterprise and Enterprise Performance Survey.

Notes

1. Details of data sources are described in appendix C.
2. This section is based on Atasoy and others (forthcoming). For details on literature of latent entrepreneurship and definition, see appendix A.
3. All the observations for the South Caucasus were analyzed as a pooled sample rather than as separate country samples, to create a sufficiently large sample for analysis. Fixed country effects were incorporated into the analysis.
4. Chemical industry, manufacture of basic pharmaceutical products, manufacture of computer and other electronic equipment, manufacture of electrical equipment, and information and communication.

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Entrepreneurship and Innovation

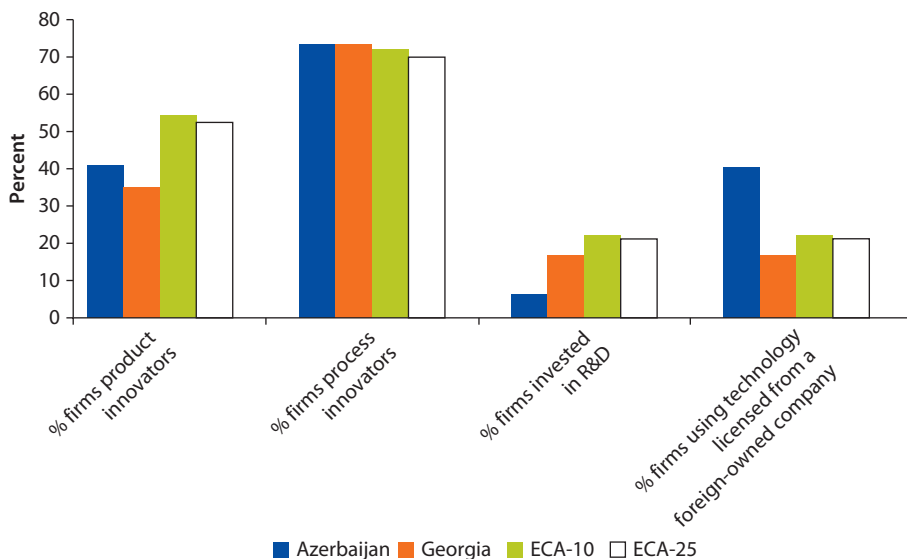
Introduction

This chapter uses data from the World Bank's Enterprise Surveys to analyze entrepreneurial activity in existing firms as measured by their innovative activity. Four types of innovation activities are analyzed: introducing new products or services in the previous three years (product innovation), upgrading an existing product line or service in the previous three years (process innovation), investment in research and development (R&D), and licensing technology from a foreign-owned company.

In Azerbaijan (and Georgia), nearly 400 firms were surveyed, and they were roughly evenly distributed across the manufacturing, retail, and services sectors. Almost half the sample was small firms, and a third was medium-size firms (see table D.1 in appendix D for the size and industrial sector distribution of the samples from each country).

Innovation activities in the South Caucasus countries are benchmarked against a group of 10 Europe and Central Asia (ECA) countries as well as all 25 ECA countries. The ECA-10 group includes eight members of the European Union (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia) and two large ECA countries (the Russian Federation and Turkey).

Process innovation is the most common type of innovation activity across the South Caucasus countries and other ECA countries. In every ECA country except Romania and Uzbekistan, at least half of firms reported conducting process innovation. In ECA as a whole 70 percent of firms conducted process innovation. Spending on R&D and licensing technology from a foreign-owned company were seen in 20 percent of firms, half the proportion that engaged in product innovation. This is common in developing countries. Most innovation is through technology adoption and adaptation, usually described as non-R&D innovation. South Caucasus countries had similar levels of process innovation; roughly three-quarters of firms upgraded an existing product line or service in the previous three years (figure 4.1). Product innovation was much less common

Figure 4.1 Innovation Rates by Country

Source: World Bank Enterprise Surveys (database) 2013.

Note: ECA-10 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Russian Federation, the Slovak Republic, Slovenia, and Turkey. The ECA-25 group includes countries in the ECA-10 as well as Belarus, Bosnia and Herzegovina, Bulgaria, Kazakhstan, Kosovo, the Kyrgyz Republic, the former Yugoslav Republic of Macedonia, Moldova, Mongolia, Montenegro, Poland, Romania, Serbia, Tajikistan, Ukraine, and Uzbekistan. R&D = research and development.

than process innovation in the rest of ECA. Azerbaijan (41 percent) and Georgia (35 percent) had lower product innovation rates than the ECA-10 group (54 percent). They also invested less in R&D (6 percent in Azerbaijan and 16 percent in Georgia, compared with 22 percent in ECA-10).

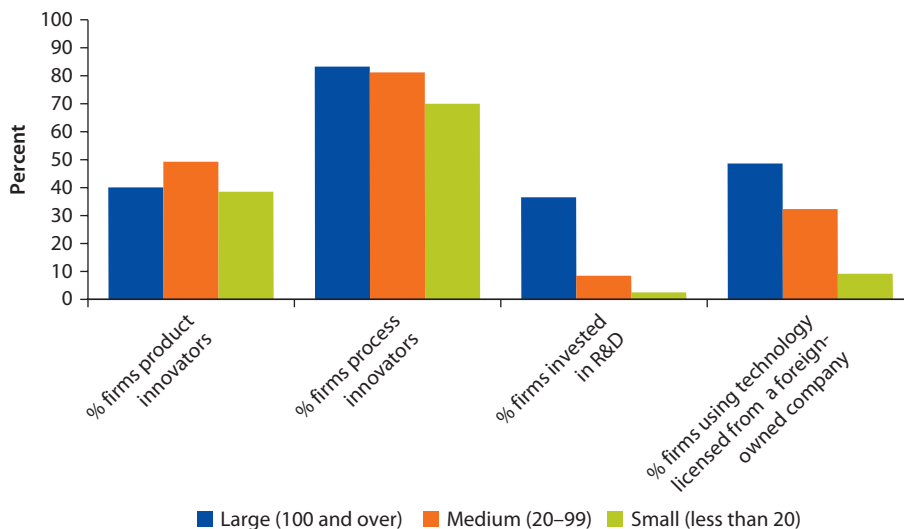
Across all countries, large firms were consistently more likely than small firms to spend on R&D or to license technology from a foreign-owned company. In Azerbaijan, large firms licensed foreign technology more than small and medium firms and are more likely to invest in R&D than small firms (figure 4.2).

Innovation and Investment Climate

Innovative firms are likely to differ from noninnovative firms in characteristics and activities. For example, in both Azerbaijan and Georgia innovative firms are much more likely to offer formal training.

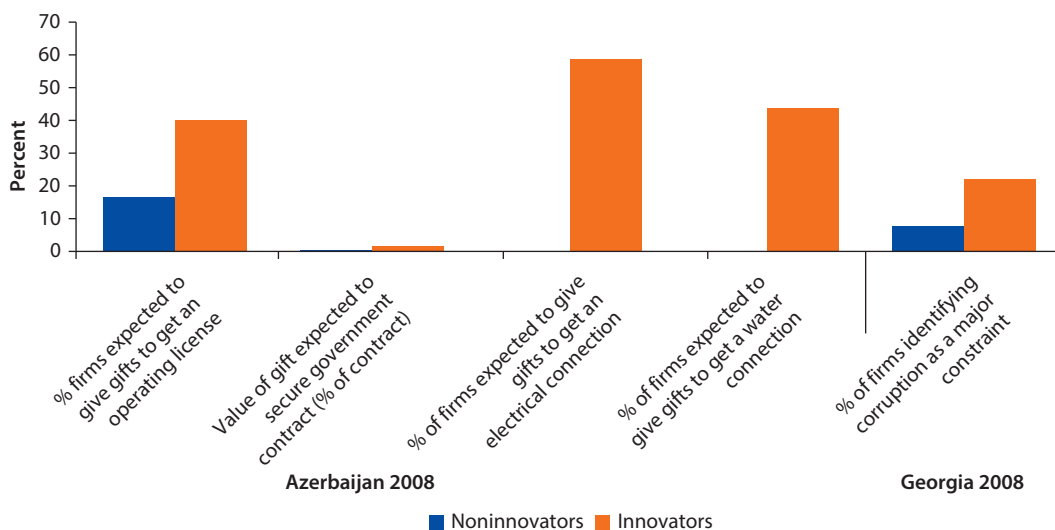
Enterprise Surveys provide a wide range of corruption data from which several corruption indicators can be constructed. Only indicators that are statistically different between innovators (firms that participate in either product or process innovation) and noninnovators are presented in figure 4.3. In Azerbaijan and Georgia, innovative firms experienced significantly more bribery and corruption than did noninnovative firms across a variety of measures.

In Azerbaijan, four Enterprise Survey corruption indicators were statistically different between innovators and noninnovators. In Georgia, innovative firms

Figure 4.2 Innovation Rates, by Firm Size, Azerbaijan

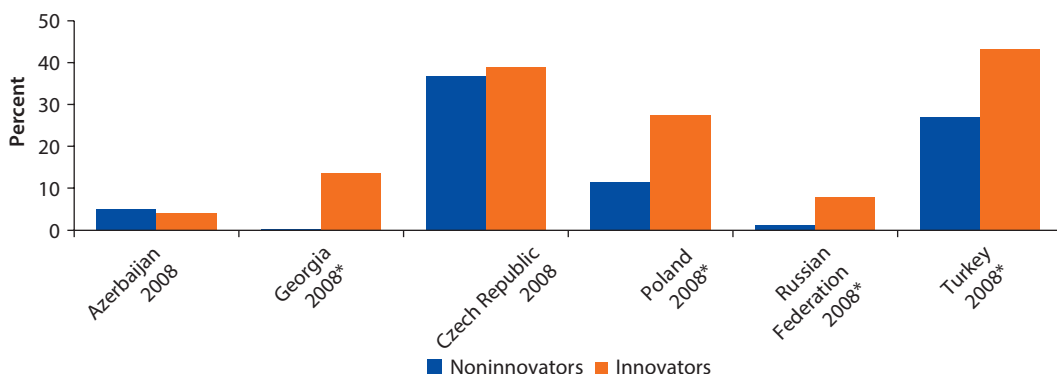
Source: World Bank Enterprise Surveys (database) 2013.

Note: R&D = research and development.

Figure 4.3 Corruption Indicator Comparisons

Source: World Bank Enterprise Surveys (database) 2013.

were almost three times more likely to identify corruption as a major constraint to daily business operations than were noninnovative firms. In Azerbaijan, innovative firms were more likely to be expected to give informal payments to obtain an operating license, electrical connection, or water connection. Moreover, the value of the bribe to government officials to secure a government contract was significantly higher for innovative firms than for noninnovative firms.

Figure 4.4 Innovative Activity by Exporting Status

Source: World Bank Enterprise Surveys (database) 2013.

Note: A firm is an exporter if at least 10 percent of annual sales are derived from direct exports. A firm is considered to be an innovator if it participated in either product or process innovation.

*Statistically significant difference in the means at the 0.01 level.

In Azerbaijan and Georgia, innovative firms were also more likely to offer training than were noninnovative firms. When the data are disaggregated by whether a firm is a process innovator, there is no difference in training offerings. Innovative firms were significantly more likely to export than noninnovative firms in Georgia, Poland, Russia, and Turkey (figure 4.4). This does not hold in Azerbaijan, but it does hold when considering only product innovators or process innovators in isolation.

Who Are the Innovators?

The previous section showed that innovative and noninnovative firms differ across several characteristics. This section uses regression analysis to examine what firm characteristics are correlated with innovation activities. Probit regressions are estimated in which the dependent variable (Y_{jc}^i) is a dummy variable indicating whether firm j in country c conducted one of the four innovation activities (i) described above (equation 4.1). Regressions are run separately for each country, and estimation tables are shown in tables D.3–D.8 in appendix D.

$$Y_{jc}^{*i} = c + Z_{jc}\beta + \delta \text{Age}_{jc} + \varphi \text{Sector}_{jc} + \rho \text{Size}_{jc} + \varepsilon_{jc}^i \quad (4.1)$$

$$Y_{jc}^i = \begin{cases} 1 & \text{if } Y_{jc}^{*i} > 0 \\ 0 & \text{otherwise} \end{cases}$$

Empirical evidence has shown that size and age are the most important observable characteristics of firms that affect their activities. In the probit regression outlined above, age and size controls are included in the baseline specification. In addition, sector fixed effects are included to account for the differences in factors that affect innovation, such as the nature of market activity, competition level, technology use, and demand. Explanatory variables of interest (Z) are included in

the regression separately, one at a time. The set of key explanatory variables of interest includes variables for whether a firm is an exporter, has foreign ownership,¹ and offers formal training; an indicator for skill intensity, measured as the percentage of unskilled manufacturing workers; and an indicator of capital intensity, measured as the log of the capital expenditures to worker ratio. Existing evidence shows that these factors can be related to why some firms innovate and others do not.

Compared with Azerbaijan, innovation activities in Georgia are more likely to differ across firm characteristics and other firm activities. In Georgia, average innovation rates are lower, and innovation is more likely to be an activity among large firms and firms that export. Moreover, Georgian exporters are 36 percent more likely to introduce new products and 19 percent more likely to be process innovators (see tables D.3 and D.4 in appendix D). Yet trade activity does not differentiate innovation activity in other ECA countries.²

Azerbaijani firms with foreign ownership that offer workers formal training are more likely to be process innovators (table D.4 in appendix D). Firms with foreign ownership are 14 percent more likely to be process innovators, and firms that offer formal training are 22 percent more likely. Less skill-intensive firms were more likely to be process innovators but only by 0.4 percent. Nevertheless, the relationship is significant and may suggest that firms are more likely to innovate and alter processes when products are easier to alter or modify.

While firms with foreign ownership may seem more likely to use foreign-owned technology, this relationship is only significant in Georgia (see table D.6 in appendix D). Georgian firms with at least 10 percent foreign ownership are 41 percent more likely to use foreign-owned technology. This may suggest that foreign ownership in Georgia is an important source of knowledge and technology diffusion.

A major concern with country-specific regression analysis is the small sample size. To alleviate this problem, the same probit model is estimated with the samples of the three South Caucasus countries pooled together. Another motivation for this exercise is to see how the overall performances of Southern Caucasus countries differ from more developed ECA economies. To control for country differences, country dummy variables are included (equation 4.2).

$$Y_{jc}^{*i} = c + Z_{jc}\beta + \delta \text{Age}_{jc} + \varphi \text{Sector}_{jc} + \rho \text{Size}_{jc} + \theta \text{Country} \varepsilon_{jc}^i \quad (4.2)$$

$$Y_{jc}^i = \begin{cases} 1 & \text{if } Y_{jc}^{*i} > 0 \\ 0 & \text{otherwise} \end{cases}$$

Regression results using the pooled sample of three countries show that firm size is positively correlated with conducting all four innovation activities (see table D.7 in appendix D).

The most significant correlates of product innovation in the region are exporting, offering formal training, and the capital expenditure to worker ratio. Firms that export are 21 percent more likely to be product innovators, firms that offer

formal training are 31 percent more likely, and there is a significant positive relationship between capital expenditure to worker ratio and product innovation.

The only significant correlate of process innovation is the proportion of unskilled manufacturing workers in a firm, and the magnitude of the correlation is very small. Firms that offer training are 0.3 percent more likely to be process innovators. Training is an integral part of firm strategy, as evidenced by the firms interviewed for the case studies, since firms need to equip staff with the required skills to keep their competitive advantage.

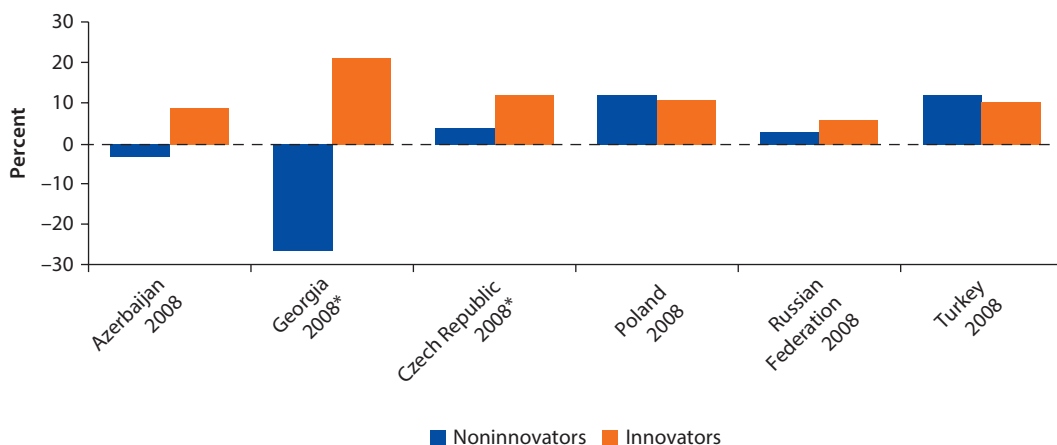
Foreign ownership predicts the licensing of foreign technology but not of any other type of innovation activity. Foreign-owned firms are 22 percent more likely to license foreign technology.

Innovation and Firm Performance

The annual real sales growth of innovative firms in Azerbaijan is significantly higher than that of noninnovative firms (figure 4.5). In both Azerbaijan and Georgia the revenues of noninnovative firms decreased; this decrease was more than 20 percent in Georgia.

As with sales growth, employment growth rates were higher for innovative firms in Azerbaijan and Georgia than for firms in the comparator countries (figure 4.6). In all countries in the figure, innovative firms had higher employment growth, yet the difference was significant only in Georgia and the Czech Republic. The high performance of innovative firms in Georgia persisted in labor productivity growth, which is measured as total sales per number of workers (figure 4.7). The closest follower of Azerbaijan and Georgia in the comparator country group was the Czech Republic. In Poland and Turkey innovative firms had lower productivity growth than noninnovative firms.

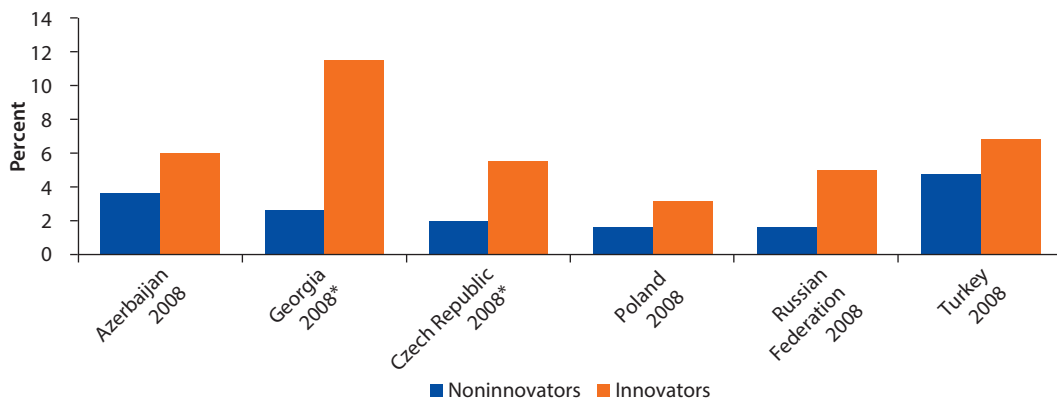
Figure 4.5 Average Annual Sales Growth



Source: World Bank Enterprise Surveys (database) 2013.

Note: A firm is considered to be an innovator if it participated in either product or process innovation.

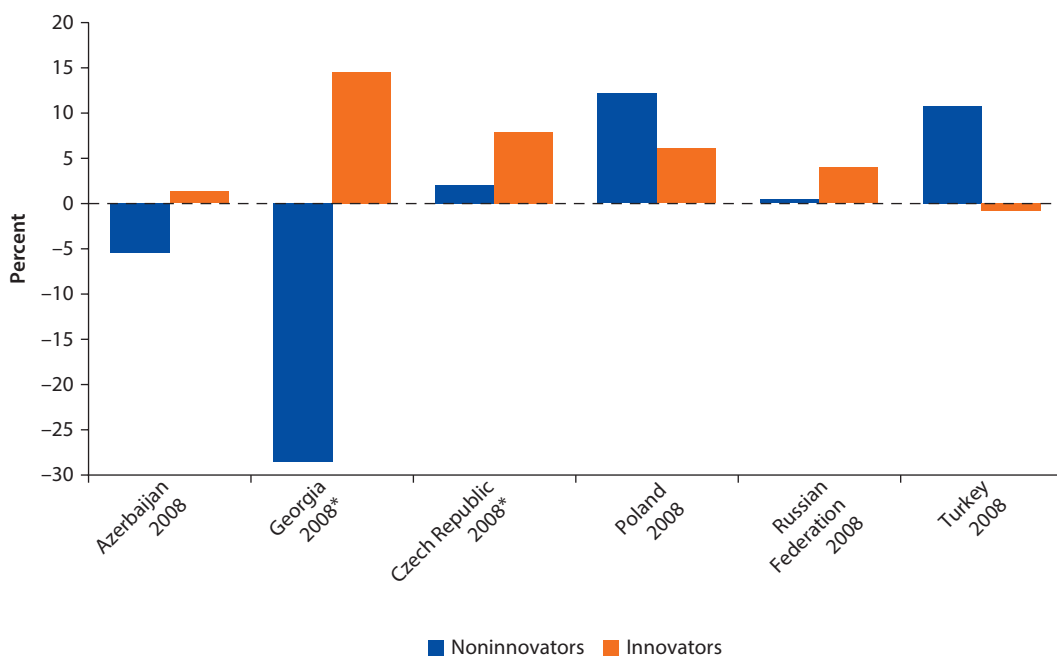
*Statistically significant difference in the means at the 0.01 level.

Figure 4.6 Average Annual Employment Growth

Source: World Bank Enterprise Surveys (database) 2013.

Note: A firm is considered to be an innovator if it participated in either product or process innovation.

*Statistically significant difference in the means at the 0.01 level.

Figure 4.7 Average Annual Labor Productivity Growth

Source: World Bank Enterprise Surveys (database) 2013.

Note: A firm is considered to be an innovator if it participated in either product or process innovation.

*Statistically significant difference in the means at the 0.01 level.

The link between innovation and firm performance is a key relationship of interest. A series of ordinary least squares regressions were estimated to examine this relationship more closely (equation 4.3). Regressions were estimated for each country separately. Three measures of firm performance (G_{jc}) were considered: annual real sales growth, annual employment growth, and annual real labor productivity growth. The main variable of interest in the regressions is a dummy variable set to 1 if the firm has engaged in an innovation activity (Innovation_{jc}). In addition, there are controls for size, age, and the sector of the firm.

$$G_{jc} = c + \gamma \text{Innovation}_{jc} + Z_{jc}\beta + \delta \text{Age}_{jc} + \varphi \text{Sector}_{jc} + \rho \text{Size}_{jc} + \varepsilon_{jc} \quad (4.3)^3$$

Product innovation and annual employment growth are significantly positively related in both Azerbaijan and Georgia (table D.8 in appendix D). Product innovation predicts about 3.5 percent higher employment growth in Azerbaijani firms and 9 percent higher growth in Georgian firms. Only firms in Georgia have higher growth performance relative to other countries when conducting innovation. Firms that conducted product or process innovation or spent on R&D experienced sales growth that was 10–12 percent higher than firms that did not.

The analysis in this chapter shows that significant differences exist between firms that innovate and firms that do not in Azerbaijan. While average innovation rates are much lower in Azerbaijan in general, innovation is more likely to be an activity among larger firms. Further, as has been found in the Entrepreneurship Survey, innovative firms spend more on training. Product innovation and annual employment growth were significantly positively related in both Azerbaijan and Georgia. These results further strengthen the link between innovation and firm growth as well as the role of government in fostering an environment conducive to innovative activity among existing firms and new high-growth entrepreneurialism.

Notes

1. A foreign-owned firm is defined as a firm with at least 10 percent ownership by a foreign individual or company.
2. When compared with Armenia, Azerbaijan, the Czech Republic, Poland, Russia, or Turkey.
3. In another exercise the contribution of innovation to firm growth was compared in Southern Caucasus countries and ECA-10 countries. The equation is similar to equation 4.2 but with the addition of an interaction term between dummy variables for innovation activity i and country c . The coefficient is the parameter of interest. A significantly positive coefficient signals that innovation activity i contributes to higher growth when conducted by firms in country c . There were no significant estimates of the coefficient in this exercise.

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How Government Policies Can Stimulate Entrepreneurship

Introduction

Governments can support entrepreneurial activities in a variety of ways. At the most basic level, effective government policies can create an institutional base that establishes openness to trade, improves the business environment for domestic and foreign investment, establishes effective intellectual property rights regimes, and enhances knowledge flows and learning. Beyond those general policies, many governments have also intervened at the industry and firm levels to address market failures.

The analyses in the preceding chapters have shown that high-growth entrepreneurialism is low in Azerbaijan and that innovative activity among firms is very low. The government's considerable efforts to improve the business environment through legislative changes as well as the introduction of the one-stop-shop reform for business registration have still been insufficient for businesses to grow rapidly. Several other factors hinder business growth and entrepreneurship:

- Lack of competition, especially among smaller firms.
- Financial systems that are not conducive to business development. Companies cite high interest rates and risk-averse lending policies (requiring high levels of collateral) as substantial hindrances to expansion. In addition, risk capital is in short supply. Few entrepreneurs reported receiving funding from the domestic financial system; most relied on their own resources to support the development of their business.
- Lack of industry-relevant skills.

The core objectives of Azerbaijan's development strategy are to diversify the economy away from the oil sector and sustain high employment and growth. To achieve these goals, public policy that supports innovation, new technologies, and entrepreneurship is pivotal. The government could play an important role in providing high-quality framework conditions by removing bottlenecks in the general business environment that impede able entrepreneurs with good ideas

from starting new ventures and creating jobs. These conditions include well functioning institutions, competitive markets for inputs and outputs, a predictable system of taxation, and bankruptcy legislation that facilitates resource reallocation while protecting creditors (Nolan 2003). The government could thus help facilitate a conducive business environment that allows failure and company exit as a necessary part of entrepreneurial learning, provide company incentives that favor entrepreneurs with good ideas, introduce instruments that enable entrepreneurs to access capital for startups, and ensure flexible labor market policies that enable firms to expand by attracting the best skilled talents from outside the firm or the country.

Promoting Greater Transparency and Efficiency

Increased Competition

Lack of competition is an issue in Azerbaijan, particularly for small and medium enterprises (SMEs), which face uneven treatment within the enterprise sector. Government ownership of companies within the total enterprise sector remains pervasive (3 percent) and is more than twice the Europe and Central Asia (ECA) average (1.1 percent). Moreover, government ownership is particularly high in the manufacturing sector (5.8 percent; World Bank 2011). This poses an additional barrier to entry for entrepreneurs and SMEs to break into the manufacturing sector, as government-owned firms have better access to additional financial support and have an easier time dealing with government regulations. Firms with government participation in ownership face fewer visits from tax officials. This is compounded by information gaps in the ownership of banks and selected enterprises as well as by gaps in the disclosure of financial information that prevent increased competition.

The government, together with international donors such as the U.S. Agency for International Development, has been working since 2011 to draft a competition code that unifies the separate individual laws and legislative acts on unfair competition and antimonopoly activity and conforms with international best practices (USAID 2011). In addition, there is a need to undertake an analysis of other legislation that affects the competition environment in the country and undermines the level playing field for businesses (for example, tax exemptions, subsidies).

A competition code that is subject to an independent external assessment and conforms to international best practice should be finalized and enacted, and an independent antimonopoly agency should be established to enforce it.

Increased Access to Information

Several organizations and programs provide support services and access to preferential credit to SMEs:

- The National Entrepreneurship Fund, also housed under the Ministry of Economic Development, provides subsidized funds to enterprises in strategic sectors through commercial banks.

- The Azerbaijan Export and Investment Promotion Foundation increases entrepreneurs' readiness to export by helping SMEs access foreign markets.
- The Baku Business Training Center, under the Ministry of Economic Development, provides business support services to entrepreneurs.
- The Azerbaijan Investment Company, established by presidential decree in 2006, supports the development of nonoil businesses through equity investments.

Entrepreneurs, particularly small entrepreneurs, lack adequate information on these agencies and programs. Currently, small firms can obtain free advice from local units of the Ministry of Economic Development, whose capacity is limited. These services need to be scaled up, possibly by engaging private consulting firms using public funds. Further, while the Ministry of Economic Development has aggregate data on use of National Entrepreneurship Fund, information on firms that have benefitted from these funds would be informative for future policy and would serve as a good demonstration effect for new entrepreneurs. These data would also be useful for assessing the effectiveness of these funds and their impact on beneficiaries, thus informing future policy interventions.

Information on existing programs, including clear eligibility criteria and target beneficiaries that have accessed the funds, should be better disseminated.

Legal and Regulatory Simplification

Over the last few years the government has embarked on reforms to facilitate business entry and reduce the tax burden through more transparent value added tax collection and a simplified tax system for SMEs. The introduction of the one-stop-shop reform for business registration¹ has reduced the time and procedures to start a business as a legal entity. Since the introduction of the one-stop shop, all procedures are run under a single entity (the Ministry of Taxes) instead of at five state bodies, as before the reform. These changes increased business registration over 30 percent in the first year of operation (IFC 2009).

While the one-stop shop greatly simplified the licensing and permits system, the government can make additional improvements, particularly in implementing more advanced tools such as an improved business registry, online application forms, and automatic registration. The permit system is not precise, and application decisions are still subject to ad hoc decisions. The newly established State Agency for Public Services and Social Innovation (ASAN), a single window agency for public service delivery, could be used as a platform by expanding its mandate and providing business-related services of issuing permits in an efficient way.

There have been improvements in the legal framework of permits and inspections such as the introduction of the new centralized e-registries of inspections (<http://www.yoxlama.gov.az>) and of permits and licenses (<http://www.iceseler.gov.ua>), which are both supported by International Finance Corporation (IFC). However progress has been slower than anticipated. While inspections are

important, frequent and arbitrary inspections can stifle entrepreneurship in a big way. No legislation regulates inspections in a systematic manner. There is a draft law on regulating business inspections and protecting entrepreneurial interest that needs to be finalized in consultation with stakeholders and then implemented. It would then be vital for these regulations to be made publicly available to all enterprises so there is greater transparency and efficiency.

Greater transparency and certainty must be ensured. The government should ensure that the number of inspections a firm is subjected to and the methods applied for selecting the companies for inspection are transparent and publicly available to all enterprises.

Further, expansion of e-services through data sharing between ministries should be facilitated to increase efficiency in issuing permits and conducting inspections by reducing discretion.

Access to Finance

Little risk capital is available to startups, and bank borrowing is expensive. Nearly all the interviewed firms had been established with personal savings or funds borrowed from friends and families. They also agreed on needing to have other sources of finances and needing to develop the financial infrastructure to support varied support instruments for new ventures. Chile's Start-up program is one such initiative that has been successful (see box 5.1).

Azerbaijan's banking system continues to remain the largest by far in the South Caucasus at \$22.6 billion in assets, about 35 percent of gross domestic product (GDP) in 2012. Although 44 banks operate in the country, the banking sector is inefficient, dominated by one large state-owned bank with the rest of the sector fragmented among more than 30 very small banks. The growth of credit accelerated during the first half of 2012 compared with the same period in 2011 and reached its precrisis level of 20 percent. However the structure of distribution of credits among the sectors of economy remained unchanged. While a substantial portion of total credit (33 percent) goes to households as consumer credit, trade and services account for almost a third of total credits. Industry and manufacturing, and construction and real estate, each account for less than 6 percent.

According to the Enterprise Survey, more than half of entrepreneurs believed that interest rates were too high. Interest rates on credit (24 percent) greatly exceed profit levels of SMEs (around 16 percent; IFC 2009). Another important reason is the high collateral requirements for loans. Commercial banks in Azerbaijan require substantive collateral (102.4 percent of the loan amount), and more than 87 percent of loans require a collateral.

Facilitating Secured Lending Transactions

Secured transactions, particularly for movables, are important for SMEs, which have more trouble accessing credit. When the regime makes it difficult to establish rights to collateral or execute on collateral, lenders are reluctant to lend on that basis. By contrast, a well functioning secured transactions regime can give

Box 5.1 Case Study: Start-Up Chile

Chile is often held up as a model of economic liberalization and has recently been at the forefront of targeted interventions that promote small business growth. These include an expansion of the tax credit that small businesses can earn for paying for new capital expenses. Capital investment has increased as a result of the tax credit.

Chile has created a competition called Start-Up Chile that provides \$40,000 equity-free seed capital, as well as immigration assistance, to dozens of teams every year. In addition to strengthening existing innovation hubs, the project goal is to have 1,000 participants by 2014. In 2011, 87 startups from more than 30 countries were selected from 330 applications.

The recent rounds have lasted 24 weeks and have already created promising firms such as Taggify, which recently attracted an additional \$750,000 from the government of Chile. Taggify's business model of offering contextual ads to web properties is competitive with innovation from the United States. Chile also gains by promoting immigration and being able to target small funds at the initial stages of innovation, which historically are the most difficult for entrepreneurs to secure. While many ventures are likely to fail, the small individual prize sizes mean that even just a few successes could validate the entire program.

More important, the imported entrepreneurial talent that does succeed provides a service in exposing a network of individuals who, by virtue of working in a startup venture, are more likely to launch subsequent ventures. The key takeaway is that Start-Up Chile is only a viable option because of the underlying favorable climate for business development and creation. Without a well regarded framework for enterprise featuring low taxes and easy registration, more incentives would have been required to get entrepreneurs to emigrate.

Sources: Applegate and others 2012; Geromel 2012.

lenders confidence that they can lend to SMEs and collect in case of default by seizing and selling collateral. Therefore, a healthy secured transactions system should be seen as an important part of an investment climate that supports entrepreneurship.

The primary laws on secured transactions in Azerbaijan are the Civil Code, 1999, and the Law on Mortgage, 2005. Azerbaijani law permits the creation of security interests in both movable property and immovable property. Security interests in motor vehicles, ships, and other movable property, which are subject to registration (in an official state registry), are recorded in such registries but are considered mortgages and are governed by the Law on Mortgage rather than the Civil Code. Though the law does not require the security interest in nonregistered assets to be perfected in a notarized agreement to create the security interest, it does allow parties in contract to allow out-of-court enforcement. In practice, banks rarely extend finance secured by movable property, except registered movable property such as vehicles, ships, and securities.

A nonpossessory security interest, which allows the borrower to keep the equipment and use it as collateral, is a basic feature of a modern secured transactions framework, which is undeveloped in Azerbaijan due to the lack of

a collateral registry and supporting legal framework. The government began to consider setting up a collateral registry for movable property in 2008 with assistance from the International Finance Corporation. In December 2012 the International Finance Corporation in conjunction with the U.S. Agency for International Development renewed efforts to promote a more efficient legal regime for secured transactions, and a new draft law on secured transactions is planned for submission to the Azerbaijani Central Bank (IFC 2012).

Leasing is an important tool that is particularly important to SMEs because it allows them to purchase equipment as they use it, with limited collateral and the need to finance growth with credit. The leasing market in Azerbaijan is dynamic, with around 30 companies competing. One of the main concerns for leasing companies is that banks are reluctant to provide long-term financing. Additionally, some banks create their own leasing companies and provide them with cheaper finance, making it difficult for independent or nonaffiliated leasing companies to compete (Abdullayev 2011). This lowers consumer choice and competition and thus reduces access to finance.

Security interests in all types of movable property should be allowed to be registered, and an electronically searchable collateral registry should be created for both movable and immovable assets. The registry should be authoritative—that is, parties should not be able to circumvent registry priority.

Access to Early Stage Risk Capital

During the early stages of new innovative companies, which usually have few or no sources of revenue and require large initial capital investments to develop their products, loan payments have a high opportunity cost. For this reason, loans are usually most appropriate for companies that already have steady revenue streams. The role of early-stage risk capital is highly relevant for innovative start-ups and SMEs. Innovative SMEs thus rely on investors that will provide risk capital, generally in return for a share in the company.

Two public programs have been established to facilitate access to finance:

- *The National Fund for Entrepreneurship Support*, an agency of the Ministry of Economic Development (OECD 2012), was established in 2002 to lend to private businesses through participating financial institutions in order to support more diverse growth by developing nonoil sector businesses. The fund lends at 1 percent a year to participating financial institutions, which are restricted to on-lending to clients at 6 percent a year. These concessional loans, while offered at low rates of interest, shift the burden of debt completely to the banks, which have to pay back the government even if the client fails to pay back. This creates a bias for participating financial institutions toward loans that are cheap to administer and low risk, which more often than not are not first-time entrepreneurs or those who require concessional credit. This also eliminates high-risk innovative entrepreneurs.
- *The Azerbaijan Investment Company* was established by presidential decree in 2006 to develop nonoil businesses through equity investments. The company's

initial charter capital was financed by the State Oil Fund of Azerbaijan. Its portfolio of investments spans a variety of sectors, such as heavy industry, agriculture, logistics, and food processing.

The government can establish favorable financing programs for SMEs by developing early-stage risk capital. A thorough evaluation of the efficacy of existing programs would inform future policy intervention and identify ways to strengthen current programs.

Some countries also use loan guarantee schemes that address market imperfections in providing debt finance for small firms. These schemes help ensure that good projects are not precluded from access to finance due to lack of collateral. A premium interest rate may be charged on the loan, but in the event of default, the government covers some of the loss. In designing new financial policy instruments to foster entrepreneurship and innovation, care should be taken in both designing and managing these instruments to prevent capture or corruption and to promote efficiency. The following elements are important:

- Clearly established goals and objectives at the outset.
- Constant monitoring and evaluation of performance against goals and objectives.
- Monitoring and evaluation performed externally to the administration and management of the instruments.
- Adjudication to approve applications, conducted by an independent panel consisting of external peer reviewers.
- An independent panel with significant private sector and export expertise.
- Adjudication based on pre-established, clear, and transparent criteria.

Public Support Instruments to Access Export Markets

Openness to trade is an important source of knowledge transfer as well as an important motivation for firms to undertake entrepreneurial activities that increase firm market share, productivity, and growth. Such a phenomenon, sometimes referred to as “learning from exporting,” often takes place when exporting firms are under pressure to meet quality standards, including safety and environmental regulations, established by their customers or the regulatory authorities of destination countries. Such pressures can either strengthen incentives for exporting firms to upgrade their technology or hinder other firms that lack the requisites for exporting to more sophisticated markets.

While competition pressure helps provide needed incentives, insufficient capacity is often the binding constraint that prevents firms from learning more from exporting. The inability to adhere to minimum global standards, in particular, can be a major obstacle for firms to enter into new export markets. Given the government’s emphasis on diversifying the economy, it could focus on three priority areas.

The first is financial assistance to defray a portion of the cost firms incur to acquire the requisite capacity. The Azerbaijan Export and Investment Promotion Foundation plays that role by helping SMEs access international trade fairs to showcase their products. The government does not provide incentives to undertake research and development (R&D) or invest in new technologies. A matching grants program to train workers and purchase consultancy services, including those required for quality certifications to adhere to global standards, should be considered. Firms would benefit from not having to bear the entire cost of such investments, and by requiring firms to match the portion paid for by the government, the program would attract genuinely committed firms. In Singapore, for example, the new Market Readiness Assistance Grant encourages SMEs to expand their business overseas by allowing Singapore-incorporated firms seeking overseas expansion to tap preapproved industry consultants in such areas as market assessment, market entry, and business restructuring through internationalization.

The second is public provision of basic infrastructure to enable firms to adhere to international standards. The government should invest in building accredited control laboratories that support firms in sectors where adhering to global standards is a prerequisite for survival. The World Bank is working closely with the European Commission in the context of the new agriculture project in strengthening this infrastructure.

Third, governments could formulate policies that promote technology transfer to the domestic economy from foreign direct investment by acting as a facilitator and gathering information on possible opportunities for links,² assisting in identifying partners (and arrangements) by matching suppliers' capabilities and buyers' needs (legal assistance, fairs, missions, conferences and exhibitions, and so forth), and providing economic incentives in the form of tax exemptions and subsidies to promote training and technology transfer from buyer firms to local supplier firms.³ For example, in 2003 the Chinese government and Microsoft signed a deal to use Windows as the preferred desktop operating system for government offices. In return, Microsoft was required to reveal its Windows source codes to allay the government's security fears, to cooperate with the country's largest software development and integration firm to co-develop products based on Microsoft's software platforms, and to train 200 software developers and 120 architects within one year. Rather than simply allowing Microsoft to wire up the government's operations, the contract was clearly designed to promote technology diffusion (Kuriakose, Goldberg, and Zhang 2011).

Skills Development

Stakeholders repeatedly cited inadequate skills as a key hindrance to developing local industry. The unavailability of a suitable business partner, also a main obstacle, indicates the lack of entrepreneurial skills. While the unemployment rate during the first half of 2012 was low at 5.3 percent, labor force participation

rates have fallen from 91.7 percent in 2003 to 77.4 percent in 2011 (World Bank 2013a). University admission rates remain among the lowest in ECA, with approximately 30,000 students (15 percent of high school graduates) admitted every year. The curriculum is outdated, and the system is unable to produce industry-relevant skills that support the new strategic priority sectors of the economy.

The government has recognized the need to improve human capital to achieve its goals of sustainable economic growth and diversification. A National Employment Strategy was adopted in 2005, as was an action plan for its operationalization in 2007. The strategy identifies multiple priorities, including reforms to labor market institutions and policies, modernization of vocational education, and introduction of lifelong learning (World Bank 2009). Through the State Oil Fund, the government is also investing in human capital development under the state program on education of Azerbaijan youth abroad in 2007–15.

Despite these measures, drastic reforms need to be made to address the existing skills gap in the economy.

Medium- to long-term policies need to reorient the higher education system to produce more industry-relevant skills especially for the new priority sectors that have been identified by the government. In addition, more emphasis must be given to industry-relevant vocational training and education courses that cater to the technical needs of the various priority sectors identified by the government.

In doing so, there needs to be a feedback mechanism between firms and the government that loops back into the design and development of new courses that are responding to the skills needs of the industry.

Another important area is the provision of an adequate supply of managerial and marketing competencies, as the analysis showed that many firm founders had these skills, which possibly set them apart and provided them with the requisite skills to start their entrepreneurial activity. Lack of managerial capital is an important constraint to firm growth (Bloom and Van Reenen 2010).⁴ Support for existing firms to develop managerial and marketing competencies by subsidizing costs or directly procuring business development supply services and advisory services is common in developed economies. Vouchers are used in several countries, which allow firms to freely choose service providers (for example, in Chile).

A way to provide business development supply services is through business incubators that supply entrepreneurs with the expertise, funding, networks, and tools they need to make their ventures successful (Etzkowitz, Carvalho de Mello, and Almeida 2005; Rothaermel 2002). In addition to physical space and shared infrastructure, incubators provide important soft skills, including professional consulting for business planning and strategy, project preparation, financial and legal assistance, and intermediation services, notably funding and/or linking to capital sources and integration to technology and business networks, among others. For example, the Republic of Korea's Institute of Start-up and Entrepreneurship Development develops requisite skills by providing a range of support services that address various aspects of entrepreneurial development (see box 5.2).

Box 5.2 Case Study: The Republic of Korea—Korea Institute of Startup and Entrepreneurship Development

Korea has a reputation for having one of the world's best education systems and a very welcoming business atmosphere (the World Bank ranks the country eighth in ease of doing business). With these advantages, Korea should be teeming with aspiring entrepreneurs. Nonetheless, cultural barriers such as an aversion to risk and failure have kept many would-be entrepreneurs from reaching their full potential. But over the past decade the country has bolstered support for startup enterprises and implemented several programs that foster an entrepreneurial spirit, changing the attitude toward entrepreneurship.

In 2008 Korea began implementing a series of policy packages known as the Start-up Korea Initiatives. These policies foster entrepreneurship with support structured around three themes: developing startup resources, enhancing startup capacity, and leveraging successful incubation. Leading this effort is the Korea Institute of Startup and Entrepreneurship Development, a public institute under the country's Small and Medium Business Administration. The institute was founded in 2000 as a nonprofit business incubation association but was designated by the government as the organization exclusively in charge of SME startup promotion in 2006, and it officially became a public entity in 2010. The institute is now the primary implementation agency for the Small and Medium Business Administration's startup initiatives.

The first theme of support involves developing the requisite skills and resources to set a backdrop for successful startup creation. The institute implemented five programs addressing various aspects of development:

- A program to support commercialization of creative ideas through content production, registration, and intellectual property protection.
- A program to cultivate entrepreneurs by providing them with financing for business preparation and access to resources at universities and research centers.
- A program to foster the spread of knowledge and know-how by linking successful ventures with fledgling startups to act as mentors and technology consultants.
- A program to encourage technology-oriented startups by providing access to patents held by universities and research organizations.
- A program to organize a variety of events to generate an entrepreneurial spirit among students.

The second type of support measure is enhancing the capacity of potential entrepreneurs through a variety of education programs, clubs, and competitions. The Youth BizCool program grooms entrepreneurs at a young age by sponsoring clubs, activities, and education materials targeted to students from primary school through high school. University startup support programs continue building skills, with support for activities such as clubs and overseas startup training. Potential entrepreneurs who are not students can also participate in an education program for the general public, which offers mentoring and consulting on weekends. Other efforts also help build capacity in this phase, such as the Korea National Startup Competition League, which holds annual competitions. Successful teams in this competition earn prize money and cost compensation for their pilot products.

box continues next page

Box 5.2 Case Study: The Republic of Korea—Korea Institute of Startup and Entrepreneurship Development *(continued)*

The third theme of support enhances the potential for businesses to succeed in the country's network of business incubators. At the end of 2010 Korea had 274 business incubators nationwide, which housed about 4,000 enterprises (KISED 2011). To improve the effectiveness of these incubators, the institute implemented a program to train and certify specialized business incubator managers. It offers the enterprises at these incubators support for marketing at home and abroad and provides commercialization support in the form of design and development assistance to promising businesses. The institute markets businesses that successfully commercialize products in newspapers, subway train ads, and e-books. Along with the startup support mechanisms discussed above, the institute supports Korean entrepreneurs through global outreach and cooperation with international partners to facilitate information exchange. So far, the country's efforts to support business creation appear to be paying off. Since 2008 the number of new business ventures and incorporations in Korea has steadily grown despite the global economic downturn.

Source: KISED n.d.

Increasing Industry-Research Collaboration and In-Firm R&D

An economy needs both researchers and entrepreneurs to be successful. Universities and industry are linked by the two groups, and the two groups require each other to be successful. But how is the relationship used to the best advantage? In several ways. The university could ask industry what appeared to be the most promising areas for product innovation and invention, or industries could ask what current research had the most commercial applications. Each must see the value of the relationship for any approach to be successful.

There is virtually no industry-research collaboration in Azerbaijan, and R&D is limited even among high-growth firms. Synergies need to be built between the industry and research communities in priority areas identified by the government. Examples of successful programs in other countries include India's SPREAD program—an early-stage technology development program that has been directed exclusively at private enterprises, with an explicit requirement for collaboration with public research institutes—which has been independently evaluated as successful.

Finland, Ireland, and Singapore contain important lessons. Yusuf and Nabeshima (2011) cite these three countries at the very outset, seeing in their strategies a vital role for university-industry links that led to a circulation of knowledge and of researchers. The universities were viewed as a source of entrepreneurship to help transfer innovation to the business sector. In Finland the Nokia Corporation took the lead in conjunction with the National Board of Education, the Ministry of Education, and the Future Committee of the Parliament in persuading the Academy of Finland to accelerate the initiative to become a knowledge society by mobilizing universities and public research entities. The role that the Finnish

Funding Agency for Technology and Innovation had in Finland's transformation into a knowledge economy has been widely acknowledged. Established by the government in 1983, the agency has a broad mandate that includes identifying areas for technological advance and coordinating the innovation system with the help of catalytic funding of R&D, all the while working closely with government agencies, universities, firms, and private financiers.

Technology transfer institutions are particularly important for firms in the process of catching up. Technology-bridging organizations can facilitate knowledge transfer from research institutions to SMEs through collaborative research and technology programs and through staff exchanges and secondments (in which researchers and engineers are placed in firms). Yet to develop an effective absorption of external knowledge and an appropriate use of foreign technologies, enhancing in-house R&D capabilities is fundamental.

To respond to these challenges, the government should introduce policy instruments that foster R&D and innovation in the private sector, including direct funding (grants and subsidies), matching grants, and R&D tax credits.

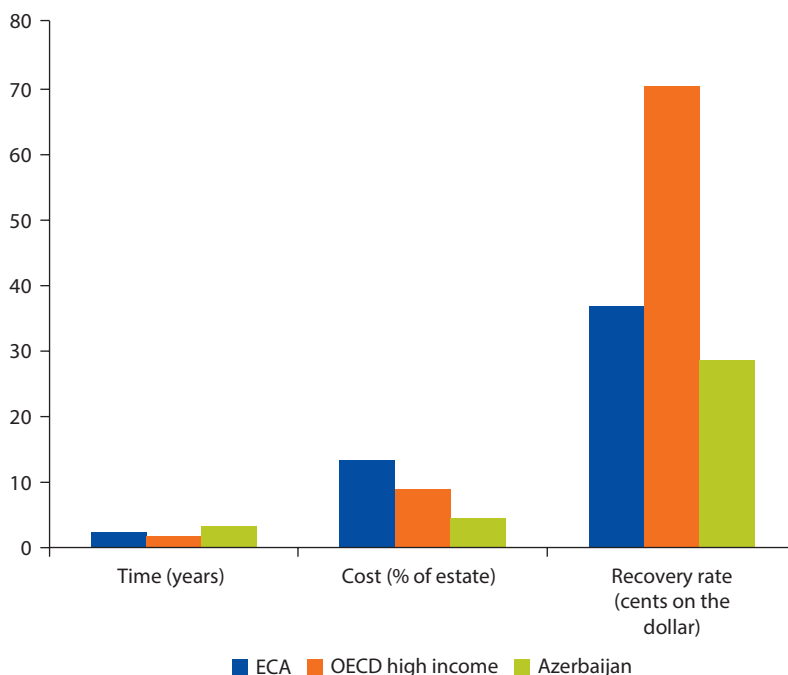
Facilitating Firm Exit and Restructuring

Lowering barriers to exit and enabling restructuring of viable firms are important means of fostering entrepreneurship. High bankruptcy costs that make failure expensive was one of the top constraints cited by surveyed entrepreneurs. Azerbaijan ranked 95 out of 183 on the 2013 Doing Business indicator on resolving insolvency. Debt recovery in Azerbaijan, on average, takes 2.7 years, longer than the Organisation for Economic Co-operation and Development (OECD) average of 1.7 years, and costs 8 percent of the bankruptcy estate, compared with the OECD average of 9 percent (figure 5.1). While the cost of recovery is low, the recovery rate in Azerbaijan is 29.7 percent, considerably lower than the OECD average of 70.6 percent.

Insolvency in Azerbaijan is limited, and bankruptcy procedures and creditor rights should be enhanced. "Insolvency" is legally defined as the inability of a debtor to pay its debts as they become due but does not include a situation in which the sum of a debtor's liabilities exceeds the sum of its assets. It is therefore possible that a viable business with cash flow problems may be pronounced insolvent and forced into bankruptcy.

Restructuring. Restructuring is a critical tool to save a viable yet distressed business. To rehabilitate a business that is insolvent but remains viable, additional loans may be required. At present, no mechanism incentivizes such post-petition financing. The unavailability of post-petition financing is a limitation in the framework for reorganization for viable businesses.

Access. For an insolvency regime to be effective, it must be accessible to all stakeholders. In Azerbaijan, a debtor may not initiate insolvency proceedings in cases of pending or potential insolvency. This means that a debtor cannot be proactive at an early stage of financial difficulty, which could reduce the chances of saving a distressed yet viable business.

Figure 5.1 Insolvency Indicators, 2013

Source: World Bank 2013b.

Note: ECA = Europe and Central Asia; OECD = Organisation for Economic Co-operation and Development.

The insolvency law should be changed to include incentives that motivate the banking sector to provide post-petition financing.

Raising Awareness

This chapter has elaborated on how government can facilitate high-growth entrepreneurial activity. In addition to instruments, the government must encourage entrepreneurship in the country. It has a key role in raising awareness of the private benefits of undertaking entrepreneurial activities. An example of this was the efforts of the Thatcher government, which came into power in the United Kingdom in 1979 with the clear objective to create an “enterprise culture” (Burrows 1991). The idea was to change the social attitudes of the U.K. population away from what the government perceived as a “dependency culture,” in which workers relied on large organizations and the state to provide them with employment, to a culture in which individuals strived to start their own businesses and created jobs.

School curriculum in Azerbaijan needs to factor in prerequisites that encourage innovative thinking. An example of a U.K.-based program designed to influence the attitudes of young people toward self-employment is the Shell Technology Enterprise Program, which raises awareness among college students of the benefits of working in a small business by facilitating short-term placements

during summer vacation. Another example of a program aimed at the youth is Law 44 in southern Italy, which provides a range of financial and advisory support services to individuals ages 18–30 who wishing to start up new businesses in that region. *Further, showcasing successful entrepreneurs could go a long way in fostering the entrepreneurship culture in society.* The objective of all the various policy instruments reviewed here is to create an entrepreneurship culture and increase the supply of new entrepreneurs as well as ensure their survival and, most important, their growth.

Summary of policy recommendations and timelines

<i>Policy measure</i>	<i>Timeline</i>
<i>Facilitating business entry and increasing efficiency</i>	
Facilitate the expansion of e-services through data sharing between ministries to increase efficiency in issuing permits and conducting inspections by reducing discretion.	3–6 months
Ensure that the number of inspections a firm is subjected to and the methods applied for selecting the companies for inspection are transparent and publicly available to all enterprises.	0–3 months
<i>Increased competition and access to information</i>	
A competition code that is subject to an independent external assessment and conforms to international best practice should be finalized and enacted, and an independent antimonopoly agency should be established to enforce it.	3–6 months
Better disseminate information on existing programs, including clear eligibility criteria and target beneficiaries that have accessed existing funds.	0–3 months
<i>Increased access to finance</i>	
Allow security interests in all types of movable property to be registered, and create an electronically searchable collateral registry for both movable and immovable assets.	6–12 months
Conduct a thorough evaluation of the efficacy of existing programs to inform design of new support programs that finance early-stage risk capital.	0–3 months
<i>Increased access to markets</i>	
Introduce financial instruments to defray a portion of the cost that the firm would have to incur to acquire the requisite capacity to export to more sophisticated markets (for example, matching grants to buy business development services).	6–12 months
Provide basic infrastructure to enable firms to adhere to international standards by building accredited control laboratories.	6–12 months
Formulate policies to promote backward links between foreign firms and the domestic economy.	6–12 months
<i>Developing skills</i>	
Reorient higher education programs to produce more industry-relevant skills for priority sectors identified.	6–12 months
Emphasize industry-relevant vocational training programs.	6–12 months
<i>Increasing firm level R&D and industry-research linkages</i>	
Provide incentives for industry and researchers to effectively collaborate.	Greater than 1 year
Introduce programs and policies that foster R&D in the private sector (such as direct funding, matching grants, and R&D tax credits).	6–12 months

table continues next page

<i>Policy measure</i>	<i>Timeline</i>
<i>Facilitating firm exit and restructuring</i>	
Change the insolvency law to include incentives that motivate the banking sector to provide post-petition financing.	6–12 months
<i>Raising awareness</i>	
Increase awareness of entrepreneurship by showcasing successful entrepreneurs.	0–3 months
Introduce changes to the school curricula that encourage innovative thinking.	6–12 months

Note: R&D = research and development.

Notes

1. The one stop shop was implemented with the assistance of the Investment Climate Advisory Services group of the World Bank.
2. Either directly or by supporting private institutions, governments promote the creation of information exchanges that could range from lists of inputs and materials available locally—which might include prices and qualities—to names, locations, and profiles of local suppliers.
3. By exempting exporters from a value added tax, governments encourage the use of local inputs; by treating costs incurred in the creation of links as tax-deductible expenses from corporate income tax, governments promote their creation.
4. Firms from non–Organization for Economic Cooperation and Development (OECD) countries score significantly below firms from OECD countries on a measure of management practices (Bloom and Van Reenen 2010).

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Latent Entrepreneurship

An empirical study of actual entrepreneurial activities alone may overlook the entrepreneurial potential of an economy.¹ Actual entrepreneurs include only people who have successfully started a business and exclude firms and individuals that are truly facing enormous constraints and are unable to enter the market at all. This bias is known in the literature as the “hippopotamus versus camel” problem, which suggests that studies of enterprises and entrepreneurs that are already present in the market (“camels in the desert”) may completely miss the constraints faced by those who cannot enter the market (“hippopotamus in the desert”).

More than 10 years ago a new literature on “latent entrepreneurship” emerged using data from a household survey data that asked members of the labor force whether they would rather be self-employed. Some may argue against this measure of latent entrepreneurship, as it captures the pool of all possible entrepreneurs, including subsistence forms of self-employment. In difficult labor markets, self-employment may serve as an alternative to joblessness and may represent little more than a survival strategy rather than a high-impact, job-creating business venture. Nonetheless, the pool of those who would rather be self-employed may also be thought of as representing the entire pool of possible entrepreneurs. Every successful venture has arguably grown from the initial efforts of self-employed individuals. Those who prefer to be self-employed represent all latent entrepreneurs, in other words, “survival” or subsistence entrepreneurs and “opportunity” entrepreneurs alike, and their success appears to be driven by similar individual-level and policy correlates. In addition, this measure of entrepreneurship is comparable across countries.

The pioneering work in this field covered about 20 countries, including four new European Union member countries and the Russian Federation. The study found large numbers of people who would like to be entrepreneurs, but the “entrepreneurial spirit” remained dormant. In the absence of suitable data, the literature has largely remained stagnant since then. However, the inclusion of a number of related questions in the 2010 Life in Transition Survey provides a window of opportunity to revisit this literature. Data from the 2010 survey

suggest that the pool of latent entrepreneurs in Europe and Central Asia (ECA)—those who prefer to be self-employed—is generally quite large. About a quarter of the labor force in the region, on average, would rather be self-employed, comparable to the size of the latent entrepreneurs in Western European comparator countries in the same survey. In addition, the desire to be self-employed does not appear to be driven by necessity alone, based on survey respondents' individual characteristics. First, many of the latent entrepreneurs are already gainfully wage-employed. In addition, many are highly educated professionals who are employed as directors or managers of their companies.

Note

1. Prepared by Erwin R. Tiongson based on ongoing work with Hilal Atasoy and others (forthcoming), "Latent Entrepreneurship in the Europe and Central Asia Region." The results also appear in a forthcoming Europe and Central Asia regional report on jobs.

Classification of Exports by Product and Technology

Table B.1 Classification of Exports by Product and Technology

<i>Total exports</i>		
Primary	Primary (oil)	
	Primary (nonoil)	
Manufactured	Resource-based 1: Agro-based	Resource-based
	Resource-based 2: Other resource-based	
	Low technology 1: Fashion cluster	Low tech
	Low technology 2: Other low tech	
	Medium technology 1: Automotive	Medium tech
	Medium technology 2: Processing	
	Medium technology 3: Engineering	
	High technology 1: Electrical and electronics	High tech
Others	High technology 2: Other high tech	
	Other transactions	

Source: United Nations Commodity Trade Statistics (Comtrade) database 2011.

Data Sources and Regression Results on New Entrepreneurship Survey

Gallup World Poll Data

The Gallup World Poll Database includes more than 18,000 observations from 19 countries in Europe and Central Asia.¹ The data for Azerbaijan and Georgia are based on 1,000 observations for each country. The core Gallup World Poll questionnaire includes detailed information on demographics (such as gender, age, marital status, and education); income; well-being and job satisfaction; confidence and trust in institutions, family, and strangers; and most important, entrepreneurs. Data on self-employment distinguish between full- and part-time employment and indicate the number of hours worked.

New World Bank Entrepreneurship Survey

A sample of 300 firms was surveyed across 24 nonoil manufacturing and services sectors that were founded between 2002 and 2010. The distribution of the sample was based on these sectors' contribution to GDP in 2011. For the services sector, there was a specific emphasis on interviewing information technology, financial services, and technical and professional services.

Box C.1 Specification of the Probit Regression**Dependent variable**

Innovation = 1 if the company introduced new or substantially improved products or services during the past three years; = 0 otherwise

Independent variables*Firm Characteristics*

Number of employees = proxy for firm size

Firm age = age of the firm (years)

R&D intensity = average research and development (R&D) expenditure to sales ratio

High-tech sector = 1 if the firm's industry belongs to high-technology sector; = 0 otherwise

Entrepreneur Characteristics

Founders' education = 1 if at least one founder of a firm has above a technical degree; = 0 otherwise

Founders' age = average age of the founders

Technical engineering = 1 if at least one founder's main area of expertise is technical and engineering knowledge; = 0 otherwise

General management = 1 if at least one founder's main area of expertise is general management; = 0 otherwise

Strategy and Market Environment

International market = 1 if the firm also sells to the international market; = 0 otherwise

R&D activity = 1 if R&D activity is considered important for creating and sustaining the competitive advantage of the firm; = 0 otherwise

Alliances = 1 if alliances with other firms are considered important for creating and sustaining the competitive advantage of the firm

Controls include sector dummy variables and the innovation rates of other firms in the same sector (in the same sector, number of innovative firms, excluding the firm as a proportion of total firms excluding itself).

Table C.1 Regression Results

<i>Estimation method</i>	<i><Georgia>Probit</i>	<i><Azerbaijan>Probit</i>
Dependent variables	Innovation	Innovation
Independent variables		
<i>Firm characteristics</i>		
Number of employees	0.004 (0.004)	0.005*** (0.001)
Firm age	−0.047 (0.073)	−0.141*** (0.052)
R&D intensity	0.075** (0.031)	0.026991 (0.023)
High-tech sector	−0.611 (0.565)	0.188 (0.433)
<i>Entrepreneur characteristics</i>		
Founders education	0.321 (0.334)	−0.336 (0.805)
Founders age	−0.198 (0.161)	0.147 (0.172)
Technical engineering	0.538 (0.647)	0.292 (0.777)
General management	0.94* (0.493)	−0.121 (0.258)
<i>Strategy and market environment</i>		
International market	−0.256 (0.518)	0.379 (0.388)
R&D activity	−0.174 (0.154)	−0.187 (0.162)
Alliances	0.069 (0.151)	0.395* (0.204)
Networking	0.313** (0.156)	0.035 (0.153)
Product and market	0.334 (0.306)	0.599** (0.252)
<i>Funding</i>		
External fund	0.254 (0.348)	−0.548 (0.394)
<i>Other firms' innovation</i>		
Other firms' innovation	0.09*** (0.028)	0.035*** (0.011)
Constant	−3.879*** (1.079)	−2.509** (1.173)
N	300	299
Log likelihood	−50.783	−72.414

Note: Numbers in parentheses are standard errors. Coefficients on sector dummy variables are not reported. R&D = research and development.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Note

1. For Europe and Central Asia, the database does not include data on Albania, Bosnia and Herzegovina, Kosovo, the former Yugoslav Republic of Macedonia, Montenegro, and Serbia.

APPENDIX D

Regression Results on Enterprise Survey

Table D.1 Sample Size and Distribution of ECA 2008/09 Surveys

	<i>N (firms)</i>	<i>Manu- facturing, %</i>	<i>Retail, %</i>	<i>Other services, %</i>	<i>Small (5–19), %</i>	<i>Medium (20–99), %</i>	<i>Large (100+), %</i>
<i>Southern Caucasus countries</i>							
Azerbaijan	380	32	32	37	45	37	18
Georgia	373	33	29	38	49	37	14
<i>Selected ECA comparator countries</i>							
Belarus	273	38	35	27	35	34	31
Bosnia and Herzegovina	361	35	29	36	39	37	24
Bulgaria	288	33	32	35	48	33	18
Czech Republic	250	44	24	32	32	40	28
Estonia	273	34	30	36	41	30	29
Hungary	291	40	21	39	34	33	33
Kazakhstan	544	34	31	36	27	42	30
Kosovo	270	38	23	39	70	25	5
Kyrgyz Republic	235	40	23	37	42	43	16
Latvia	271	34	33	33	34	33	33
Lithuania	276	37	26	37	38	34	27
Macedonia, FYR	366	35	26	39	38	40	22
Moldova	363	30	37	33	34	42	24
Mongolia	362	36	23	41	40	41	20
Montenegro	116	33	35	32	52	34	14
Poland	455	33	29	37	48	28	24
Romania	541	35	28	36	32	34	34
Russian Federation	1,004	71	11	18	24	37	39
Serbia	388	35	26	39	37	32	31
Slovak Republic	275	33	30	37	35	35	30
Slovenia	276	38	20	42	38	30	31
Tajikistan	360	32	30	38	50	36	14
Turkey	1,152	80	9	12	31	39	30
Ukraine	851	68	14	18	39	35	25
Uzbekistan	366	34	30	37	37	37	26

Source: World Bank Enterprise Surveys (database) 2013.

Note: ECA = Europe and Central Asia.

Table D.2 List of Variables***Innovation variables******(indicator 0/1)***

ECAo1	Product innovation
ECAo13	Process innovation
in both	Conducted both product and process innovation
in neither	Conducted either product or process innovation
ECAo3	Spent on R&D
e6	Uses foreign-licensed technology

Performance variables (Y)

perf1	Annual sales growth
perf2	Annual employment growth
perf3	Annual labor productivity growth

Explanatory and control variables

wk1	% of firms offering formal training
wk13	% of unskilled workers* (manufacturing only)
logexp_wkrs	Log of capital-expenditures-to-workers ratio: $\log((n5a+n5b)/s)$
exporter	Indicator if firm has at least 10 percent of annual sales derived from direct exports
ownership	Indicator if firm has at least 10 percent foreign ownership
car1	Firm age
Size dummy variables	1=small (5–19), 2=medium (20–99), 3=large (100+)
Sector dummy variables	Garments, food, chemicals, metals and machinery, other manufacturing, retail, other services

Regression structure

Probit: errors clustered by sector7 (7 industries)
 OLS: svy set command

Note: R&D = research and development.

Table D.3 Who Innovates? Product Innovation

	<i>Azerbaijan</i>	<i>Georgia</i>	<i>Czech Republic</i>	<i>Poland</i>	<i>Russian Federation</i>	<i>Turkey</i>
Exporter	0.203 (0.232)	0.355** (0.152)	−0.0630*** (0.0228)	0.0467 (0.0414)	0.176*** (0.0272)	0.0785 (0.0600)
Foreign ownership	0.213* (0.120)	0.00678 (0.0518)	0.262*** (0.0657)	0.161 (0.106)	0.165*** (0.0308)	0.0976 (0.155)
% of unskilled workers (manufacturing firms only)	0.000792 (0.00298)	0.00156 (0.00163)	−0.00865 (0.00671)	0.00251 (0.00427)	0.00257** (0.00114)	0.000447 (0.00108)
Offers formal training	0.256 (0.182)	0.309*** (0.0892)	0.0431 (0.194)	0.166** (0.0826)	0.168*** (0.0448)	0.0936 (0.0723)
Capital expenditures to sales ratio	−0.00130 (0.00121)	0.00691* (0.00372)	−0.00600* (0.00335)	−0.00155 (0.00114)	−0.00869 (0.00643)	0.00127*** (0.000474)
Log(capital expenditures to workers ratio)	0.0272 (0.0347)	0.121*** (0.0161)	−0.0918*** (0.0236)	−0.0137 (0.0181)	−0.0560** (0.0230)	0.0281 −0.0202

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for β from equation 4.1. Probit regression where explanatory variables are regressed individually with control variables. Dependent variable: dummy variable if firm conducted product innovation. Marginal effects are shown. Each regression also controls for age, sector, and firm size group. Excluded dummy variables: other manufacturing and small-size firm.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Table D.4 Who Innovates? Process Innovation

	<i>Azerbaijan</i>	<i>Georgia</i>	<i>Czech Republic</i>	<i>Poland</i>	<i>Russian Federation</i>	<i>Turkey</i>
Exporter	−0.118 (0.271)	0.193*** (0.0207)	−0.125 (0.120)	0.156** (0.0612)	0.124*** (0.0204)	0.190*** (0.0587)
Foreign ownership	0.141*** (0.0519)	−0.268 (0.191)	0.0124 (0.0367)	0.213** (0.0885)	−0.0484 (0.0343)	0.126 (0.0974)
% of unskilled workers (manufacturing firms only)	0.00435*** (0.00147)	0.00427*** (0.000786)	−0.00274** (0.00111)	0.00619** (0.00295)	0.00286*** (0.000908)	0.00118 (0.00104)
Offers formal training	0.216** (0.0949)	−0.0647 (0.0429)	0.0790 (0.117)	0.245*** (0.0891)	0.106*** (0.0249)	0.180*** (0.0421)
Capital expenditures to sales ratio	0.000236 (0.00124)	0.000353 (0.000261)	−0.00875*** (0.00222)	−0.00206 (0.00270)	−0.00585* (0.00348)	0.000645* (0.000348)
Log(capital expenditures to workers ratio)	0.00489 (0.0348)	−0.0199** (0.00988)	−0.0806*** (0.0171)	0.0628** (0.0297)	−0.0361*** (0.0123)	0.0248 (0.0178)

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for β from equation 4.1. Probit regression where explanatory variables are regressed individually with control variables. Dependent variable: dummy variable if firm conducted process innovation. Marginal effects are shown. Each regression also controls for age, sector, and firm size group. Excluded dummy variables: other manufacturing and small-size firm.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Table D.5 Who Innovates? R&D

	<i>Azerbaijan</i>	<i>Georgia</i>	<i>Czech Republic</i>	<i>Poland</i>	<i>Russian Federation</i>	<i>Turkey</i>
Exporter	−0.0231 (0.0171)	0.0316 (0.0561)	−0.0386 (0.0410)	0.250*** (0.0572)	0.568*** (0.0472)	0.146** (0.0603)
Foreign ownership	0.00835 (0.0173)	−0.0429 (0.0479)	−0.0945 (0.0632)	0.157** (0.0713)	−0.0688*** (0.0239)	−0.00679 (0.104)
% of unskilled workers (manufacturing firms only)	1.44e−08 (6.25e−08)	0.000609 (0.000483)	−0.00231* (0.00118)	0.00180 (0.00250)	−0.00101** (0.000497)	0.000167 (0.000852)
Offers formal training	9.18e−07 (3.85e−06)	0.621*** (0.0705)	0.0642 (0.138)	0.141* (0.0733)	0.322*** (0.0382)	0.157*** (0.0510)
Capital expenditures to sales ratio	−0.00152*** (0.000127)	−0.00121** (0.000523)	−0.00114 (0.00170)	0.00153* (0.000823)	−0.0100*** (0.00205)	−0.000423** (0.000205)
Log(capital expenditures to workers ratio)	0.00667 (0.00959)	0.0815 (0.0519)	0.00414 (0.0201)	0.0101 (0.0228)	−0.0285** (0.0123)	−0.00749 (0.0181)

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for β from equation 4.1. Probit regression where explanatory variables are regressed individually with control variables. Dependent variable: dummy variable if firm spent on research and development. Marginal effects are shown. Each regression also controls for age, sector, and firm size group. Excluded dummy variables: other manufacturing and small-size firm. R&D = research and development.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Table D.6 Who Innovates? Foreign-Licensed Technology

	<i>Azerbaijan</i>	<i>Georgia</i>	<i>Czech Republic</i>	<i>Poland</i>	<i>Russian Federation</i>	<i>Turkey</i>
Exporter	0.108 (0.221)	0.0111 (0.0926)	0.0616 (0.0404)	0.0109 (0.0492)	0.0557 (0.170)	−0.00587 (0.0499)
Foreign ownership	0.190 (0.163)	0.410** (0.167)	0.233 (0.148)	−0.000761 (0.0553)	0.162 (0.213)	0.0721 (0.116)
% of unskilled workers (manufacturing firms only)	−0.000854 (0.00248)	0.00143 (0.00101)	−0.000466 (0.00112)	−0.000245 (0.000647)	−0.000775 (0.000703)	0.000183 (0.000224)
Offers formal training	0.636*** (0.107)	0.137** (0.0587)	0.112*** (0.0252)	0.0510* (0.0305)	−0.109 (0.0708)	0.0799* (0.0434)
Capital expenditures to sales ratio	0.00475*** (0.00143)		−0.00289 (0.00361)	−0.00226 (0.00365)	0.00638 (0.00389)	−0.000387 (0.000945)
Log(capital expenditures to workers ratio)	0.0937*** (0.0232)	0.00107 (0.00181)	−0.0149 (0.0259)	0.0768** (0.0302)	0.0332 (0.0314)	0.0176 (0.0218)

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for β from equation 4.1. Probit regression where explanatory variables are regressed individually with control variables. Dependent variable: dummy variable if firm uses technology that is foreign licensed. Marginal effects are shown. Each regression also controls for age, sector, and firm size group. Excluded dummy variables: other manufacturing and small-size firm.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Table D.7 Who Innovates? Pooled Regressions

	<i>Product innovation</i>	<i>Process innovation</i>	<i>Innovated in both</i>	<i>Innovated in either product or process</i>	<i>Spent on R&D</i>	<i>Uses foreign- licensed technology</i>
Exporter	0.213*** (0.0609)	0.0712 (0.0841)	−0.182*** (0.0562)	−0.0910 (0.0644)	0.00141 (0.0242)	0.0170 (0.127)
Foreign ownership	0.0438 (0.0319)	−0.0717 (0.0929)	−0.00277 (0.0302)	0.0346 (0.0806)	−0.00477 (0.0418)	0.222** (0.107)
% of unskilled workers (manufacturing firms only)	0.00125 (0.00147)	0.00284*** (0.000882)	−0.00113 (0.00135)	−0.00270*** (0.000958)	0.000578** (0.000257)	0.000465 (0.00133)
Offers formal training	0.311*** (0.0418)	0.0132 (0.0570)	−0.306*** (0.0401)	−0.00687 (0.0545)	0.255 (0.166)	0.178*** (0.0686)
Capital expenditures to sales ratio	−0.000502 (0.00112)	−0.000119 (0.000426)	0.000539 (0.00106)	9.91e.05 (0.000334)	0.000104 (0.00118)	0.00574*** (0.00109)
Log(capital expenditures to workers ratio)	0.0902*** (0.0207)	−0.000716 (0.0116)	−0.0894*** (0.0256)	0.00179 (0.0113)	0.0567* (0.0299)	0.130*** (0.0312)

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for β from equation 4.2. Sample includes Armenia, Azerbaijan, and Georgia. Probit regression where explanatory variables are regressed individually with control variables. Dependent variable: dummy variable if firm uses technology that is foreign-licensed. Marginal effects are shown. Each regression also controls for age, sector, and firm size group. Excluded dummy variables: Armenia, other manufacturing, and small-size firm.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

Table D.8 Annual Employment Growth and Innovation

	<i>Azerbaijan</i>		<i>Georgia</i>	
Product innovation	3.450** (1.477)	3.523** (1.498)	9.091*** (2.327)	9.146*** (2.294)
Exporter		−8.53e−05 (2.465)		0.225 (3.378)
Foreign ownership		−1.122 (2.317)		−5.448 (3.672)
Age (years)	−0.0390 (0.0412)	−0.0440 (0.0419)	−0.594*** (0.195)	−0.620*** (0.198)
Medium-size	0.372 (1.722)	0.501 (1.726)	6.574** (2.637)	6.451** (2.598)
Large-size	−0.281 (1.686)	0.125 (1.755)	0.475 (3.288)	1.586 (3.470)
Garments	−3.872 (2.542)	−3.836 (2.550)	2.987 (3.634)	2.875 (3.628)
Food	10.64* (5.836)	10.50* (5.380)	−2.864 (4.295)	−4.280 (5.037)
Chemicals	6.114 (5.352)	6.084 (5.305)	3.082 (5.665)	3.883 (5.586)

table continues next page

Table D.8 Annual Employment Growth and Innovation (*continued*)

	<i>Azerbaijan</i>		<i>Georgia</i>	
Metals and machinery	0.476 (3.092)	0.154 (3.196)	−1.493 (5.358)	−1.259 (5.358)
Retail	−1.449 (2.356)	−1.628 (2.436)	3.865 (3.201)	3.851 (3.186)
Other services	−3.559 (2.161)	−3.696* (2.231)	9.153** (3.683)	9.727** (3.766)
Constant	10.70*** (1.975)	10.89*** (2.072)	8.765*** (3.363)	9.102*** (3.396)
Observations	250	250	261	261
R^2	0.117	0.118	0.332	0.343

Source: World Bank Enterprise Surveys (database) 2013.

Note: Numbers in parentheses are standard errors. Table shows estimates for γ from equation 4.3. Dependent variable is annual employment growth in percentage points. Excluded dummy variables: other manufacturing and small-size firm.

Significance level: * = 10 percent, ** = 5 percent, *** = 1 percent.

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The central challenge facing the government of Azerbaijan today is the need to create conditions that will facilitate growth in nonoil tradable sectors. Crucial to achieving this objective is a dynamic and vibrant private sector, and in particular entrepreneurial activity, which generates new businesses and fosters competition and economic growth. *Fostering Entrepreneurship in Azerbaijan* uses data and in-depth case studies to identify the determinants of high-growth entrepreneurial activity. It finds that high-growth entrepreneurialism is low in Azerbaijan and that innovative activity among firms is very low. Based on these findings, the book outlines broad policy directions for improving the business environment, providing access to finance, developing skills, increasing access to markets, incentivizing firm-level research and development, and raising awareness, and it identifies priority areas for government action. The issues discussed in this book will be of particular interest to policy makers who are aiming to achieve higher growth and job creation through entrepreneurship, as well as to development practitioners and those in the private sector.



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