Countries differ in where the development payoffs from jobs are greatest. These payoffs depend on the country’s level of development, demography, endowments, and institutions.

Countries face different jobs challenges as they move along the development path. In agrarian economies, most people are still engaged in agriculture and urbanization has not yet picked up. In urbanizing countries, productivity growth in agriculture has risen enough to free up large numbers of people to work in cities. Formalizing countries generally have more developed economies, where the coverage of social protection systems is large enough to envision extending it to the entire workforce.

In some countries, the jobs challenge is shaped by demography with special circumstances affecting particular groups. In countries with high youth unemployment, prolonged joblessness and idleness affect large numbers of young people, with many seeing limited opportunities for the future. Aging societies also face generational issues, but these stem from a decreasing share of the working age population and increasing costs related to providing and caring for a growing number of old people.

Natural endowments, including geography, can create unique jobs challenges. Resource-rich countries may have substantial foreign exchange earnings, but this wealth often does not translate into employment creation beyond the exploitation of the natural resources. Small island nations cannot reap the benefits from agglomeration and global integration because of the size of the population and geographic remoteness.

Finally, the strength of institutions can define a country’s jobs challenge. In conflict-affected countries, institutions are fragile, private investment is largely out of reach for the time being, and restoring social cohesion through jobs takes on particular importance.

These criteria are not mutually exclusive. A country may be both resource rich and conflict affected, or it may belong to the formalizing group and be characterized by high youth unemployment. Still, focusing on the key features associated with each type of country situation helps to clarify which jobs would make the greatest contribution to development in a particular context. This allows for a richer analysis of the potential tradeoffs among living standards, productivity, and social cohesion in a specific country situation. And it provides clues about the nature of the obstacles to job creation and how they can be removed (question 6).

Agrarian economies

In countries where a majority of the population lives in rural areas, wage employment is not the prevalent form of work. For instance, about half of the employed population in Kenya is engaged in farming, whereas self-employment in nonagricultural household businesses and wage employment in informal enterprises account for slightly more than one-third.

Diverse jobs agendas
Formal employment, including wage laborers in registered private enterprises and the entire public sector, typically accounts for less than 10 percent of total employment in agrarian economies. The share of wage employment in manufacturing is much smaller. A comparison across several French-speaking Sub-Saharan African countries puts the fraction at less than 5 percent of total employment even in the capital cities—less than 3 percent in Cotonou and Lomé to 8 percent in Yaoundé; only Antananarivo has more than 10 percent. Across Sub-Saharan Africa, one-quarter or less of formal sector workers are women; only in Senegal does the fraction exceed one-third. If anything, employment in the formal sector has trended downward over the past two decades as state-owned enterprises have been privatized and foreign trade has been liberalized.

In this context, the notion of unemployment needs to be interpreted with caution. Unemployment rates can technically be computed, but given the prevalence of poverty in agrarian economies, a substantive share of the labor force is unlikely to remain idle for long. Underemployment and low earnings, rather than open unemployment, are the challenges most people face in agrarian economies. Household survey data from Mozambique show that an astounding 81 percent of those at work were living on less than US$1.25 a day in 2003, and 95 percent were living on less than US$2.00 a day.

In agrarian economies, the main avenues to improving living standards involve increasing productivity in farming, creating a dynamic economic environment in cities, and promoting labor reallocation from rural to urban areas, thereby sparking a positive spiral of productivity growth and improvement in living standards. Together, these approaches should lead to the expansion of off-farm employment opportunities, which are in turn an important driver of poverty reduction.

Mozambique illustrates the jobs challenges faced by agrarian economies. Thanks to important mining discoveries and a commodities boom, as well as Maputo’s privileged position as one of the ports closest to Johannesburg, Mozambique has had one of the best growth performances in Sub-Saharan Africa over the past decade. Yet, after falling substantially during the 1990s, probably as a consequence of the end of the civil war, the poverty rate remained basically unchanged between 2003 and 2008, at around 55 percent of the total population.

Agriculture is the locus of much of Mozambique’s poverty. Over 80 percent of employment is in agriculture, yet the sector accounts for only 30 percent of gross domestic product (GDP). Value added per hour worked in agriculture is one-seventh that of services and one-twelfth that of manufacturing. Yields have been stagnant over the past decade. About 95 percent of agricultural workers work on small plots, the use of modern technology is low, and access to extension services is minimal.

Evidence suggests that growth in agriculture delivers more poverty reduction than other sectors in lower-income countries, because poor people are concentrated in the sector and because they participate more in the growth in agriculture than in the growth in other sectors. Since 1700, virtually every example of mass poverty reduction has actually begun with an increase in agricultural productivity.

Constraints on agricultural growth vary depending on the availability of land relative to the availability of farm labor. Compared with other areas of the developing world, Sub-Saharan Africa was traditionally seen as a continent of ample land and scarce labor. While that may still be true in some areas, it no longer applies to countries in the south and east of the continent. In Mozambique, the average farm size is less than 1.5 hectares. As the area under cultivation declines relative to the size of the population, producing sufficient food becomes a major issue unless yield-enhancing technological changes take place. In many agrarian economies in Sub-Saharan Africa, these changes have yet to occur. Unlike many parts of Asia, where the Green Revolution has increased cereal yield and the poverty incidence has declined, cereal yield has remained low and poverty incidence high in these Sub-Saharan countries (figure 6.1). Some Asian economies, such as Cambodia, the Lao People’s Democratic Republic, and Myanmar, face similar challenges.

Public sector investments are important drivers of productivity growth and intensification of smallholder agriculture. Technology is often a public good. Because farmers can reproduce improved varieties of rice and wheat, private seed companies cannot reap the benefit of in-
and Mozambique in particular are comparable with yields in Asia. In such areas, improved varieties developed in Asia or crossbred with local varieties have been adopted. This observation suggests that, as far as lowland rice is concerned, Asian technology could be directly transferred to the irrigated areas of Sub-Saharan Africa.

While the intensification of crop-based agriculture has been associated with a significant increase in the use of inorganic fertilizer, the application of fertilizer per hectare is far lower in Sub-Saharan Africa than in any other region of the world. One of the major reasons is the high fertilizer prices relative to grain prices. Fertilizer prices are usually two to three times higher in Sub-Saharan Africa than in Asia and Latin America because of poor infrastructure and trade logistics. Another major constraint on fertilizer application is the lack of credit for smallholders, given that land ownership titles are seldom secured and hence cannot be used as collateral. Therefore, productivity growth in agriculture also requires a favorable investment climate including improved access to infrastructure and credit.

Gravity irrigation systems are a local public good as well. Irrigated land accounts for only 5 percent of the total cultivated area in Sub-Saharan Africa. Lowland rice yields in irrigated areas in Sub-Saharan Africa in general and Mozambique in particular are comparable with yields in Asia. In such areas, improved varieties developed in Asia or crossbred with local varieties have been adopted. This observation suggests that, as far as lowland rice is concerned, Asian technology could be directly transferred to the irrigated areas of Sub-Saharan Africa.

The recent surge in the production of high-value crops for export, including in Mozambique, is also encouraging. Aside from these examples, however, few improved crops appropriate to the African climate have been developed.

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The job structure in the cities is dominated by self-employment, with petty commerce growing quickly. If agriculture matters most for poverty reduction, successful urbanization may hold the key to more rapid productivity and income growth as well as social cohesion. In most of Sub-Saharan Africa, however, urbanization has failed to create the dynamism observed elsewhere in the developing world. Migration from rural to urban areas continues, but migrants are simply swelling the ranks of the self-employed earning subsistence wages. In the absence of dynamic cities, migration is driven by despair, and not hope. In Mozambique, for example, young people are moving to urban areas, but few are moving into regular wage employment. Meanwhile, levels of trust are falling and are lowest among young workers.  

Some have argued that the jobs challenge in these urban areas can be addressed through the creation of greater opportunities for self-employment. For example, building space for informal markets around bus stops would allow more rural migrants to make a living. But self-employment of this sort is unlikely to support the agglomeration effects and knowledge spillovers that make cities thrive elsewhere.  

An alternative approach is to create conditions for labor-intensive light manufacturing to take off. This approach focuses on identifying activities that may hold latent comparative advantage and on removing the constraints that dissuade private firms from taking up these activities. In fact, there are many informal industrial clusters in urban areas in Sub-Saharan Africa. They produce garments, leather shoes, simple metal products, and furniture, among other things, though seldom for export. These clusters have spontaneously developed, suggesting a potential comparative advantage in these industries. Reducing logistics costs, removing red tape, and addressing coordination issues could create the necessary conditions to attract foreign investors to these clusters, especially at a time when wage increases in coastal China are encouraging the relocation of some industries where low labor costs are a key competitive factor (box 6.1).  

Jobs, which start to trigger agglomeration effects and make connections to the global economy, are good jobs for development in agrarian countries. To create more of these jobs and become centers of economic dynamism, cities need to be more functional. But even in the most optimistic scenario, it will take time to complete the urbanization process, so increasing productivity in agriculture is a priority for reducing the high poverty levels.

Conflicted-affected countries

Jobs are among the most pressing issues in countries in conflict or emerging from it. They are critical for restoring the livelihoods of individuals and families affected by war and violence, reintegrating ex-combatants, and rebuilding everybody’s sense of belonging in society. They are also key to jump-start economic activity, reconnect people, and reconstruct networks and the social fabric. Alongside security and justice, jobs are central to breaking cycles of violence, restoring confidence in institutions, and giving people a stake in society. Yet the obstacles to creating jobs in conflict-affected countries are staggering and confront policy makers with overwhelming questions. How can jobs be generated quickly for demobilized soldiers, displaced persons, and vulnerable groups affected by violence or war? What kinds of government programs can have a quick impact? How can the private sector become an
BOX 6.1 Can agrarian Ethiopia compete in manufacturing?

The labor productivity of workers in well-managed firms in Ethiopia is comparable with that in China and Vietnam, although wages are only a quarter of those in China and half those in Vietnam. Ethiopia thus has the potential to compete globally in apparel thanks to a significant and growing labor cost advantage. It is also close to a state-of-the-art and well-located container port in Djibouti and has duty-free access to the markets of the European Union and the United States. The binding constraint on Ethiopia’s competitiveness in apparel is poor trade logistics, which wipe out its labor cost advantage and cut the country off from the higher-value time-sensitive segments of the market. Establishing a fast-track channel for moving apparel through customs, providing free and immediate access to foreign exchange, reducing the cost of letters of credit, and setting up an industrial zone closer to Djibouti would alleviate the most important trade logistics bottlenecks. These steps would also put Ethiopia in a position to attract investors to lead the industry in the same way that China and Vietnam have done.

Ethiopia also benefits from an abundance of natural resources. Raw materials such as skins for the footwear industry and hard and soft timber for the furniture industry are available. But they are expensive. A cubic meter of timber costs US$667, compared to US$344 in China and US$246 at most in Vietnam. So urban consumers in Ethiopia buy imported modern furniture, which is cheaper and of better quality. Yet Ethiopia has enormous unexploited potential in timber, particularly bamboo. Reforms could make the country’s furniture industry competitive in the domestic market, create more productive jobs, and save foreign exchange.

Source: Dinh and others 2012.

BOX 6.2 Conflict can increase labor force participation among women

Out of necessity, women often intensify their economic activity during periods of conflict. Post-conflict programs that target women can help them take advantage of the window of opportunity presented by conflict and assume new roles that contribute meaningfully to local economic recovery. Women in North Maluku, Indonesia, were active participants in the rapid recovery and poverty reduction that occurred in the wake of nearly a year of intensely violent civil strife. “Since 2002, when the conflict ended, I have run a retail shop for extra income to fulfill our family needs. . . . I received support money that I used for my business capital from the Ternate city government. . . . Ten years ago, I was only a housewife because I didn’t have the capital to run the business as I do now,” a 38-year-old married woman reported.

Conflict environments range from situations with high levels of criminal violence to civil wars and other forms of internal conflict. Less frequently, they involve hostilities between states. When entire countries are affected by internal or external conflict, the jobs challenge is particularly daunting because of institutional breakdown and fractured connectivity with the outside world. If conflict is localized, constraints are less severe where functioning infrastructure, services, and institutions can be extended to conflict-affected regions once hostilities become manageable. Conflict situations are generally further complicated by large numbers of displaced people. At the end of 2010, an estimated 15.4 million people sought refuge from conflict outside their home countries, and another 27.5 million were displaced internally.

Conflict can fundamentally disrupt jobs by destroying or damaging infrastructure and access to markets, as well as through altering incentives. In Sri Lanka, conflict in the north disrupted economic activity and created favorable conditions for the insurgency to recruit among the newly unemployed.

Even during war, however, people work. Jobs disproportionately involve low-pay or unpaid work, such as subsistence agriculture or petty trading. Youth in rural areas in post-conflict Liberia reported working two to four jobs at a time. Across countries, conflict increases female labor force participation, as women work to help their households cope with income shocks and to compensate for the absence of men who are fighting (box 6.2). In Afghanistan, female employment rates were higher in high-conflict than in low-conflict areas; in Nepal, they increased more than in high-conflict areas.

Some jobs in conflict-affected countries may involve illegal activities that persist in the aftermath of conflict because of weak governance and lack of legal alternatives. Even if these activities are limited in scope, they may undermine the creation of good jobs for development by distorting incentives and generating rents. In Afghanistan, poppy cultivation is an important source of income for rural households. In Somalia, piracy creates jobs for some through the employment of speed boat crews and related land-based operations. In Liberia, young people in rural areas have supplemented their income by working in illegal mining, rubber tapping, and logging.

Jobs are central to recovery in countries emerging from conflict, but the barriers to job...
creation can be especially steep (box 6.3). Firms in conflict-affected countries report that political instability is the most severe bottleneck to business followed by the lack of electricity (figure 6.2). Simply getting basic services up and running can be a major issue. Corruption and the lack of finance are also among the top constraints. Security risks because of high crime rates or armed conflict reduce returns to investment and can persist even after the armed conflict has officially ended. Firms may need additional funds to hire private security or to pay bribes. The loss of skills because of migration and disruptions in schooling can also create obstacles for firms.

Demobilization and reintegration of former combatants are major challenges for countries emerging from conflict. Although ex-combatants make up a relatively small share of the total population, unemployment and idleness, particularly of young men, are stress factors that can strain and potentially undermine fragile post-conflict environments. Jobs can compensate for the loss of identity and status associated with the dissolution of armed forces and militias and the income lost from theft and looting. Jobs can also help deter further involvement in gangs and violence. Yet not all jobs are alternatives to violence, especially if they provide little income and the work is drudgery.

Most disarmament, demobilization, and reintegration programs include some form of employment support such as emergency temporary jobs, cash for work, public employment services, small grants, or vocational training. Temporary employment programs can play an important bridging role by providing jobs quickly to ex-combatants and other vulnerable populations in the absence of other options. Evidence on whether temporary programs reduce conflict and contribute to rebuilding communities is less clear. Cash-for-work programs can be costly and may strain stretched public budgets, may create poor quality and unsustainable assets, and can be divisive and lead to tensions if they are targeted only at certain groups.

Broadly targeted community-based programs may be more conducive to stability. In the Democratic Republic of Congo, where many ex-combatants have had a difficult time finding jobs, associations of ex-combatants and community members share information about employment opportunities and social support and also help manage disputes. Programs can be tailored to facilitate the reintegration of youth, particularly young men, who have been involved in conflict. In some cases, such as the Democratic Republic of Congo, Liberia, and Sierra Leone, young ex-combatants have no memory of peaceful times or normal civilian life.

Ultimately, conflict-affected countries need to attract private investment. The state can play an enabling role by strengthening regulations and institutions, rebuilding basic infrastructure, and providing security. Partnerships between the public and private sectors, donors, and civil society can help to rebuild markets and investor confidence. Connecting farmers and entrepreneurs through value chains has the potential to spark innovation and employment growth. Business associations can support entrepreneurship and help solve collective action problems by restoring law and order, roads, and electricity. As security is restored,

**BOX 6.3 Solving jobs challenges is urgent in South Sudan**

The Republic of South Sudan, the world’s newest country, exemplifies the challenges countries face emerging from conflict. South Sudan has natural resources, including oil, yet more than four-fifths of the population lives in rural areas, and most depend on subsistence farming and cattle raising. Half of the population lives in poverty, which is especially deep in rural areas, according to the 2009 household survey. Only slightly more than one-fourth of the adult population is literate, and prospects for future human capital development are dim: almost half of 10- to 14-year-olds are working, with only slightly more than one-third in school.

The International Organization for Migration estimates that 4 million people were displaced during the Sudanese civil war, and that nearly 1.9 million have returned since the signing of the Comprehensive Peace Agreement in 2005. The return of internally displaced persons creates substantial pressures on already poor communities. The new government of South Sudan is aiming to demobilize 150,000 soldiers over the next six to eight years. Access to land rights and conflict among nomadic groups are also notable challenges for jobs, as is the legacy of overemployment in the public sector, which is not sustainable given severe fiscal pressures.

Creating jobs is one of the most immediate concerns facing the new government—jobs that can contribute to peace and stability, provide sustainable living standards through legal and nonviolent activity, and foster economic recovery. Generating these jobs involves building an enabling environment for private sector investment. That will take time, however, and alternatives are urgently needed for groups whose lack of jobs can threaten stability, including internally displaced persons, ex-combatants, and youth.

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b. IOM 2009.

c. Republic of South Sudan Disarmament, Demobilisation and Reintegration Commission 2012.
economic activity and violence, and that start the long process of economic recovery. In conflict settings, jobs can also have development payoffs for social cohesion by involving people in productive activities that strengthen self-esteem and give them a sense of identity and status, by rebuilding networks, and by giving people a sense that opportunities are fairly distributed.

However, the jobs focus can shift from targeted public programs to employment creation in the private sector. But it would be naïve to expect conflict-affected countries to become dynamic economies overnight.

Tackling the jobs challenge faced by conflict-affected countries is a formidable task: it requires creating jobs that contribute to peace and stability, that are an alternative to illegal economic activity and violence, and that start the long process of economic recovery. In conflict settings, jobs can also have development payoffs for social cohesion by involving people in productive activities that strengthen self-esteem and give them a sense of identity and status, by rebuilding networks, and by giving people a sense that opportunities are fairly distributed.
Urbanizing countries

Urbanizing countries endowed with abundant unskilled labor have the potential to enter a virtuous jobs circle. The integration of these countries into the world economy can lead to the creation of extensive employment opportunities, especially in light manufacturing. These jobs may involve hard work, relatively low pay, and limited or negligible benefits, but in general they are preferable to jobs in agriculture. They can also be the entry point to a process of economic and technological upgrading that leads to better jobs in the future. Employment opportunities for the unskilled thus provide avenues out of poverty for large numbers of households. In countries in which women’s jobs choices have been restricted, new employment opportunities in urbanizing economies can bring about important changes at the household and society levels.

This has been the story of several East Asian countries over the past half century. In many respects, it has also been the recent story of Bangladesh, where industrialization is growing in large cities such as Chittagong and Dhaka. The industrial sector now accounts for nearly 30 percent of value added, up from 20 percent in 1990, and the urbanization rate is approaching 30 percent, double what it was in 1980. Exports as a percentage of GDP tripled between 1990 and 2010, with much of the increase in a thriving ready-made garment industry that is highly intensive in female labor. This structural transformation, along with improvements in agricultural productivity, has had a major impact on living standards. GDP per capita has doubled in the past two decades and the share of the population living below US$1.25 a day fell from 70 percent in 1992 to 43 percent in 2010. Productivity and earnings growth still lag behind some of its neighbors, but Bangladesh’s story is remarkable because the country was often held out in the development literature as a hopeless case (box 6.4).

These successes have been built on modernization in the agricultural sector, an industrial sector able to absorb low-skilled surplus farm labor, and supportive social policies.

Faster technology adoption has led to productivity increases in agriculture. Farmers have shifted from growing low-yield, single-crop, deep-water rice to double cropping of short-maturity, high-yield rice. There has also been a pronounced shift away from sharecropping into fixed-rent leasehold tenancy. Landless and marginal farmers have been the major beneficiaries of this change. Simultaneously, credit constraints have been relaxed thanks to the country’s well-known microfinance institutions. Access to finance has facilitated human capital accumulation, especially in women’s education and health, and promoted investments in microenterprises.

Despite the still considerable labor surplus in rural areas, real wages in agriculture have increased from the monetary equivalent of less than 2.5 kilograms of rice a day in 1983 to more than 6.0 kilograms today. The seasonal hunger associated with the *monga* period—between transplanting and harvesting paddy—is receding. Remittances from women working in factories and from men working in construction have also helped reduce rural poverty.

The movement of labor out of agriculture has been facilitated by close urban proximity, resulting from Bangladesh’s high population density. Special links allowed by proximity also may have supported productivity growth among laborers engaged in rural nonfarm sectors. The ready-

**BOX 6.4 Development pessimism about Bangladesh was understandable, but has been proven wrong**

In 1975, the first book on the economy of Bangladesh commented: “If the problem of Bangladesh can be solved, there can be reasonable confidence that less difficult problems of development can also be solved. It is in this sense that Bangladesh is to be regarded as the test case of development.” In the same spirit, a well-known study on famines concluded that Bangladesh was “below poverty equilibrium.”

Such a negative perception of the viability of the Bangladesh economy was conditioned by the adverse initial conditions facing the country after independence—high population density, a limited natural-resource base, underdeveloped infrastructure, frequent natural disasters, and political uncertainty.

This negative perception has given way to optimism in global development circles because of Bangladesh’s positive record of socioeconomic development in recent decades. Some countries have done well in human development indicators, and others have done well in economic growth, but Bangladesh belongs to a rather small group of countries that have done well on both fronts, the initial pessimism notwithstanding. This is the crux of the surprise.


made garment industry has been an important part of the jobs story in urbanizing Bangladesh. About 3 million women are working in this sector, which has a strong export orientation. Construction has been an important employer for men moving out of rural agriculture. Many low-skilled workers go abroad as well, especially to the Gulf countries. Remittances are growing by about 10 percent every year.37

Light manufacturing opens up opportunities for large numbers of workers in urbanizing economies because skill requirements are modest. Firms demand some education but it is generally limited. In Bangladesh, for instance, 87 percent of regular urban wage workers in 2005 had some education but only 28 percent had secondary schooling or more.38 These education levels are considerably higher, though, than the educational attainment of workers in agriculture, so opportunities in the garment industry stimulate schooling, especially for girls. Urbanization has other beneficial effects on women, as well. Growing labor earnings increase the opportunity cost of raising children, which, in turn, may raise the age of marriage and reduce the birth rate. To the extent that women’s educational attainment and labor market participation rise, the status of women in society is enhanced.

On the social policy front, both governmental and nongovernmental organizations have established pro-poor, pro-youth, and pro-women programs. These have been instrumental in reducing population growth and encouraging more effective public and private investments in education and health. Agricultural modernization, labor migration, and social policies have altered the jobs landscape in Bangladesh, but these transformations have not involved a substantial formalization of the economy. The share of jobs benefitting from legal protection or social insurance has not increased much over the past decade. The booming construction sector remains largely informal. Corporate social responsibility among export-oriented corporations in Bangladesh is making some difference in the ready-made garment sector, but worker unrest has been recurrent. But corporate social responsibility is mainly associated with exports to industrial countries and may become less relevant if the sector diversifies its exports to other developing countries. Corporate social responsibility is unlikely to be a workable option in construction. But while formalization has not advanced, the development of entrepreneurship has been remarkable, leading to the creation of thousands of nationally owned medium and large firms within a mere two decades (box 6.5).

Bangladesh stands out as an intriguing case that is important to understand, especially given its starting point. The government has provided some support, with export processing zones, bonded warehouses, and special treatment of garments at ports. Large infrastructure projects, such as the Jamuna Bridge linking the prosperous eastern and lagging western regions, have made it easier to move around the country. But government has not played the leading role in the transformation. Corruption is a problem and the cost of doing business is high. Power failures are frequent, many roads are unpaved, and those that are paved are highly congested. Despite these obstacles, agricultural modernization has occurred thanks to the Green Revolution associated with the development and diffusion of high-yielding varieties of rice and access to finance. Labor has moved out of agriculture through industrialization, and social policies

**BOX 6.5 The entrepreneurs of Bangladesh are local**

The ready-made garment industry in Bangladesh has grown rapidly over the past three decades, and the country now ranks among the largest garment exporters in the world. While the early successes have been attributed to an initial technology transfer from the Republic of Korea, such a one-time infusion of knowledge alone is insufficient to explain the sustained growth. In this respect, the pattern of development in Bangladesh is similar to that in East Asia, where investment in human capital and the importation and assimilation of technological and managerial knowledge from advanced countries played a critical role in promoting industrialization.

Primary data collected from knitwear manufacturers and garment traders can be used to explore the process of the continuous learning of advanced skills and expertise. The data show that the initial infusion of specific human capital attracted highly educated entrepreneurs to the industry, that the division of labor between manufacturers and traders facilitated the expansion of the industry, and that enterprise growth has endured because of the continuous learning from abroad by the highly educated entrepreneurs. These factors, taken together, account for the high profitability of garment manufacturing in Bangladesh.

Sources: Mottaleb and Sonobe 2011; Sonobe and Otsuka 2006.
have been supportive through family planning and social protection.

Urbanizing countries like Bangladesh have the potential to exploit several spillovers. But a key challenge for them is to find a way to move up the value-added chain and diversify manufacturing exports. Apart from ready-made garments, few sectors have grown substantially in Bangladesh. The pharmaceutical industry has developed, and the different pattern of development there relative to that of the garment industry is intriguing. But the high skill levels required by the pharmaceutical sector and other higher value-added export sectors are unlikely to make them a source of jobs for the masses of youth with only primary education.

Resource-rich countries

Investments in extractive industries can represent a sizable fraction of a developing country’s GDP and lead to spectacular increases in export revenue, but they do not create many jobs. The number of people at work during the construction phase may be sufficient to generate dynamism at the local level, but once the mines and fields are in operation, employment goes down dramatically. Perhaps the most extreme example is the liquid natural gas project in Papua New Guinea. The investment cost of the project exceeded twice the country’s GDP at project startup, and the project may lead to double-digit growth rates for many years. But it is unlikely to generate more than 1,000 direct jobs in the longer term (table 6.1).

Links to the rest of the economy tend to be weak as well. Port facilities, transport corridors, and logistical, financial, and accounting services are needed. In some cases, oil refining and ore processing can also be carried out within the country. All these services are bound to generate high-value-added jobs in major cities and hubs. But even after including all backward and forward links, the ratio between the total number of jobs generated and the number of direct jobs is likely to remain in the single digits. Taking into account direct and indirect job effects, extractive industries may not account for more than 1 or 2 percent of total employment in resource-rich developing countries.

In addition, extractive industries can have important negative impacts on jobs elsewhere in the economy. These effects are often considered manifestations of Dutch disease, a reference to the experience of the Netherlands after large natural gas fields were discovered in the province of Groningen in the late 1950s. The ensuing export revenue led to strong real exchange rate appreciation, deterioration in competitiveness in sectors exposed to international competition, and a loss of jobs in these tradable sectors.

Some industrial countries confronted with resource booms have successfully protected or fostered the diversification of their economies. Norway offers what may be the most striking example. With strong backing from the labor movement, centralized collective-bargaining agreements ensure that real wages do not grow more rapidly than the productivity of the tradable sectors, excluding oil. Wage moderation supports employment opportunities for everybody, to the point that the unemployment rate remained close to 3 percent during the recent global financial crisis. Oil revenue is used for long-term investments but is not immediately converted into higher labor earnings.

Among oil-rich countries elsewhere, the United Arab Emirates has also managed to diversify its economy through financial and logis-
resource-rich developing countries find it difficult to reap the benefits of agglomeration. Specialization in the production of commodities (including agricultural products such as cocoa) may be an important reason why urbanization has failed to deliver growth in countries in Sub-Saharan Africa.

These wealthy consumption agglomerations are nonetheless attracting rural migrants, thereby fueling local inequality, discontent, and crime. None of the cities in resource-rich developing countries among the top 50 in the world according to cost of living is among the top 50 according to quality of life. While extractive industries fail to create many jobs, they do contribute to the local economy through other channels. A recent survey of employees of large-scale mining projects in Papua New Guinea shows that they make remittances both in kind and in cash to their households. Most remittances in kind were for construction and building materials (41 percent), followed by transport-related items (28 percent). Cash contributions were used most often for school fees (29 percent) and transportation-related items (12 percent). Employees also reported accommodating relatives visiting from rural areas. Some of their guests helped with housework, and some obtained education at the host’s expense.

### Table 6.1 Projects in extractive industries are capital intensive and create few jobs

<table>
<thead>
<tr>
<th>Country</th>
<th>Project (sector or resource)</th>
<th>Investment, % of 2010 GDP</th>
<th>Direct employment, number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNG</td>
<td>LNG Project (natural gas)</td>
<td>237.0</td>
<td>9,300 during construction; 1,000 afterward</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Oyu Tolgoi (copper, gold)</td>
<td>74.2</td>
<td>14,800 during construction; 3,000 to 4,000 afterward</td>
</tr>
<tr>
<td>Botswana</td>
<td>Jwaneng Cut 8 Project (diamonds)</td>
<td>20.2</td>
<td>1,000</td>
</tr>
<tr>
<td>PNG</td>
<td>Ramu Mine (nickel)</td>
<td>19.0</td>
<td>5,000 during construction; 2,000 afterward</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Benga Mine (coal)</td>
<td>13.6</td>
<td>currently 150; 4,500 afterward</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Mchuchuma (coal)</td>
<td>12.2</td>
<td>5,000</td>
</tr>
<tr>
<td>Namibia</td>
<td>Husab Mine (uranium)</td>
<td>11.9</td>
<td>5,200 during construction; 1,200 afterward</td>
</tr>
<tr>
<td>Zambia</td>
<td>Lumwana Mine (copper)</td>
<td>9.3</td>
<td>4,700 during construction</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Reko Diq Mining (copper, gold)</td>
<td>4.0</td>
<td>2,500 during construction; 200 afterward</td>
</tr>
<tr>
<td>Peru</td>
<td>Conga Mine (gold)</td>
<td>2.6</td>
<td>6,000 during construction; 1,700 afterward</td>
</tr>
</tbody>
</table>


Note: GDP = gross domestic product; LNG = liquid natural gas.
Artisanal mining can flourish in parallel with major investments and raise the living standards of local communities. In Papua New Guinea, the number of grassroots alluvial miners is two to three times greater than the number of people working in the formal extractive industries sector, even if contractors and temporary workers are counted among the latter. Some of the large extractive projects, such as Ok Tedi Mine, happen to be in poor areas. Thus, the artisanal mining taking place around them helps spread the wealth.

But poverty maps show a significant level of spatial dispersion in living standards and a persistence of poverty over the past three decades. The deepest and most persistent rural poverty in Papua New Guinea occurs in areas with no known mineral resources.

When large extractive projects close, artisanal and small-scale mining can also contribute to the local economy by cushioning the decline in earnings. For example, in Misima in Papua New Guinea, local people had become used to making a living around the only large mine project, Misima Mines Limited. When the project closed in 2004, the economy of Misima ground to a halt, and local residents found it hard to make ends meet. Artisanal and small-scale mining provided an avenue for income for some: each hard rock miner could earn the equivalent of US$50,000–$75,000 a year, and each alluvial miner could make around US$10,000 a year. This income became the main contribution to the local economy, together with remittances sent by those ex-Misima Mines Limited employees who found work in large mines elsewhere.

And even in mining areas, social impacts are more mixed than the positive effect on living standards suggests. The influx of money from mining enclaves has enabled men to pay high prices for brides and marry multiple wives on an unprecedented scale, which might have contributed to a decline in women’s status. Around Porgera Mine, the abandonment of older wives and the increasing number of women taken from other tribal groups are considered factors in the increased incidence of domestic violence and tension with neighboring groups. In Lihir, when groups of landowners received compensation and royalty payments, no women were given authority to control the accounts. In addition, children normally help out in artisanal and small-scale mines. In Misima, because of clear restrictions and training by the Wau Small-Scale Mining Center, children are less involved in mining than before, but child labor remains a con-

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**TABLE 6.2 Cities in resource-rich developing countries are among the most expensive in the world**

<table>
<thead>
<tr>
<th>Rank in 2011</th>
<th>City</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Luanda</td>
<td>Angola</td>
</tr>
<tr>
<td>2</td>
<td>Tokyo</td>
<td>Japan</td>
</tr>
<tr>
<td>3</td>
<td>N’Djamena</td>
<td>Chad</td>
</tr>
<tr>
<td>4</td>
<td>Moscow</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>5</td>
<td>Geneva</td>
<td>Switzerland</td>
</tr>
<tr>
<td>12</td>
<td>Libreville</td>
<td>Gabon</td>
</tr>
<tr>
<td>14</td>
<td>Sydney</td>
<td>Australia</td>
</tr>
<tr>
<td>18</td>
<td>London</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>23</td>
<td>Niamey</td>
<td>Niger</td>
</tr>
<tr>
<td>27</td>
<td>Paris</td>
<td>France</td>
</tr>
<tr>
<td>29</td>
<td>St. Petersburg</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>32</td>
<td>New York</td>
<td>United States</td>
</tr>
<tr>
<td>41</td>
<td>Lagos</td>
<td>Nigeria</td>
</tr>
<tr>
<td>44</td>
<td>Khartoum</td>
<td>Sudan</td>
</tr>
<tr>
<td>48</td>
<td>Baku</td>
<td>Azerbaijan</td>
</tr>
<tr>
<td>50</td>
<td>Amsterdam</td>
<td>Netherlands</td>
</tr>
</tbody>
</table>

Source: Mercer 2011.
Note: Cities are ranked from most to least expensive based on the cost of a consumption basket for expatriates. Cities from developing countries are highlighted.
Finally, land disputes often take place among artisanal miners as people tend to trespass on other’s land to find minerals. Beyond local communities, the boom in extractive industries is affecting jobs in the main agricultural sector of Papua New Guinea. Palm oil exports have been growing steadily in recent years and now exceed the exports of all other agricultural crops combined. Remarkably, the production of palm oil fruit involves 18,000 smallholder blocks around the main plantations.

While this sector makes a significant contribution to the economy, improving rural livelihoods and generating employment, the extractive industries boom is undermining the competitiveness of palm oil exports through higher wages for skilled employees and higher logistics costs. The higher wages paid to skilled workers are also eroding the effectiveness of the public sector. Entire departments in government and in education and training institutions have been depleted because their staff leaves for more attractive opportunities in the extractive industries sector. Mining companies complain about the shortage of skills at the same time as they poach people away from the education and training system, where they could help build skills. For instance, among 181 interviewees in a recent survey on large-scale mining projects, 58 workers (or 32 percent) had at least a university degree. Raising salaries in the public sector may be needed, but that would create other problems. Absenteeism is rife and service delivery is poor. Without strengthened accountability, higher salaries would only transform many public sector jobs into a window for rent sharing.

An encouraging development has been the success of some landowner companies around mining enclaves. These companies may have built up a good work ethic and developed effective business practices in places that were far removed from the modern economy only a few years ago. Not all landowner companies have been successful, however, and this model may fail to spread the wealth from extractive industries beyond the surrounding areas (box 6.6).

The challenge of resource-rich economies is often framed in terms of transparency, which is certainly important for social cohesion. However, accounting for the money involved in extractive industries is only part of the solution. Equally important is ensuring that resources flow from booming enclaves and hubs to the poorer parts of the country, especially in the form of basic infrastructure and service delivery. Focusing the flow of resources on the demand side rather than on the supply side (for example, on health insurance rather than public hospitals) may contribute to productivity rather than to the creation of new windows for rent sharing.

Beyond public finance, the concentration of wealth in mining enclaves and urban hubs requires attention to spatial pricing issues. The benefits of agglomeration cannot be reaped if urban land becomes prohibitively expensive. Active efforts are needed to increase the availability of urban land and keep urban housing affordable. Despite such efforts, the cost of labor is bound to be much higher in mining enclaves and urban hubs. Labor policies need to take these disparities into account and avoid making workers too expensive in poorer and more remote areas through minimum wages or mandated benefits that mimic the wages and benefits available in the booming parts of the country.

The main challenge facing resource-rich countries is to spread the wealth in ways that do not undermine productivity growth and social cohesion spillovers. Good jobs for development in this context are those that generate output (as opposed to just absorbing it) outside the extractive industries sector. Incentives for firms to create jobs and for people to work are important if the economy is going to diversify its export base. The abundance of foreign currency can be a constraint because of exchange rate appreciation. The experience of some countries, most notably Norway, shows how sovereign funds that are used for long-run investments can manage this foreign currency problem.
Diverse jobs agendas

Exports to larger foreign markets are difficult, however, as the disadvantage of smallness manifests itself in the form of higher production costs. Given that small countries are price-takers in world markets, these cost premiums are hard to pass on to customers. The only way these economies can export is by accepting lower profits and labor earnings. Even in industries such as electronic assembly and clothing, even if capital earns negative returns and wages are zero, the unit cost of production in a tiny economy would still exceed prevailing world prices.

A number of small island nations, especially those located in the Pacific Ocean, are also confronted with the challenge of remoteness. When small islands are located far away from economic centers, they face additional challenges in accessing markets and services. With limited domestic markets, small island nations need to look outward to overcome problems of scale. Exporting to larger foreign markets is difficult, however, as the disadvantage of smallness manifests itself in the form of higher production costs. Given that small countries are price-takers in world markets, these cost premiums are hard to pass on to customers. The only way these economies can export is by accepting lower profits and labor earnings. Even in industries such as electronic assembly and clothing, even if capital earns negative returns and wages are zero, the unit cost of production in a tiny economy would still exceed prevailing world prices.

Small island nations

The jobs agendas of small island nations are shaped by their market size and their geography. Because of their size, these countries cannot exploit economies of scale or reap the benefits of agglomeration or specialization. As islands, many of them are characterized by fragmentation—an already-small population spread thinly over large areas. For example, Fiji has a population of around 860,000 people and a total territory of 18,274 square miles, but this land is fragmented across a total 332 islands. Yet jobs in cities and clusters rely on scale and density to create positive spillovers.

With limited domestic markets, small island nations need to look outward to overcome problems of scale. Exporting to larger foreign markets is difficult, however, as the disadvantage of smallness manifests itself in the form of higher production costs. Given that small countries are price-takers in world markets, these cost premiums are hard to pass on to customers. The only way these economies can export is by accepting lower profits and labor earnings. But in industries such as electronic assembly and clothing, even if capital earns negative returns and wages are zero, the unit cost of production in a tiny economy would still exceed prevailing world prices.

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The key to the successes of these companies may be the clear separation between their social roles and their business model, which builds on solid corporate governance. The landowner origins and commercial focus allow them to partner with landowner groups in other resource project areas, which helps them to build scale and management depth. Expatriates with a genuine interest in development seem to have played an important part in achieving the proper balance.

Not all landowner companies have been equally successful. Most exist purely to distribute rents from mines to communities and have no ambitions of building sustainable economic opportunities for their members. Two of four companies established in Central Province never gained a foothold because the funds that were supposed to serve as equity vanished. Even the successful landowner companies may be unsustainable beyond the construction phase of extractive industries, during which the demand for support services is exceptionally high. Skeptics wonder whether building work skills through the development of these businesses is really more valuable than investing in service delivery through local infrastructure.

**BOX 6.6 Landowner companies can build capacity while spreading the wealth**

Firms linked to local landowner groups in Papua New Guinea are developing increasingly diversified businesses and are able to compete regionally, even nationally, thereby generating jobs with a range of skill levels. The origin of these firms is the communal ownership of land in Papua New Guinea, which has meant that mining companies have had to pay compensation for land to communities rather than to individuals. As a result, some of the landowner companies have up to 300,000 shareholders. National agencies negotiate with individual resources projects for local landowning groups to have privileged rights to supply selected services to the project.

The most successful landowner companies, including Trans Wonderland, Anitua, the iPi Group, National Catering, and Star Mountain, are locally managed. Their business activities extend beyond the core job streams of the extractive industries sector in exploration, construction, and extraction. For example, they provide logistical services through a franchise truck-ownership structure and catering services that reach out to all Papua New Guinea including to customers outside the natural resource sectors.

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Source: Blacklock and Bulman 2012.
centers, the cost of trading with them may become prohibitive. In the case of Pacific island nations, the average GDP-weighted distance to trading partners is about 11,000 kilometers, compared with about 8,000 kilometers for small countries in the Caribbean (figure 6.3). Not surprisingly, these Pacific island nations also trade less relative to other small countries.

Smallness and fragmentation further raise the costs of public services and infrastructure. A road, an energy network, or a government ministry that serves 100,000 people is likely to have a higher cost per user than one serving 10 million people. High fixed costs have to be spread across a smaller number of people, and often across a larger number of locations, which implies higher costs of doing business.

These geographic challenges are fundamental to the economic experience of these small island nations. Unfortunately, policies cannot alter these disadvantages, but they can be partially offset through integration with bigger economies. Canada’s seasonal agricultural worker program with Caribbean and Latin American countries is an example. Several other similar bilateral agreements have been introduced. In fact, tighter political relationships with large economic centers are found to be associated with higher income levels among small island nations. Migration is one of the key channels for economic integration. As workers move to larger economic centers, they gain access to larger markets, cheaper inputs, and more investment. Thus, the labor force is put to more productive use and can earn higher incomes. In turn, remittances from migrants improve living standards at home. Moving labor to larger markets also allows workers and entrepreneurs to interact with more dynamic firms, thus acquiring better and more diversified skills and gaining exposure to new ideas.

Emigrants account for over 20 percent of the total population in a majority of these countries. On average, remittances are responsible for over 8 percent of GDP in Pacific island countries and for 5 percent in other small island nations (figure 6.4). In fact, migration is behind several success stories. Samoa has a long history of migration into New Zealand, through a treaty of friendship in existence for more than 30 years, and the Cook Islands are in a free association with New Zealand. Both have been able to register sustained growth in contrast to the experiences of other Pacific island nations. It may take time for the benefits from migration to materialize, as a comparison of Tonga and Fiji illustrates. Tonga has more than 40 years of substantial migration and receives large per capita remittance flows. In Fiji, international migration is a much more recent phenomenon. Household surveys show that more than 90 percent of households receive remittances in Tonga, compared with 43 percent of households in Fiji.

The different historical paths influence the impact of migration on the domestic economy. In countries with a more mature migration, household behavior at home is more tilted toward business activities. In both Tonga and Fiji, migration and remittances lead to higher savings, but they have a different impact on household income generation. In Tonga, both the number of emigrants and the level of remittances received are associated with increasing income from business activities. In Fiji, by contrast, remittances do not seem to affect business income and have a negative relationship with wage earnings—as if migration just served as a substitute for wage employment in the domestic economy.
Migration does not always lead to a win-win situation, however. For example, large remittance flows raise the prospect of Dutch disease—the appreciation of the real exchange rate due to the abundance of foreign currency. Brain drain is also a salient feature in these countries, at least in the short term. Their migrants are more educated than their general population. In 12 of 19 small island nations, more than 30 percent of total emigrants are skilled workers; in 14 of them, skilled emigrants represent more than 40 percent of the domestic skilled population. While these migrants experience large income gains, send substantial remittances back, and do not appear to trade with their home countries or invest in them to any large degree. In Caribbean countries, the outmigration of health personnel has raised particular concerns because of its negative impact on health systems.

On the other hand, migration and remittances can promote human capital accumulation. The possibility to migrate may motivate greater investments in education, and remittances may finance them. Short-term migration can offer workers better training and education opportunities, which adds to domestic human capital stock once the migrants return. Evidence from Fiji suggests that migration opportunities increase the probability that household members will acquire tertiary education. Results from qualitative surveys in Fiji also indicate that workers are prompted to acquire special skills for migration.

Viable jobs in small islands are traditionally associated with the exploitation of natural resources including fisheries, forestry, mining, and tourism. When niche opportunities exist, low business costs become less critical for attracting investment. In Fiji, sugar production and tourism are the largest sources of employment. As the most important agribusiness, sugar production contributes about 8 percent of exports and employs over 10 percent of total population. Annually, half a million visitors come to Fiji, while the local population is less than one million. Tourism has become a main source of employment growth in the formal sector.

The reliance on natural resources, however, raises the vulnerability of these countries. These sectors tend to be more susceptible to natural shocks—both natural disasters and volatile rainfall patterns. As with geographical disadvantages, policies cannot eradicate the vulnerability.


Note: GDP = gross domestic product. Nineteen small island nations are included in panel a on migration and 15 small island nations in panel b on remittances. The variation of remittances in Pacific Island countries over time is driven by missing data from Samoa.
But jobs exploiting natural resources should not undermine the fragile ecosystem of the islands. When conducted in a sustainable manner, tourism and fisheries have positive environmental impacts.

Ensuring a broad distribution of the rents from jobs in the natural resource sectors is challenging. For example, Vanuatu’s impressive growth has not had an impact on the lives of most residents. The country’s development has been driven by foreign investment in tourism, financial services, and land development, and only a relatively small proportion of the urban population is reaping the gains. This has increased inequality and may lead to disruptive social trends.63

A closer look at the Mauritius miracle shows how small island nations might be able to diversify into activities not based on the exploitation of natural resources. Between 1977 and 2009, real GDP grew at 5.1 percent a year in Mauritius, compared with 3.2 percent for Sub-Saharan Africa overall. The World Economic Forum ranks Mauritius as the second-most-competitive country in the region. This sustained growth has been accompanied by a profound structural transformation over time. Poor at independence in 1968, Mauritius has transitioned from a sugar economy to manufacturing textiles and apparel to knowledge-intensive services in tourism, finance, and information communication technologies.64

Many explanations have been offered for the Mauritius miracle. There is no doubt that the focus on trade and foreign direct investment, and on using export processing zones to target light manufacturing industries, has been a critical element of Mauritius’ success. The country also boasts low corruption levels and a favorable regulatory environment, coupled with strong public-private sector cooperation and flexible institutions.65 But the circumstances that allowed Mauritius to embark on this remarkable development path were exceptional. They included the quota system that used to govern garment exports. Other small island nations may not enjoy such opportunities these days.

Small island nations face unique difficulties because they cannot benefit from the gains of scale or specialization. These difficulties are intensified in places such as the Pacific island countries, which are far from major centers of economic activity. The experience of Mauritius shows what might be possible with strategic policies, strong institution building, and a dose of luck. But for many small island states, establishing links with nearby economic centers, maximizing the benefits of migration, and exploiting niche markets while preserving their fragile ecosystem point the way forward.

Countries with high youth unemployment

Young people are much more likely to be unemployed than older adults. In most countries, unemployment rates for youth, defined as 15–24 years old, are usually between two and three times the overall unemployment rate (figure 6.5). And the unemployment rate captures only one aspect of the problems young people face in their transition from school to work. In agrarian countries, for example, open unemployment is low and youth employment difficulties are likely to manifest themselves in poor job quality and low earnings. In countries with high youth unemployment, job quality may be a problem for those young people who do find work. In the Arab Republic of Egypt, informality is two times more common among 15- to 24-year-old workers than among 35- to 54-year-olds.66 Highly
segmented labor markets offer limited scope to make the transition from informal to formal jobs. In Tunisia, even in those sectors that largely employ youth labor, employment is often temporary and informal.\textsuperscript{67} The stakes in youth unemployment are high. Recent events in the Arab world and in southern Europe have highlighted the discontent of educated youth whose employment opportunities are falling short of expectations. The Arab Spring may boost transparency and accountability in the region, but if jobs do not follow, greater instability may result.\textsuperscript{68} Youth employment problems have economic costs, not only in the short run but also in the longer term. Unemployment among young people can lead to permanent scarring effects in the form of lower future earnings.\textsuperscript{69} The lack of job opportunities may also lead to discouragement. Some of the decline in youth unemployment in the aftermath of the global crisis is actually driven by young people dropping out of the labor force.\textsuperscript{70}

Many countries with youth unemployment problems have very large youth cohorts. In Zimbabwe, where 43 percent of the working-age population is between 15 and 24, the youth unemployment rate is three times higher than the overall unemployment rate. The Middle East and North Africa, which has especially high youth unemployment, is an overwhelmingly young region. More than 100 million people are between the ages of 15 and 29, making up 30 percent of the region’s population and about 47 percent of the working-age population. Youth cohorts this large are not only likely to face higher unemployment rates but also tend to exert downward pressure on labor earnings.\textsuperscript{71}

But demography is far from the whole story. Not all countries with pressing youth employment problems have “youth bulges.” In Sri Lanka, less than one-quarter of the working-age population is between 15 and 24, but the youth unemployment rate is more than three times the overall rate. And even where youth cohorts are large, young people may encounter other barriers to employment. Poor information on job seekers and on employment opportunities is one reason why young people face more difficulties than adults in finding jobs. Where private and public agencies and other sources of labor market information are not well developed, personal networks are important for matching people and jobs. A majority of workers in most Middle Eastern and North African countries have found their jobs through family and friends.\textsuperscript{72} Adults tend to have better networks than young people going through the transition from education to employment. If a large percentage of a person’s network is unemployed, the chances of that person finding a job are low.

A skills mismatch is the other common explanation. Close to 40 percent of the firms surveyed through investment climate assessments in the Middle East and North Africa report that the limited availability of skilled labor is a major constraint on business. Lack of formal schooling, which has increased substantially in the region, is not the cause. In fact, youth unemployment rates tend to rise with educational attainment in many countries. In Morocco, young people with a university education had an unemployment rate in 2009 of 17 percent, 3.7 times the rate for those with primary education or less. In Tunisia, 23 percent of university-educated youth were unemployed in 2010, compared with 11 percent for nongraduates.\textsuperscript{73} In Tunisia, it takes graduates 28 months on average to find a job, compared with 19 months for nongraduates.\textsuperscript{74} Not only has un-
employment been increasing, but the employment deficit is expected to grow more among university graduates than among people with less education (figure 6.6).

The paradox of high unemployment among the highly educated is related to the growth path of countries in the Middle East and North Africa, where the civil service and state-owned enterprises have long been the employers of choice and education systems were built to feed them with staff. Students aspire to public sector jobs, where benefits are generous and employment is stable, and focus on obtaining academic credentials rather than skills that enhance employability. There is a striking difference between the preferred educational path of youth in the region and that of youth in the high-performing East Asian countries. In 2009, one-quarter or less of the university students in Algeria, Lebanon, and Saudi Arabia were majoring in science, technology, or engineering. In some East Asian countries, such as China, the Republic of Korea, and Malaysia, that share was more than two-fifths.

Prescriptions on how to address the jobs challenge in countries with high youth unemployment usually build on these two explanations. The poor flow of information between employers and jobseekers is seen as a justification for active labor market policies that focus on improving the match between labor supply and demand. Counseling can help jobseekers understand what they have to offer and where the opportunities are. Temporary employment programs may provide a first job and make employers realize the value of a young worker. As for skills, the contrast between high educational attainment and high unemployment rates is seen as an indication of a disconnect between the quality and relevance of schooling and the actual needs of the labor market. Improving youth employment prospects, it is argued, will critically depend on restructuring education and training systems to produce marketable skills rather than credentials.

In the short term, training programs are indeed the most obvious response to provide unemployed youth with the practical skills employers need. The potential impact of these prescriptions is limited, however. Better information, counseling, and temporary employment programs can certainly help some jobseekers, but whether...
they would make a major dent in the aggregate unemployment rate is unclear. Better matches between jobseekers and employment opportunities would result in large increases in total employment only if there were many unfilled vacancies. But that is not the case in the Middle East and North Africa. Part of the high unemployment rate among graduates stems from the fact that the demand for skilled labor derives mainly from public administration, where growth is constrained by budgetary issues, and by increasing privatization and deregulation. Meanwhile, the main sources of private sector growth (such as construction and low-value-added services) demand unskilled workers, for the most part.

The key questions are why growth in Tunisia and other countries with high youth unemployment has not been more labor intensive and why the sectors that have expanded the most rely on unskilled workers. The answers may be in the product market more than in the labor market. Although many countries in the region have implemented reforms to reduce red tape and improve the overall business climate, discretion, arbitrariness, and unequal treatment still hinder competition and private sector development, especially in skills-intensive sectors such as telecommunications. In many countries in the Middle East and North Africa, connections with political power may matter more for success than entrepreneurial capacity.

The perks often extend to the workers in these cosseted businesses, under the form of job security and other benefits, adding to the frustration of those left out.

Firm dynamics provide some evidence of the difficulties associated with job creation and employment growth in these countries. Rates of new firm registration are low in most countries in the region. In some of these countries, public sector employment has recorded modest growth in recent years, but budgetary pressures will inevitably result in a severe contraction in the future. Aspirations remain, however, and, for many of the unemployed youth who have pursued university education in the expectation of getting a public sector job, there is a sense of a broken promise.

Information, counseling, and training are unlikely to overcome this frustration. Addressing the jobs challenge of countries with high youth unemployment rates requires a dynamic private sector that can create employment opportunities commensurate with the education and aspirations of new entrants to the labor market.

Growth alone may not be enough. After all, few countries have had a better economic performance than Tunisia, the first country in the Arab world in which jobs discontent erupted into political turmoil. Between 2000 and 2010, its GDP expanded at an average annual rate of almost 5 percent; meanwhile, the overall unemployment rate remained at 14 percent or above, and the rate for university graduates exceeded 30 percent.

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formalizing economies

Formalizing economies

The challenge of formalization is present in economies where a large share of the labor force is already covered by labor legislation and social protection programs, and reaching universal coverage seems attainable. But going in that direction raises serious tradeoffs. Formalization is often seen as necessary to strengthen social cohesion. It is also bound to increase the living standards of those who get under the purview of labor law and gain access to social protection. But formalization may reduce productivity if it distorts incentives or puts a burden on firms.

Formalizing economies are characterized by already large or growing urban populations where many residents have incomes well above poverty levels, yet where many still work in informal employment. The emerging middle classes in these economies demand advanced public services, including tertiary education, health care, and pensions. They are often frustrated by poor governance. They may perceive taxes and public sector benefits as useless or unfair and resent the weak physical and institutional infrastructure, as well as the excessive regulatory load. These frustrations beget avoidance and evasion of regulations, and, in such a climate, informal jobs not only persist but can even proliferate.

This state of affairs, sometimes described as an informality trap, reflects a weak social contract. That a large share of a country's urban labor force is informal is sometimes interpreted as a sign that the state is unable to enforce regulations and citizens are unwilling to comply with them.

The prevalence of informal employment in these relatively advanced economies can nurture poverty and social exclusion. Almost by definition, informal workers lack legal job protections and social insurance coverage, making them more vulnerable to workplace abuses, health risks, and the vagaries of the business cycle. Informal workers face a higher probability of poverty and often perceive themselves as poor. Men represent a majority of informal workers, but the probability for them to work in the informal sector is generally lower than for women, making informality another source of gender inequality. In Peru, informality rates are 76 and 66 percent for women and men, respectively. In South Africa, the corresponding rates are 37 and 30 percent. The Arab Republic of Egypt is a notable exception, with rates of 23 and 54 percent, respectively.

Informality is also associated with low productivity. Most informal workers are either self-employed or work for small unregistered firms, with low capital per worker, limited technology, and no scale economies. In Turkey, the differential in total factor productivity between formal and informal firms is 19 percent in manufacturing and 62 percent in services. A study in six Latin American countries finds that labor productivity is 30 percent higher in formal firms than in informal firms. The use of public services by the informal sector, without proper tax
It does not follow that formalization alone would increase productivity. Evidence shows that firms do not become more profitable simply by formalizing. Low productivity may reflect self-selection by workers and firms, who choose whether to formalize depending on the balance between the associated benefits and costs. For many workers, the poor quality of social protection and the possibility of relying on others in case of adverse shocks may make informal sector employment a preferred alternative. An analysis of labor market dynamics in Brazil and Mexico confirms that a substantial part of the informal sector workforce, particularly the self-employed, appears to voluntarily exit from the formal sector. Self-selection also occurs in the case of firms. A business tax reduction and simplification adopted in Brazil in 1996 led to a significant increase in formality among microenterprises. In other cases, workers with limited access to asset accumulation find themselves trapped in low-productivity informal jobs or use this sector as a last resort to escape unemployment. In Colombia and Argentina, evidence shows that a large share of workers, particularly low-skill workers, are systematically less likely to work in the formal sector despite being willing to work in it. In any case, informality is clearly a multilayered phenomenon with some workers trapped in this sector and others self-selecting into it.

Personal views about informality are actually very diverse. For example, some participants in a focus group of young women from a better-off neighborhood in Durban, South Africa, associated good jobs with formal occupations such as doctor, lawyer, teacher, nurse, or police woman: “Being a police-woman is a good way to make a living because they get benefits and they help protect the community.” Other participants, from a poorer neighborhood, identified good jobs as those in farming (“because you can sell the veggies”) or sewing (“because you can make a lot of money”). But other informal sector jobs were seen as bad because they involved financial precariousness and hard working conditions. Among them were working as a domestic worker (“because you have to go door to door asking people if they have a job for you. . . . [They] would pay you R30 and say because you are just helping”) or cutting grass (“because

![FIGURE 6.7 Labor regulation may not be the biggest obstacle to formalization](image)

Source: Investment Climate Survey (database), World Bank, Washington, DC.
Note: Formalizing countries in the sample include Albania, Argentina, Armenia, Azerbaijan, Brazil, Cape Verde, Chile, Colombia, Costa Rica, Ecuador, Georgia, Guyana, Kazakhstan, the Kyrgyz Republic, the former Yugoslav Republic of Macedonia, Mauritius, Mexico, Moldova, Mongolia, Panama, Peru, the Philippines, Romania, the Russian Federation, Serbia, Turkey, Ukraine, Uruguay, Vanuatu, and República Bolivariana de Venezuela. The horizontal axis measures the ratio of the average score of a constraint to the average score of all other constraints. The asterisk denotes statistical significance of the difference between formalizing economies and others at the 1 percent level.

In the long run, the informal sector tends to be larger in countries where labor productivity is lower, government services are weaker, and the business environment is less flexible. A controversial question is how much labor market and business regulations actually contribute to informality. Responses by firms surveyed in investment climate assessments suggest that labor legislation is not necessarily the main cause of informality, not because the laws and regulations are irrelevant, but because they are regarded with irreverence. Corruption and taxations are seen as the most vexing obstacles firms face (figure 6.7). Recent research also indicates
BOX 6.7  The debate on how to reduce informality is intense in Mexico

Having at least one member working in the formal sector allows Mexican families to have a regular source of income, health coverage for all, and, through these, access to the support of social networks. A case study, based on both ethnographic and statistical evidence, makes the case that households whose members fail to secure formal jobs are more likely to fall into poverty because of the risk of catastrophic health expenses. They are also less likely to secure social support from relatives and neighbors. Formal employment is thus critical for living standards in Mexico.

Despite a GDP per capita around US$14,000 in purchasing power parity terms, Mexico’s informal employment has ranged from 50 to 62 percent of total employment depending on the definition used. This rate is considered high given the country’s development level and has not shown consistent signs of decline in nearly two decades. Several studies argue that restrictive labor legislation is a factor explaining Mexico’s large informal economy. The country has tried unsuccessfully to reform its main labor law, which was enacted in 1973 and which is tied to rights enshrined in the 1917 constitution.

Weak enforcement is another factor behind informality in Mexico. The government announced a doubling of inspectors at the Ministry of Labor in 2012, from 300 to 600. This number still compares unfavorably with other countries. Labor courts are also over-stretched: cases may take between three and six years to reach a conclusion.

This stagnation in the reform of legislation and enforcement contrasts with the expansion of a successful cash transfer program, Oportunidades, and a noncontributory social insurance program, Seguro Popular. Oportunidades covers nearly one-fifth of the total population and nearly all the rural poor, making it one of the best-targeted poverty reduction programs in the country. Seguro Popular is the most rapidly growing program, claiming a coverage of more than 50 million by April 2012. But some preliminary research finds that non-contributory programs in general, and Seguro Popular, in particular, may induce informality or, at least, discourage formal employment.

Meanwhile, the debate about the universalization of health insurance is very much alive in Mexico. Academics and policy makers argue over it, and it is also a topic of political controversy. Much pivots on how much universalization will cost. Estimates vary widely from no incremental costs because of efficiency and tax collection gains to relatively large costs when accounting for long-term demographic changes. These differences originate from different methodologies, which indicate the complexity of the topic and the difficulty in gauging the full implications of the reform.

Mexico’s debate on formalization needs to be cast in a broader context. In recent years, poverty and unemployment have increased while real wages have been stagnant. But other measures of well-being, such as access to education, health, and social security, have continued to improve. Average productivity has been growing, but slowly, which can be due to an excessive churning of jobs and firms.

Demographic trends still show high fertility rates for a large share of the population, which leads to a social reproduction of poverty and informality. Whether sweeping changes in labor and tax legislation as well as in the organization of social protection would substantially reduce informality is still an open question.


c. Brazil has 3,000 inspectors, according to Pires (2011); France has 2,100, according to Piore and Schrank (2008). Piore and Schrank (2007) estimate that while Mexico has 1.72 inspectors per 100,000 workers, Brazil has 2.45, Argentina 3.05, and Chile 19.25.
g. Anton, Hernandez, and Levy 2012; Perry and others 2007; Villarreal 2012.
h. Villarreal and Rodriguez-Oreggia 2012.
i. Calderon 2012.
j. Martinez and Aguilera 2012.

that it is business regulations, more than labor regulations, that help explain changes in informality and unemployment.

Addressing the jobs challenge faced by formalizing economies requires extending social protection and the purview of labor laws without choking off economic dynamism. Previous attempts by Latin American countries to formalize through heavy-handed regulation, mandated benefits, and ill-designed social insurance programs led to populist enthusiasm but also to lower productivity and eventually to economic stagnation and poor quality of social protection. Efforts to reduce informality have taken a new twist in recent years. In several Latin American countries, sweeping changes in the organization of social protection are being implemented or proposed. First, transfer programs have escalated. Brazil and Mexico introduced cash transfer programs in the late 1990s that now cover nearly one-fifth of their populations. Brazil, Chile, and Mexico have also introduced noncontributory programs for senior citizens, and other countries are following suit. More radically, policy makers are debating whether to make the coverage of social insurance universal,
moving away from the current contributory systems toward the funding of benefits from general tax revenue.104 This reform would certainly expand the number of beneficiaries, but whether it would encourage firms to formalize is a matter of intense debate, especially in Mexico (box 6.7).105

So far, few countries have managed to substantially reduce informality. Rapid growth and strengthening institutions in Brazil and Chile have made them recent exceptions. In both cases, changes in labor market regulation have had limited effect. Patient accumulation of human capital and sustained growth have paid off. But strengthened rule of law, effective policies, and a better perception of the role of the state have also helped.

Those who see informality as the outcome of a weak social compact argue that the way forward involves a combination of enhanced enforcement of regulations, improved quality of public services, and greater policy coherence.106 If informality is associated with production units that evade, elude, or stay outside regulation, a three-pronged strategy may be warranted.107 For those who clearly work outside the purview of regulations, the reach of human development and social protection services and activation policies should be expanded. For those who work in stunted firms that legally avoid becoming formal, regulations should be simplified and their burden eased. Finally, for those in firms that evade regulations, enforcement should be strengthened. For this three-pronged strategy to have a chance of success, workers and employers need to perceive the state as a reliable and fair partner. If the state is not able to generate a sense of trust through the provision of efficient and good-quality services, neither regulatory reform nor increased enforcement will succeed in increasing formalization substantially.

The key is to build formal institutions and programs that are not too costly and that are valued by workers. The jobs agenda of formalizing economies is closely linked, then, to the development of effective regulation and social protection systems.

### Aging societies

Declining fertility rates and, in many countries, rising life expectancy have led to rapidly aging populations in several regions of the world. Today’s aging societies are concentrated in industrial countries, in Eastern Europe, and in the Southern Cone of Latin America. China entered the aging phase in 2010; and India, the Islamic Republic of Iran, Singapore, and Thailand will experience significant aging in the relatively near future.108

The old-age dependency ratio measures the number of people 65 years or older in relation to the number of people in the working-age population (15 to 64 years). When this ratio is high, the working-age population faces pressure to generate income to meet the needs of the elderly generation. The old-age dependency ratio in the Islamic Republic of Iran and in Singapore will rise almost fivefold between now and 2050. These two countries will have four and six elderly people, respectively, for every ten 15- to 64-year-olds. China’s old-age dependency ratio will rise by a factor of almost four. Many already aging societies in Eastern Europe as well as in Argentina, Chile, and Uruguay, will experience a rise in the ratio—a doubling or even more in most cases—between now and 2050.

The reasons for these surges in dependency ratios vary across countries. In most, the elderly live longer; in some, there are fewer people of working age. Low fertility rates in Bulgaria contributed to a population decline of 15 percent
between 1990 and 2010—and by 2050, the country is projected to have lost almost 40 percent of its population compared with its peak in the mid-1980s. Other Eastern European countries, such as Bosnia and Herzegovina, Moldova, Romania, and Ukraine, are expected to follow the same pattern; China’s population will be 50 million less in 2050 than it is now. In India and Singapore and in the Southern Cone countries of Latin America, population growth is slowing down and will start to decline by the middle of the century.

If the labor force participation rates of older workers are significant today and if these levels can be maintained, the impact of aging on average income can be cushioned considerably. But that may not be enough. If age-specific participation rates remain constant, some countries, such as Thailand, would be able to limit the absolute decline in its labor force, but many others would not. The impact in many Eastern European countries, Cuba, and China would be stark because of the decline in the size of the working age population. Between 2011 and 2050, Bulgaria would face a 40 percent drop in its workforce, Poland 28 percent, and China 17 percent (figure 6.8).

Aging affects jobs through several channels. Lower fertility may imply higher numbers of women ready to seek and take up jobs, although little evidence of this has been observed in Eastern Europe over the past 20 years. Smaller cohorts of young people could reduce innovative capacity. Disability rates increase in older age groups and thus further affect the labor supply in aging populations. Understanding how aggregate savings will be affected is also important, given that savings drive investment, growth, and job creation. Savings typically decline among older age groups. This decline could be offset if young people were to build up additional buffers to support their longer life spans, especially if public retirement schemes prove unsustainable or are absent. Expenditure patterns also vary with age. The rapid rise in the long-term care industry in high-income countries is an example. In the United States, the industry now counts more than 3 million formal jobs, and an estimated 10 million Americans 50 years or older (roughly one-quarter of this

![Figure 6.8: The labor force will shrink if age-specific participation rates remain constant](image)


Note: The simulation assesses the decrease in the total labor force based on the assumption that age-specific labor force participation rates remain constant between 2011 and 2050.
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rial hardship for elderly people. The adjustment process itself is likely to be painful economically, socially, and politically. The experience of several high-income countries shows that implementing the necessary reforms can stretch social cohesion to the limit.

Aging also can make a society less mobile, which can have economic consequences. In Ukraine, for example, aging is taking place against a relatively high pre-crisis level of growth with very little creation of jobs. Some firms, though, are desperately looking for workers, both highly skilled and manual. The elderly are usually less mobile than the young, and the housing market makes changing residence difficult. Low internal mobility represents a significant bottleneck to increasing activity and raising productivity (box 6.8).

In aging societies like Ukraine, good jobs for development are those that keep labor force participation rates high, especially for the elderly. These jobs can contain the decline in average income while at the same time protecting the viability of the social insurance system, which, in many countries, is under significant fiscal stress. Through these two channels, such jobs would also contribute to supporting social cohesion.
BOX 6.8 In Ukraine, the impact of aging is compounded by migration and declining fertility

Ukraine’s population is shrinking. This country, which stretches from the heavily industrialized Russian-speaking east to the more agricultural and predominantly Ukrainian-speaking west, was home to 52 million people when the Soviet Union broke apart. Today, there are 6 million fewer people; by 2050, the population will have fallen to 35 million. Fertility rates are sharply down, from about 2.0 at the end of the 1990s to below 1.5 today, albeit with an upward tick in recent years. The elderly dependency ratio is 22 percent and will reach more than 40 percent over the next 30 years.

The effect of this population aging on jobs is amplified by international migration. Between the turbulent transition years and the middle of the last decade, about 2.5 million Ukrainians emigrated, mainly to the Russian Federation and Western Europe. Every year, around 80,000 people leave the country, and recent studies have shown that the possible positive impacts of migration through remittances, return migration, and diaspora involvement have not (yet) shown their desired impacts. People ages 25–29 years, especially women, are withdrawing in large numbers from the labor market: the female participation rate dropped from 78.1 percent to 70.9 percent between 2001 and 2010.

Achieving high degrees of efficiency in the labor market is key to counterbalancing the impact of aging. But regional labor markets show little integration, as reflected by the high dispersion of unemployment rates. In some parts of the country, employers complain bitterly about the lack of workers with adequate skills, and at the same time they cannot fill available unskilled jobs. Yet, internal mobility is low in Ukraine by international standards and has declined in recent years. The lack of affordable housing has emerged as major barrier to mobility, also hindering registration for benefits in new locations. Rental property is scarce, often expensive, and can absorb up to 50 percent of household incomes in the big cities.

Eventually, Ukraine may face a vicious jobs circle. A declining labor force and a lackluster productivity performance put the social insurance and welfare systems at risk of becoming unsustainable. The inability to provide benefits to an aging population, and the stress that reforming the system could bring about, could become a source of social tension. As participants in focus group discussions mentioned, this tension would be amplified by the perception that the distribution of jobs is unfair and that jobs in the public sector require bribes. The decline in employment rates could also undermine civic engagement. Although low, the level of political and community participation among the employed is about twice as high as among the unemployed and 25 percent higher than among the inactive population.

The development of home-care models for the elderly can also support the twin objectives of keeping a high employment rate and containing social insurance costs. Proactively attracting—and integrating—migrants and managing to create virtuous circles with the diaspora promises equally large returns.

Measures such as raising the retirement age can contribute to labor force participation and financing of the welfare system, but not all groups have the same life expectancy. Typically, professional, technical, and skilled workers can expect to live longer than manual workers, especially those in hazardous occupations. Keeping the skilled at work longer is a way to increase average labor productivity and offset the decline in employment rates.
Creating an investment climate conducive to job creation in the private sector is a top policy priority. The question is whether the government should aim for a level playing field or focus its efforts on the specific areas, types of activities, firm sizes, and sectors with the greatest potential to create good jobs for development. Jobs challenges vary depending on a country’s level of development, its endowments, its demography, and its institutions. Ensuring free entry and competition across all sectors is a fundamental requisite for growth. But given the often limited fiscal space and administrative capacity of developing countries, creating an enabling business environment across the entire economy can be challenging, and the relevant question is how policy priorities should be set.

The conventional wisdom views targeting with a skepticism that stems from often disastrous experiences with industrial policy. While targeting was common in Latin America during its import substitution phase, by the 1980s the consensus was that interventions favoring specific sectors led to rent seeking, economic stagnation, and external vulnerability. Slow growth in India until the 1990s was also attributed to policies that favored local industrial groups and undermined competition. The success of several East Asian countries in industrializing has reignited the debate on the merits of targeting and the role of the state, but the potential for institutional failures remains the main concern. The dominant view holds that policy makers lack both the information and the capacity to “pick winners” when they select activities to target. In the absence of a solid information base, and taking into account the institutional failures common in developing countries, a risk exists that potential beneficiaries from targeted support could unduly influence the decision process.

**Targeting is not necessarily industrial policy**

The investment climate is the set of public goods and public policies that shape the opportunities and incentives for firms to invest productively, create jobs, and expand. It encompasses a wide range of policy levers: ensuring stability and security, enhancing financial markets, providing infrastructure services, reducing regulatory and tax burdens, and improving the quality of the workforce. The natural inclination is to equate a targeted investment climate with industrial policy. If some activities result in large productivity spillovers (because of learning-by-doing, for instance, or because of greater specialization and integration), targeting can imply supporting such activities. In recent years, productivity spillovers associated with various activities have been reexamined from different viewpoints, with both academics and practitioners proposing practical approaches for their identification (box 6.9).

The targeting of the investment climate may not necessarily be aimed at industrial sectors, however. Targeting can focus on gender, as when policies aim to increase labor market participation by women, or on spatial concerns, as in urbanization policies or policies for regional development. Or it can focus on firm size, as when policies support the development of small and medium enterprises. Good jobs for development differ across countries. The jobs agenda may involve making smallholder farming more productive in an agrarian economy, preserving international competitiveness in a resource-rich country, or fostering competition in activities employing skilled labor in a country with high youth unemployment. In each case, the logic for targeting lies in tackling market imperfections or government failures that are preventing jobs from contributing more to development.

An example is targeting in the agricultural sector. The underlying logic is based on the notion of public goods. The biggest obstacles to agricultural development are the lack of appropriate technologies and adequate infrastructures. As arable land becomes scarce, the development of yield-enhancing technologies is indispensable. But incentives to generate these technologies are undermined because they can be replicated freely. Thus, public policy plays a role by supporting the development and dissemination of such technologies. Because yield-enhancing technologies are fertilizer intensive
Industrial policy is an approach to state economic stewardship in which direct support is given to particular sectors in pursuit of national goals. Industrial policy fell out of favor in the 1980s, but today it is getting recognition again. The emerging views, however, draw criticism and have led to a new round of debate.

Arguments for industrial policy rest on three types of market failures: knowledge spillovers and dynamic scale economies, coordination failures, and information externalities. In the first, industrial policy is derived from the observation that knowledge spillovers and dynamic scale economies differ across industries. Coordination failures arise when markets fail to correctly signal the future payoffs of investment projects, such as large-scale infrastructure projects, and the private sector tends to underinvest on its own. Information externalities exist when knowledge on the profitability of investment opportunities is limited and the risk of free riding discourages investment and innovation.

Building on these rationales, several approaches further develop thinking on industrial policy. The New Structural Economics stresses the shift in comparative advantage that results from changes in endowments. The large productivity spillovers from infrastructure and associated coordination failures justify a leading role for the state. To identify the industries to be supported, this approach proposes to learn from countries with similar endowments but somewhat higher income levels. Exports with a solid track record by these countries indicate which sectors could have a competitive advantage as the economy grows. A second approach emphasizes the policy process and especially public-private partnerships. In this view, the dialogue between the government and businesses can help to overcome coordination failures and elicit information from the private sector on the most relevant productivity spillovers.

For a third school of thought, what matters is not just any coordination failure or externality, but spillovers of productive knowledge—mastering ways of doing things. Such knowledge is different from codified, public knowledge and is acquired and accumulated through experience. This approach claims that spillovers of productive knowledge associated with different industries can be sizable. To identify industries worth supporting, the approach proposes to rank products by how much productive knowledge is embedded in them and to focus on products that are similar to what is being produced currently but embody a higher knowledge content.

Opponents of industrial policy cast doubts on its alleged rationales, but above all, they question the practicality of its implementation. For instance, while admitting the existence of potentially sizable knowledge spillovers and dynamic scale economies in certain industries, skeptics question the whether the public sector has the capacity to identify these industries. A related concern is the ability of the public sector to make industrial policy a dynamic process: applying credible sunset clauses to old industries, and reallocating resources to new industries. More generally, skeptics believe the knowledge and skill requirements for successful implementation exceed the capacity of the public sector.

The objective is to strengthen the investment climate in a small part of the country, potentially providing a demonstration effect for further reforms, while not threatening the rents of powerful local elites elsewhere.

The information base for targeting exists

When there is clarity on the challenges faced by a country, it is also possible to determine which types of jobs would help address these
challenges. Thanks to efforts in research and data collection, the information set for deciding whether and how to support the creation of more of those good jobs for development is far from empty.

Consider jobs in farming. Among staple crops, rice, wheat, and maize are more promising than sorghum and millet, but the latter crops are grown in drier and harsher conditions where farmers are particularly poor. Modern cereal varieties are high yielding primarily in favorable rain-fed and irrigated areas. Thus, agricultural policies are bound to affect the well-being of the rural population differently in different regions. The choice depends on the country’s natural endowments and societal goals.

In nonagricultural sectors, the main obstacles to job creation can be identified through quantitative and qualitative assessments of the constraints faced by enterprises. While these assessments need to be interpreted with caution, differences in responses across enterprises reveal patterns that can also be used for developing targeted policy interventions (box 6.10).

If creating competitive cities is a feature of a country’s jobs agenda, enterprise surveys can provide information on how different the constraints faced by businesses are in cities of different sizes (figure 6.10a). If the jobs agenda requires the inflow of foreign direct investment, enterprise surveys indicate that foreign companies are less concerned about finance, but view customs administration, transportation, and licensing as more severe impediments to firm activity and growth (figure 6.10b). One country may choose to focus on microenterprises, because their success contributes to poverty reduction, and another on young and large firms, because they tend to be the most innovative. In both cases, enterprise surveys can be used to uncover the most relevant constraints (figure 6.10c, 6.10d). For example, shortages of skilled labor, delays in customs, and stringent labor regulations are viewed as more severe constraints by medium and large enterprises than by smaller companies. In contrast, micro- and small enterprises consider access to finance and competition to be more serious obstacles to their growth. Recently, enterprise surveys have been conducted for household enterprises operating in rural areas in selected countries. They can serve as additional tools for countries to foster nonagricultural sectors in rural areas.

The effects of removing those constraints also differ across businesses. Reducing barriers to entry fosters the growth of industries that experience higher natural turnover rates. Improving access to finance stimulates the development

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**BOX 6.10 Caution is needed when interpreting results from enterprise surveys**

Surveys of entrepreneurs and senior managers can provide feedback on what the private sector sees as significant constraints to private sector development. Some care in interpreting their responses is necessary, however. The respondents will give answers that reflect constraints on their bottom line—without regard to the broader societal or welfare implications. Almost every entrepreneur will complain that taxes and interest rates on loans are too high. But that does not necessarily mean that taxes should be lowered or that interest rates are out of line with risks faced by creditors. Constraints to the individual respondents need to be weighed against the broader social goals.

In addition, enterprise surveys only target incumbent enterprises. The surveys do not reach discouraged entrants and so do not ask about the constraints to entry they could not overcome; nor do they reach those who recently closed down to ask why they are no longer in business. Thus the issues that may have an important role in shaping who is even asked the questions are unlikely to be identified.

Any survey that asks subjective questions has to address issues of comparability of responses. Where possible, more objective questions are preferable. Thus, instead of asking how constraining the supply of electricity is on a scale of one to five, questions can ask for the frequency and length of outages, or the costs of running a generator. These responses can more easily be compared across respondents and over time.

One further complication in interpreting responses from enterprise surveys and linking them to enterprise outcomes is the potential for a two-way causal relationship between them. It could be that more onerous conditions are hindering an enterprise’s ability to stay in business. But a firm’s poor performance, perhaps stemming from weak management, could also be affecting the degree to which the respondent complains. Performance also affects which dimensions of the investment climate matter the most; for example, the availability of skills may be more constraining to expanding firms, whereas labor regulations may be of greater concern to firms that are contracting and facing the need to shed workers.

Sources: Hallward-Driemeier and Aterido 2009; World Bank 2004b.
companies are more likely to withdraw from the market than private local firms.

Not all targeting is vulnerable to capture by interest groups

Capture by vested interests is arguably the most important concern about targeting. The risk of industries that rely more on external funding. The impact of removing constraints also varies across firm size, age, ownership, and other characteristics.\(^{129}\) For example, infrastructure bottlenecks tend to stunt the growth of medium and large businesses but do not affect microenterprises significantly. Similarly, when the judiciary system is viewed as a hindrance, foreign companies are more likely to withdraw from the market than private local firms.\(^{130}\)

Not all targeting is vulnerable to capture by interest groups

Capture by vested interests is arguably the most important concern about targeting. The risk
that the potential beneficiaries could unduly influence the decision process is a real one. A too-cozy relationship between businesses and government can make it extremely difficult to remove support, even in the event of a blatant failure. Policy capture by vested interest groups could undermine the often weak capacity of governments in many developing countries.

Targeted activities that involve a large number of beneficiaries are less subject to capture. For example, support for smallholder farming, competitive cities, or female microentrepreneurs is less likely to be influenced by beneficiaries. In every country, thousands, if not millions, of farmers, urban businesses, and female microentrepreneurs are all bound to benefit from targeted policies aimed at their group. But individually they do not have the power to influence such policies, and they may not be able to organize as effective interest groups.

Targeted government interventions are justifiable only if they are based on a solid understanding of what good jobs for development are in a particular context and only if they can be designed to be resistant to capture. One example is the involvement of the private sector in the design and management of special economic zones (box 6.11).

**BOX 6.11 Special economic zones have a mixed record**

Special economic zones (SEZs) are demarcated geographic areas within a country’s boundaries where the rules of business are different from those that prevail in the national territory. These differential rules principally deal with investment conditions, international trade, and customs. The zones have a business environment that is intended to be more liberal from a policy perspective and more effective from an administrative perspective.

Before the 1970s, most SEZs were operated by developed countries. Then, starting with East Asia and Latin America, developing countries began to use SEZs to attract foreign direct investment, often as a part of export-led growth strategies. The objectives broadened over time, as SEZs became instruments of trade, investment, industrial, spatial, and even broader economic policies. In 1986, there were 176 zones in 47 countries; by 2006, there were 3,500 of them in 130 countries.

SEZs have a mixed record. Their rates of return are still a topic of heated debate among economists. Their performance critically depends on their design and management. SEZs are more likely to be successful when they are an integral component of the country’s development strategy, are aligned with the country’s comparative advantage, are cluster-based, and establish linkages with the rest of the economy.

For example, in Bangladesh, the SEZ program initially aimed to attract high-technology investments, but the government shifted the focus to garments, where the private sector had shown signs of success. The shift proved to be critical for the performance of the SEZ program. Building effective partnerships with the private sector is an important mechanism through which coordination challenges can be overcome. Institutionally, the partnership can be established through representation of the private sector on the board of the SEZ, as in the Dominican Republic and Lesotho.

A common element of many successful SEZs is the technical competency of the bureaucracy responsible for constructing and implementing them. While this cautions against targeting when government capacity is weak, several Latin American countries have recorded successes by relying on private sector ownership and management. In the Dominican Republic, where public and private zones coexist, there are no clear differences in employment, investment, or exports by zone ownership. But the private zones generally offer higher-quality infrastructure and more value-added services than the government-run ones and, accordingly, charge higher rents.

Farmers in a pomegranate field in Tajikistan
© Gennadiy Ratushenko / World Bank

Street vendor in Kabul, Afghanistan
© Steve McCurry / Magnum Photos

Wage worker at a garment factory in Vietnam
© Lino Vuth / World Bank

Drying peppers in the street in Mexico
© Curt Carnemark / World Bank
According to the accepted wisdom, as income increases, the diversity of industrial structure increases before the onset of industrial concentration (Imbs and Wacziarg 2003). Thus, the industrialization process in Bangladesh that has involved a shift toward the monoculture of the garment industry deviates from the general rule.

Another social consequence of high levels of youth unemployment is the effect on family formation patterns, and what is referred to as

Notes
5. Because of new discoveries in the natural resource sector, including natural gas, Mozambique may become a resource-rich country. Yet, raising agricultural productivity and developing light-manufacturing industries will remain key issues in this country, according to the Mozambique country case study for the WDR 2013.
7. Mozambique country case study for the WDR 2013.
27. Shortland 2011.
32. Dudwick and Srinivasan forthcoming; World Bank 2010.
33. Dudwick and Srinivasan forthcoming.
34. Lin 2011a.
35. World Development Indicators.
36. World Development Indicators; World Bank Poverty and Inequality database.
37. ADB 2012.
39. According to the accepted wisdom, as income increases, the diversity of industrial structure increases before the onset of industrial concentration (Imbs and Wacziarg 2003). Thus, the industrialization process in Bangladesh that has involved a shift toward the monoculture of the garment industry deviates from the general rule.
43. Gibson and others 2005.
45. Macintyre 2011.
49. Stillman, McKenzie, and Gibson (2007) also find evidence that migration improves the mental health of workers.
55. World Bank 2006b.
stalled transitions. In the Middle East and North Africa context specifically, this includes delayed marriage (Wrigley 2010). The rate of marriage has been declining as the age of entry into marriage has increased (Dhillon and Yousef 2009). Adequate employment is necessary for a man to be perceived as an eligible marriage partner.

69. Bell and Blanchflower 2010; Giles, Newhouse, and Witoela 2010.
70. ILO 2011a.
71. World Bank 2006b; Wrigley 2010.
72. Binzel 2011; Gatti and others 2012; Matsumoto and Elder 2010.
73. World Bank 2012a.
74. Stampini and Verdier-Choucane 2011. These figures are based on data collected in the 2005 and 2006 Labor Force Surveys.
75. According to the 2010 Gallup World Poll, the proportion of young people preferring to work in the public sector ranged from around 40 to 70 percent in countries in the Middle East and North Africa. Only Libya had a significantly lower share.
76. World Bank 2012a.
77. World Bank 2008b.
78. Some call for promoting access to secondary and university education among marginalized groups in the region (see Middle East Youth Initiative 2009).
81. Gatti and others 2012.
82. World Bank 2009.
84. Freund and others 2012.
85. Centeno and Fortes 2006; Mezzadri 2010; Saavedra and Tommasi 2007.
86. Kanbur 2011.
88. Some would argue that poverty begets informality because of the constraints that the poor face in finding a formal job (Devicenti, Groisman, and Poggi 2010).
89. Perry and others 2007.
90. ILO 2011b.
91. Taymaz 2009.
94. See McKenzie and Seynabou (2010) for recent evidence from Bolivia, and see de Mel, McKenzie, and Woodruff (2008).
95. Bosch and Maloney 2010; Maloney 1999.
96. Fajnzylber, Maloney, and Montes-Rojas 2011.
97. Bernal 2009 for Colombia; Mondragón-Vélez, Peña, and Wills 2010 for Colombia; World Bank 2008a for Argentina.
98. Fields 2005; Perry and others 2007. Gunther and Launov (2012) provide an econometric technique for separating the size of these two components using data on Côte d’Ivoire.
100. Loayza and Rigolini 2011.
102. Freund and others 2012; Ulyssea 2010.
103. Fiszbein and others 2009.
108. Demographic statistics, including outmigration rates, are based on estimates of the United Nations Population Division.
109. Giles, Wang, and Cai (2011) discuss measures that may facilitate longer working lives as China’s population ages.
111. WHO and World Bank 2011.
112. Fiegerman 2011.
114. Cai and others 2012.
117. Schwarz 2009.
118. See Lin and Monga (2011) and Pack and Saggi (2006) for reviews. For detailed discussion, see Cimoli, Dosi, and Stiglitz (2009); Harrison and Rodríguez-Clare (2010); Lin (2012); Porter (1990); Rodrik (2004).
120. Hayami and Ruttan 1985.
121. This is not the case for hybrid seeds, which farmers cannot self-produce, or for mechanical technologies.
122. The Economist 2010.
123. Levitt and Dubner 2009; Mallaby 2010; Romer 2010.
References

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