

Unity, Not Uniformity

Effective approaches to territorial development



Globalization and liberalization may rearrange production within countries, leaving people concentrated in places no longer favored by markets. In Brazil, China, India, and the Russian Federation, changes in both markets and policies over the last century have altered the fortunes of places. Geographic differences in economic activities encourage migration from lagging areas, concentrating people—including the poor—in leading areas. But geographic unevenness in living standards, by creating or deepening divisions within countries, can also lead to conflict, slowing social and economic development.

Building on the findings and analysis in earlier chapters, this chapter discusses the policy responses to widening or persistent differences in living standards between areas of a country that markets favor with greater economic mass and those that they do not. As in the rest of this report, the term “area” is synonymous with a subnational region or territory, so this chapter deals with the “regional development” (also referred to as the “territorial development”) debate. Logic and experience indicate that policy makers should calibrate their responses to the severity of the challenge.

- ***In countries where labor and capital are mobile, economic distance between lagging and leading areas should be addressed mainly with spatially blind or universal policies, for which the term “institutions” is used as shorthand.*** These policies should make it easier for people to move toward opportunity.

When lagging areas have few people and a small share of the country’s poor, measures to enhance migration should be the mainstay of development policy.

- ***In countries where lagging areas have large numbers of the poor, but few impediments to their mobility, institutions that promote mobility should be augmented by spatially connective infrastructure.*** Some countries have high population densities in lagging areas—and large numbers of the poor—but few cultural, linguistic, or political impediments to labor and capital flows. Investments in infrastructure that increase the flow of goods, people, and information would aid economic concentration and spatial convergence in living standards.
- ***In countries fragmented by linguistic, political, religious, or ethnic divisions, spatially targeted interventions may be needed.*** When lagging areas face the triple challenge of long distances to economic opportunities in leading areas, large population densities, and large numbers of poor people, as well as domestic divisions that limit the movement of labor and capital, institutions and infrastructure investments could be supplemented by targeted incentives to encourage economic production in lagging areas. But these incentives should not run counter to the integration objectives pursued through institutions that bring people together and infrastructure that connects lagging and leading areas of a nation.

Institutions, infrastructure, and incentives—these are the three parts of a successful policy approach to domestic integration. In deciding among the integration options, governments have to consider the fiscal and opportunity costs of these instruments. This chapter provides an organizing frame for governments to think through these options and find the best combination of policies.

A new approach. Policy discussions about how to improve welfare in lagging areas often begin with a focus on lagging areas—and an emphasis on targeted interventions or policy “incentives” to move production to these places. Instead, territorial development policies should integrate lagging with leading areas, and the discussion of spatially targeted incentives should come last—after considering spatially blind policies such as national revenue-sharing and social expenditure arrangements and spatially connecting initiatives, such as transport and communication systems. The experience of developed and developing countries shows that without these supporting institutions and infrastructure, incentives have been unsuccessful and expensive.

In many countries, the decentralization of administrative and fiscal responsibilities has increased the role of subnational governments in the design and delivery of policies. Resources allocated to subnational governments should come with agreements to ensure that local initiatives improve national welfare along with local welfare (see box 8.1).

In addressing these policy issues, the chapter provides an answer to a question of considerable concern to policy makers: Should countries invest in people or in places? The answer is to invest in activities that produce the highest economic and social returns nationally. In leading areas, emphasize investment in places—durable investments that increase national economic growth. In lagging areas, emphasize investment in people—portable investments that stimulate mobility and accelerate poverty reduction.

People seek opportunities

Throughout history, people have moved from places with harsh geography to those offering a more pleasant climate and better

BOX 8.1 *Are the policy messages of this Report “anti-decentralization”? No.*

Spatially blind institutions are the bedrock of economic integration policies seeking spatial efficiency and equity. Regardless of where people live, they should have affordable access to basic services such as primary health care, education, sanitation, and security. How these services are delivered depends on country circumstances.

Decentralization in many countries has made subnational governments more responsible for improving local welfare outcomes. In Vietnam subnational governments were responsible for almost 50 percent of public spending in 2002, up from about 25 percent in 1992. In China the ratio climbed from 67 to 72 percent between 1990 and 2004.^a In the Philippines the ratio was about 25 percent in 2002, up from 11 percent in 1990.

Problems arise when decentralization gets in the way of delivering spatially blind policies. Rather than allocating resources to social services, subnational

policy makers may be inclined to tilt expenditures toward politically popular activities. In a highly decentralized country such as Brazil, progress on national priorities of eliminating illiteracy and universalizing primary education is monitored using expenditure allocations, with the constitution determining that 25 percent of state and municipal revenues from taxes and transfers be earmarked to finance primary education. But closer inspection shows that around 10 percent of municipalities spend less than the constitutionally recommended amounts.^b

Large and visible investments are politically expedient signals to voters that their representatives are hard at work. So how can decentralization be consistent with the spatially integrative policies discussed here?

- **Institutions**—resource allocations to subnational governments could be based initially on inputs (expenditures

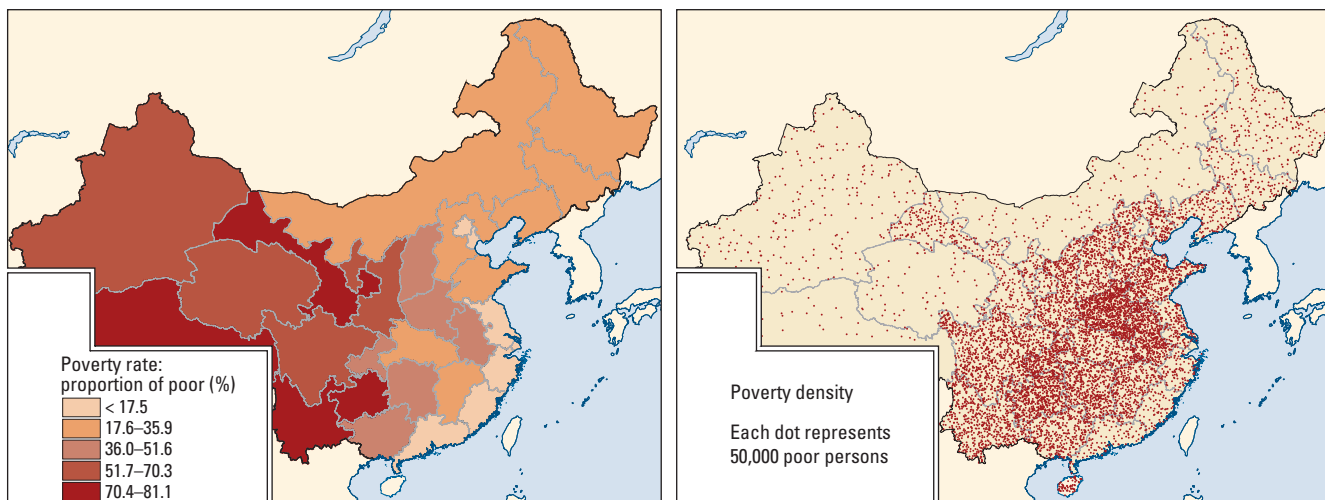
on public services) but should move as soon as feasible to outcomes (improvements in the national Millennium Development Indicators).

- **Infrastructure**—to maximize synergies from infrastructure investments and to regulate interstate commerce efficiently, design and planning decisions should be jointly made by subnational governments affected by these investments and regulations.
- **Incentives**—while subnational governments may be well suited to assess local economic potential, the decision of *where* to target incentives should lie with a national authority that can prioritize resources to accelerate overall growth. *How* these programs are implemented can be decided locally.

Source: WDR 2009 team.

- a. National Bureau of Statistics, China, 2005.
- b. Instituto Brasileiro de Geografia e Estatística (IBGE) 2004.

Map 8.1 The poverty rate is high in China's western interior, but most poor people live closer to economic density in the East



Source: WDR 2009 team.

Note: Poverty rates and counts are estimated for a \$2/day poverty line in 2002.

economic opportunities. The concentration of people in areas with hospitable natural environments attracted economic activities to these places, helping many to prosper even when the initial conditions that made these settlements economically attractive became less important. Mobility was not just for the well-off. Poor people also moved to economically dense areas—to seek better lives.

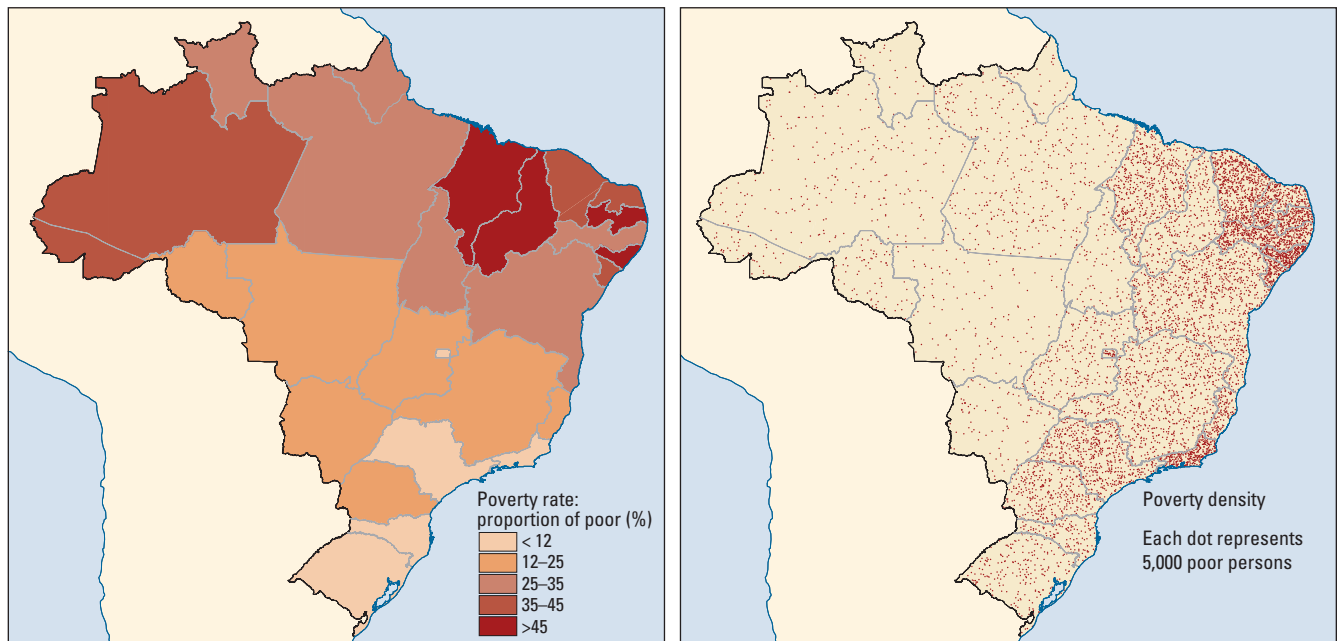
Consider the current distribution of poor people in China (see map 8.1). The percentage of people living below \$2 a day is high in the country's lagging western areas. But in absolute terms, many more poor people live in the dynamic coastal southeastern areas—the leaders in China's rapid integration with the global economy. Even before this integration happened, people did not concentrate in places with inhospitable geography, such as the Qinghai-Tibet Plateau with an elevation of 4,000 meters above sea level, or the highlands of the central region with elevations of 2,000 meters. The flat lands and warmer climates along the coast provided better conditions for farming and trade.

Maps of many countries would also show that the poverty mass—the numbers of poor people—and economic mass coincide. Java, the economically leading area in Indonesia, is also the island in the archipelago where most poor people live. The islands of Java and Bali are home to 21 million poor people, about 58 percent of the

country's poor. The numbers on the other islands are much lower: 1.3 million in Kalimantan, 2.6 million in Sulawesi, 2.7 million in Nusa Tenggara, and 1 million in Papua. Chapter 2 showed that Honduras and Vietnam have similar (overlapping) geographic distributions of economic production and poor people.

Using a sharper geographic resolution, a similar distribution of the population can be discerned *within* lagging areas. The northeast of Brazil is the country's poorest area. Per capita incomes in the southeast were 2.9 times that of the northeast in 1939, and 2.8 times in 1992. Eight of the 10 poorest states are in the northeast, two in the north.¹ The poverty rate is clearly high in the rural northeast and Amazon areas (see map 8.2). But even in the northeast, the mass and concentration of poverty—the number of poor people per square kilometer—is much higher in urbanized agglomerations near the coast, from the lagging northeast all the way to the dynamic regions of Rio de Janeiro and São Paulo in the southeast.²

In some countries the market forces prompting factor mobility are not quite as strong. Their economic mass and poverty mass do not coincide nearly as much as in countries such as China and Honduras. Consider India, where more than 400 million people live in "lagging states" in the north-central part of the country, which includes—using the country's poverty

Map 8.2 The poverty rate is high in Brazil's Northeast and Amazon areas, but the poor are massed in areas along the coast

Source: State-level poverty rates computed by Phillippe G. Leite, based on the Brazil Household Budget Survey (*Pesquisa de Orcamentos Familiares*) 2002–03 (see World Bank 2007c).

line—60 percent of the nation's poor (see map 8.3).³ Labor mobility from these areas has been limited due to ethnolinguistic and class-based divisions, perhaps inclining people to stay in their own “enclaves.”

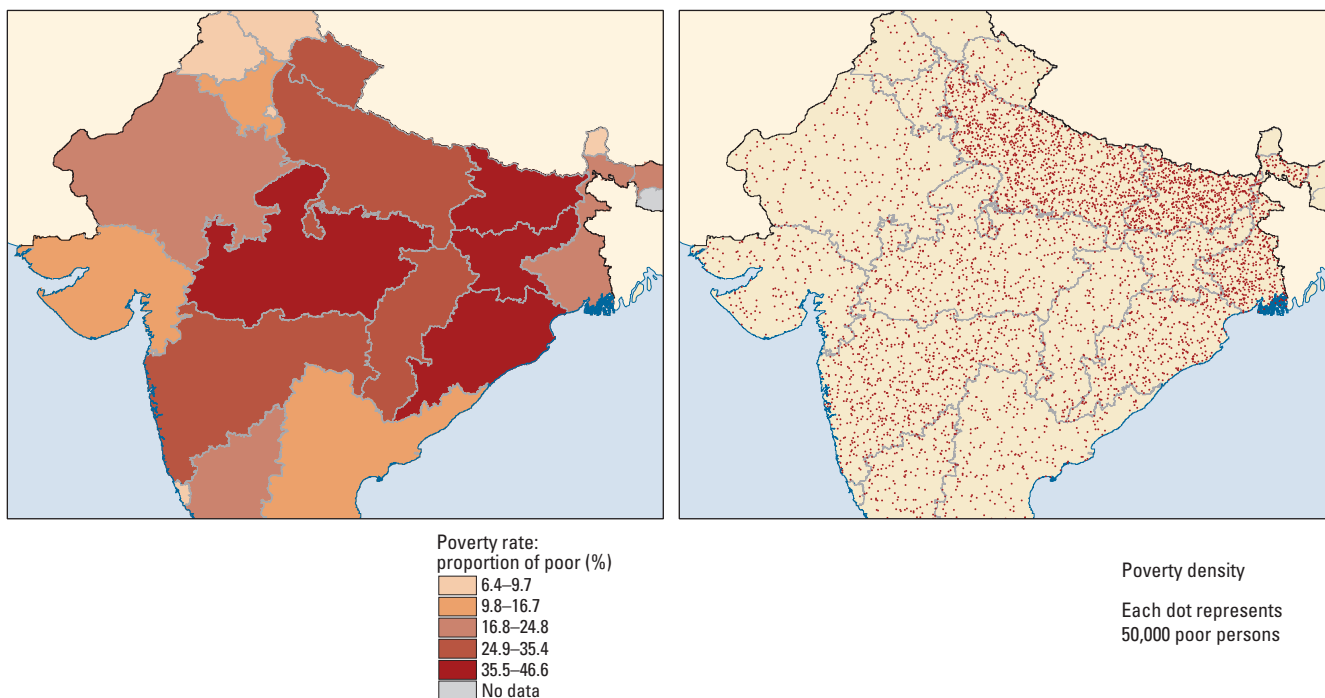
People are in these lagging areas for a reason. With rich soils and good internal connections, the fertile Indo-Gangetic plain attracted people. These areas were historically among India's most dynamic locations when the country accounted for a quarter of the world's gross domestic product (GDP), between 1600 and 1700.⁴ But historical “accidents,” such as making landlords responsible for paying land taxes to the British crown in these areas, eroded agricultural productivity and infrastructure investments.⁵ India is now reintegrating into the world economy, resulting in economic dynamism in its coastal and metropolitan areas. These areas offer good access to intermediate inputs and domestic and international markets, provide reliable and high-quality local public services, and have a business environment conducive to entrepreneurship. About half of manufacturing investments in 2005 were concentrated in only 10 of the country's more than 3,000 cities, the ones offering

better access to domestic and international markets.⁶

Should today's policy makers try to correct historical accidents by reviving investments in lagging areas and helping them regain their past glory? Or should they accelerate India's integration with the global economy and help people in lagging areas take advantage of new opportunities in places with greater economic density?

India's national policy discussion in the mid-1970s focused on promoting spatially balanced growth to revive the lagging areas with subsidized finance, investment subsidies, industrial infrastructure, and preferential industrial licensing. India's latest five-year plan recognizes the failures of industrial licensing and its inconsistency with growth. The discussion today is more about integration and the shift toward promoting better health and education in lagging areas, along with strategic inter-regional infrastructure investments that connect the remote northeast with markets in the rest of the country.⁷ Similar regional development policies have been implemented in other countries with internal divisions along religious or ethnic lines, such as Nigeria and Ethiopia.

Map 8.3 Both the poverty rate and poverty mass are high in some of India's lagging states



Source: Based on poverty estimates for 2004–05 from the Planning Commission, Government of India.

Note: State-level poverty rates and counts are based on the sum of the number of urban poor and rural poor in 2004–05, which are calculated using different poverty lines.

Policies aimed at reducing such divisions have reinforced a natural tendency of people to seek places that offer better economic opportunities. Take the well-studied German unification, a merger of two economies with few exchanges of goods and factors that propelled people from the east to the west. The opportunity arose in the summer of 1989, when people could leave East Germany through Hungary. And with the fall of the Berlin wall on November 9, 1989, direct migration from East to West Germany became possible. With the border open, 800,000 people left the east for the west in 1989 and 1990, 5 percent of the eastern population (see box 8.2).⁸ Clearly, the German unification started a move to density. It suggests that reducing distance to economic density improves people's welfare, and labor mobility is the strongest natural mechanism for this.

Countries seek unity

Many countries have spatial differences in production and poverty, mostly because of economic distance between lagging and

leading areas, and also because of divisions from political, ethnic, religious, and linguistic differences. And all countries seek unity, by lowering the barriers of internal divisions. A review of national constitutions from 20 developing countries shows that promoting unity—reducing divisions—is an important political objective (see box 8.2). In Nigeria an important article of unity is that people will not be discriminated by sex, religion, place of birth, ethnic, or linguistic association. In India Article 16 of the constitution states that “no citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against in respect of, any employment or office under the State.” For the most part, constitutions do not make *places* paramount—they focus instead on the welfare and unity of *people* (see box 8.3).

Unity does not mean uniformity. India's national motto, for example, is “unity in diversity.” But in many countries, policy makers have viewed uniformity as the main vehicle for unity. The European Union (EU)

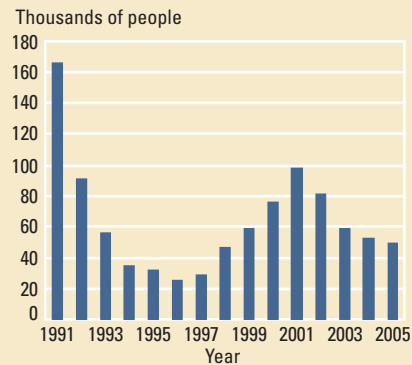
BOX 8.2 The German integration: convergence and concentration with mobile labor

With the fall of the Berlin wall in 1989, direct migration from East to West Germany became possible. Opening the border led 400,000 people to leave the east to the west in 1989 and again in 1990, about 5 percent of the eastern population (see the left figure). In later years, incomes started to converge and the process slowed. In 2001 a recession in Germany again led about 100,000 people to leave the east for the west. By 2007 more than 1.7 million people had left the east (of about 17 million at the time of the fall of the Berlin wall).

Migration produced one predictable outcome: incomes became more equal between the two areas (see the right figure). While the cross-country distribution of income in 1992 was clearly bimodal, with the counties in the east forming the lower peak, this was smoothed by 2005. Although the counties from the east are still located at the left of the distribution, their economic distance to western counties has shortened.

Convergence in incomes has also produced more surprising outcomes. Almost all counties with more young women than men are in the economically dynamic areas of Germany, which also have better

Migration from East to West Germany was possible after the fall of the Berlin wall
Net migration from East to West Germany, 1991–2005

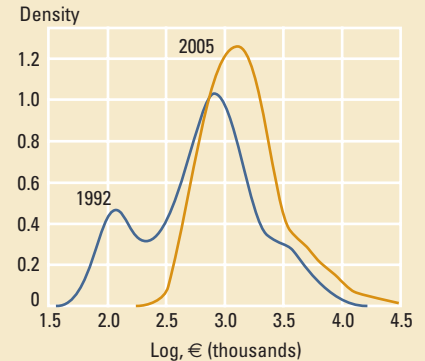


Source: Federal Statistical Office Germany 2007.

institutions of higher learning (see the map below). In 2004, in the 18–29 age-group, there were only 90 women for every 100 men in East Germany (including Berlin).

Why did East German women move to the economically dynamic areas, while men stay in the lagging areas? There are two explanations. First, women are on average more successful in school and higher education, which makes it easier

Convergence of income across German counties was noticeable between 1992 and 2005

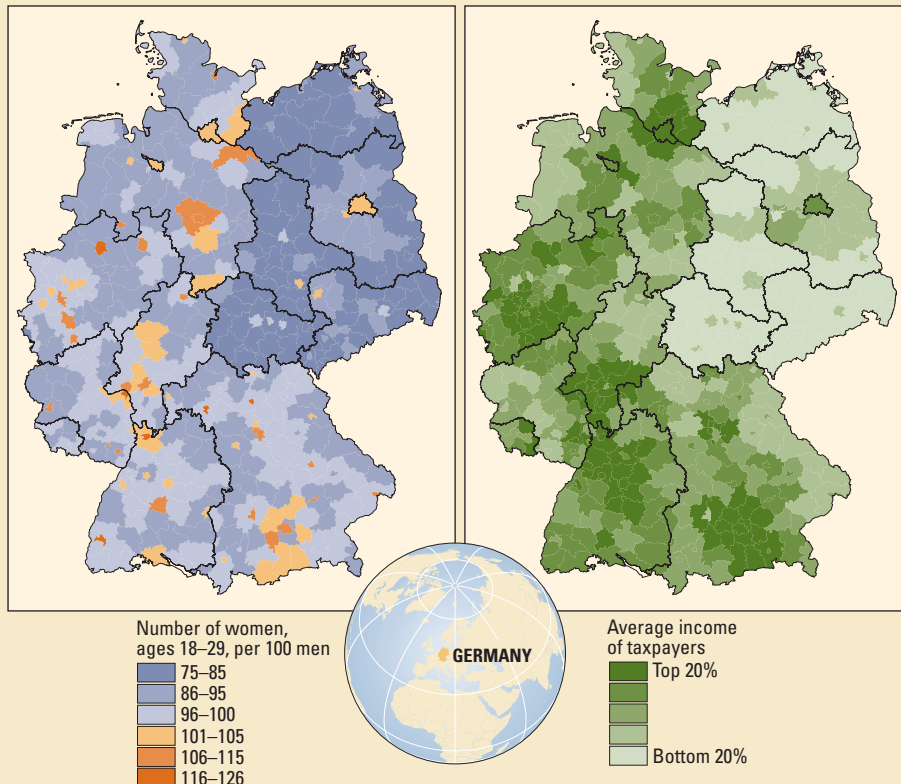


Source: Holzmann, Priebe, and Vollmer 2008.

for them to study or to find a job in the economically more dynamic parts of Germany. Second, it is much harder for women to find an attractive job locally in the lagging areas than it is for men, because these areas are typically dominated by traditionally male jobs in agriculture, manufacturing, and construction.

Sources: WDR 2009 team, based on Kroehnert and Vollmer 2008.

Women moved to the west seeking economic opportunity: in 2003, there were fewer women per 100 men in the eastern part of the country (left), and higher taxpayer incomes in the west (right)



Source: Kroehnert, Medicus, and Kinglölz 2006.

Source: Federal Statistics Office of Germany.

BOX 8.3 *Constitutions call for unity, not uniformity*

National constitutions reflect the evolution of political discourse in most countries and define interactions between the state and its citizens. A review of constitutions from 20 developing countries⁹ finds that all emphasize national unity as an important national objective. Uniformity in economic outcomes across areas is mentioned only in one—Brazil's constitution. Universal access to primary education and basic health care are constitutional mandates in most countries.

Excerpts from the constitutional articles of three African countries highlight the importance that societies place on national unity and integration:

Nigeria: "The motto of the Federal Republic of Nigeria shall be Unity and Faith, Peace and Progress." Article 15 (2)—"Accordingly, national integration shall be actively encouraged, whilst discrimination on the grounds of place of birth, sex, religion, status, ethnic or linguistic association or ties shall be pro-

hibited." Article 15 (3)—"For the purpose of promoting national integration, it shall be the duty of the State to: (a) provide adequate facilities for and encourage free mobility of people, goods and services throughout the Federation; (b) secure full residence rights for every citizen in all parts of the Federation."

Côte d'Ivoire: Article 30—"The Republic of Côte d'Ivoire shall be one and indivisible, secular, democratic and social. The Republic shall ensure equality before the law to all without distinction as to origin, race, sex or religion. It shall respect all beliefs." Its principle shall be: "Government of the people, by the people and for the people."

Uganda: Article 3—"(i) All organs of the State and people of Uganda shall work towards the promotion of national unity, peace and stability. (ii) Every effort shall be made to integrate all the peoples of Uganda while at the same time recognizing the existence of their ethnic, religious, ideological, political and cultural diversity."

Brazil's constitution calls for regionally balanced economic development, setting out guidelines to promote capital flows to lagging areas. The translation of these guidelines into practice has not produced the expected economic gains. And the programs have been costly. The Constitution Funds—a prominent regional economic development program—provided subsidized credit worth more than \$10 billion between 1990 and 2002 to help firms locate in lagging areas. The ineffectiveness of these interventions is evaluated elsewhere in this chapter.

Source: WDR 2009 team; based on a review of constitutions from 20 developing countries.

a. The countries are Argentina, Bolivia, Brazil, Colombia, and Mexico (LAC); Côte d'Ivoire, Ghana, Nigeria, and Uganda (AFR); Bangladesh, India, Nepal, and Pakistan (SAR); Kazakhstan, Poland, and the Russian Federation (ECA); China, Indonesia, and the Philippines (EAP); and the Arab Republic of Egypt (MENA).

policies to integrate new member states call for "cohesion." But the objective of cohesion—or unity—is pursued through policies for convergence. Convergence targets include eliminating territorial disparities in economic development (economic cohesion) and in access to labor and income (social cohesion). This "cohesion" is matched by the EU regional policy, which allocates about 60 percent of its funding to support areas of low development (less than 75 percent of the EU average GDP per capita).⁹

Accounting for 35 percent of total spending of the EU, the EU cohesion policy is translated into practice through structural funds (90 percent of spending) and the cohesion fund (10 percent). The Agenda 2000 package comes with a price tag of €236 billion, with €195 billion for structural funds; €18 billion for the cohesion funds for Greece, Ireland, Portugal, and Spain; and €22 billion for new member states, in view of their 2004 accession.¹⁰ Agenda 2000's objectives include the development and structural adjustment of lagging areas, the development of border areas and areas in industrial decline, and the adaptation and modernization of education

and training systems.¹¹ The cohesion policy aims to improve economic performance of specific areas and help them catch up with the rest of the union.

Resource allocations of this scale to support integration may reflect the redistribution preferences of member states (particularly the ones whose residents are footing the bill), but do these policies stimulate overall growth? Are they paying for the "wrong" type of assets? Academic research shows that they are not well suited to maximizing aggregate economic growth because they try to promote spatial evenness and not agglomeration. Nor are they especially well suited to promoting catch-up by lagging areas. Traditional cohesion policies that provide "hard" infrastructure and assistance to firms are unlikely to increase the competitiveness of lagging areas.¹² Moving away from these programs to support education programs and institutional development could do much more.

Trying to use the same instrument to pursue dual challenges of internal and external convergence is likely to make the policy lose focus. The EU's fourth report on economic and social cohesion provides

a candid assessment of convergence across its regions and within individual countries.¹³ Between 1995 and 2004, there was a tendency of aggregate convergence in the EU, with new member states with lower GDP per capita growing faster than the EU-27 average. But at a more disaggregated Nomenclature of Territorial Units for Statistics (NUTS) 2 regional level—sub-national areas larger than administrative units in most countries—the results show little effectiveness of directed interventions in improving economic performance of lagging areas. For the better-off EU-15, the number of people in lagging regions has remained almost unchanged at 32 million, around 8 percent of the total. When the new member states are considered, there has been international convergence in

per capita incomes. But the concentration of economic production within member states—new and old—has been increasing, led by market forces driving faster economic growth in their leading areas. Indeed per capita incomes in several areas in some new member states—Bratislavský kraj in the Slovak Republic, Közép-Magyarország in Hungary, Mazowieckie in Poland, and Zahodna Slovenija in Slovenia—have risen to more than 75 percent of the EU average.

Ireland took a different approach for using EU funds. Rather than try to use the EU funds to achieve both international catch-up and to disperse economic production domestically, Ireland focused on one objective—national economic growth. From being one of Europe’s poorest countries, it is now one of the richest (see box 8.4). Between

BOX 8.4 *An instrument per objective: Ireland used EU funds for international convergence*

Between 1977 and 2000, Ireland’s GDP per capita grew from 72 percent of the EU average to 116 percent. What was behind Ireland’s success?

Since joining the European Union in 1973, Ireland received approximately €17 billion in EU Structural and Cohesion Funds through the end of 2003. In the first two rounds of EU funding, the entire country was classified as an Objective One area. Between 1993 and 2003 cohesion funds supported 120 infrastructure projects at the cost of about €2 billion.⁹ The choice of projects was based on a national development plan, which focused on investments in economic infrastructure that stimulated long-term national economic growth. These included investments in leading areas and in connecting leading and lagging areas, such as the M50 (Dublin Ring Road), M1 (Dublin-Belfast), and improvements in the N4 (Dublin-Sligo), N7 (Dublin-Limerick), and N11 (Dublin-Rosslare).

The Irish also invested in education, training, and lifelong learning in all of Ireland to provide investors with a good business environment countrywide. With its skilled labor force and good logistics, Ireland has become a popular destination for American firms wishing to reach European markets. In 2004 Irish-based U.S. firms exported \$55 billion worth of goods and services, mostly destined for Europe.

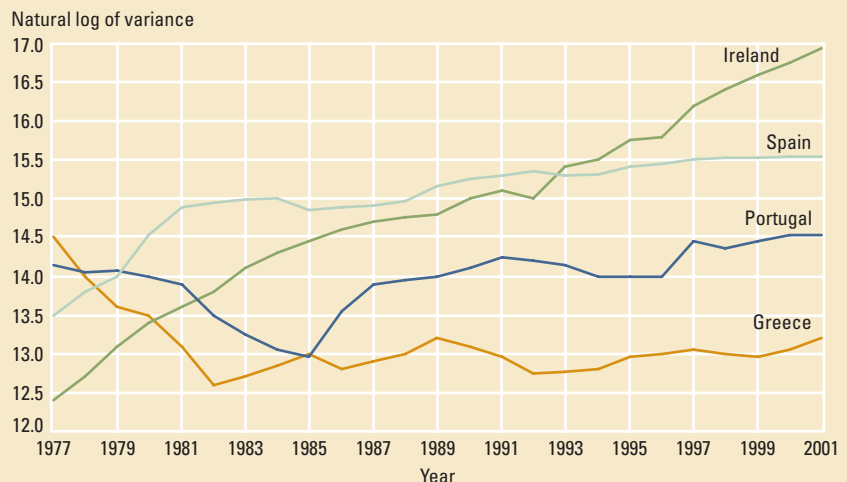
Ireland’s rapid convergence toward the incomes of Europe’s leaders was accompa-

nied by a rising spatial concentration of economic activity. Compared with the other cohesion countries—Greece, Portugal, and Spain—Ireland’s economic concentration rose much more (see the figure below). But its per capita income grew much faster too. In 1977 Greece, Ireland, and Spain had per capita incomes of about \$9,000; Portugal’s was about \$6,000. By 2002 Portugal had an income of \$11,000, and Greece and Spain close to \$15,000. Ireland’s per capita income had risen to \$27,500.

Today, almost all regions in the new member nations in Eastern Europe qualify for EU financial support. They should consider the Irish example of using the funds for international convergence and not—until later stages—for spatially balanced economic growth within their borders.

Sources: Dall’Erba 2003, WDR 2009 team. a. Ireland’s National Development Plan (NDP) 2000–06.

As Ireland’s income rapidly grew, economic concentration increased within the country



Sources: Dall’Erba 2003; WDR 2009 team.

1991 and 1998 Ireland was just one region for the purposes of Objective One support from the EU.¹⁴ When the country grew past the 75 percent threshold, in July 1999, Ireland created two regional “assemblies”—Border-Midland-Western, and the Southern and Eastern. But spatial concentration of economic production has increased in Ireland relative to Greece, Portugal, and Spain, the other three cohesion countries.¹⁵

A policy framework for integrating lagging and leading areas

People seek opportunity, and countries seek unity. Policies that integrate lagging and leading areas can help with both. This section outlines a framework to guide policy making. It proposes a calibrated combination of institutions, infrastructure, and incentives to address the domestic challenges posed by density, distance, and division. Used well, a combination of these measures can help countries reap the economic benefits from increasing concentration of economic activity, as well as the social, political, and economic payoffs associated with converging living standards between lagging and leading areas.

Policy makers, often viewing economic concentration as inconsistent with spatial equity in living standards, have sought to reduce concentration through spatially targeted interventions. Many governments fight market forces that promote the concentration of people in economically dense

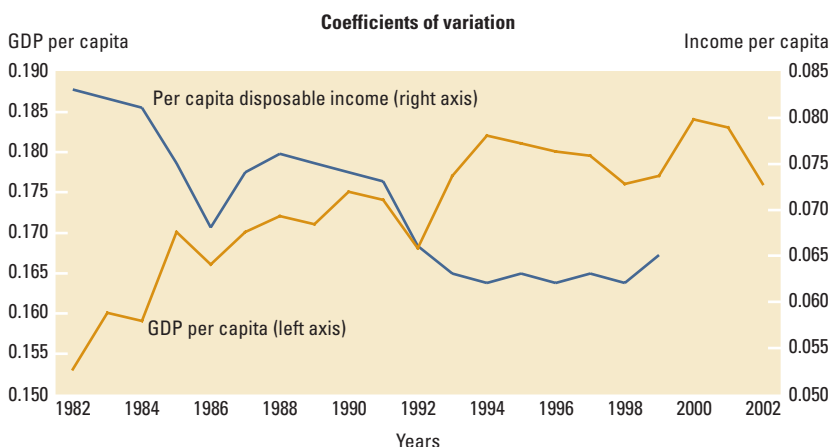
places. Indonesia’s transmigration program tried to relocate people from densely populated Java to less densely populated areas of Kalimantan, Papua, Sulawesi, and Sumatra. At its peak between 1979 and 1984, 535,000 families or almost 2.5 million people were relocated. The objective was to promote “balanced demographic development” and reduce poverty by providing land and new economic opportunities for poor landless settlers. But the program made almost no dent in the population density of Java, nor did the high cost of the program reduce poverty much among the migrants.¹⁶

Relying solely on spatially targeted interventions is a common mistake. It is far better to rely on institutions that work less noisily. In France the concentration of economic mass and convergence of disposable incomes between leading and lagging areas have been concurrent, producing a “scissors effect” in the geographies of production and disposable income (see figure 8.1).¹⁷ The effect appears to be driven not by spatially focused interventions but by spatially blind or “universal” progressive income taxation, social security, and unemployment benefits. Although space is not explicitly considered in such policies, their effects and outcomes can vary considerably across locations. As the base of economic integration, such “institutions” capture the benefits of spatial concentration of production and deliver convergence in living standards.

Even in the EU as a whole, the rising inequality of market incomes between 1985 and 1995 was partially offset by progressive tax and transfer policies. Increases in the income of skilled people were moderated through higher taxes, and the unskilled were aided with transfers.¹⁸ Similarly, the progressive tax structure in the United States reduced disparities in disposable incomes across states, while production became more concentrated, although the extent has varied greatly over time as government policies changed (see box 8.5).

The experience of the EU and the United States in addressing spatial equity with aspatial tax systems is instructive. Skeptics might counter that the coverage of the tax system is low in developing countries and that weak tax administration and

Figure 8.1 France has benefited from increasing concentration of economic production and declining spatial disparities in disposable income



Source: Martin 2005.

BOX 8.5 Taxation against spatial inequality? The U.S. federal income tax system

A progressive federal income tax in the United States has reduced income inequalities among people. An unintended effect has been to reduce income inequalities across states, showing that a spatially blind policy can be a sharp instrument for reducing spatial inequalities.

Data from the Internal Revenue Service show how much the income tax reduced spatial inequality. To see this, first, pretax incomes of the top percentile of earners in each state are divided by the U.S. personal income, as published by the Bureau of Economic Analysis. Next, the same income dispersion ratio is calculated with post-tax incomes. Then, the percentage decrease between the pretax and post-

tax income ratios for two groups of 10 states are calculated: one recording the highest pretax incomes (Group 1), and the other the lowest (Group 2).^a The figure below shows the change in post-tax income differences between the richest and poorest states. Directly imputable to taxation, it shows how the U.S. taxation system has helped to reduce income inequalities across states.

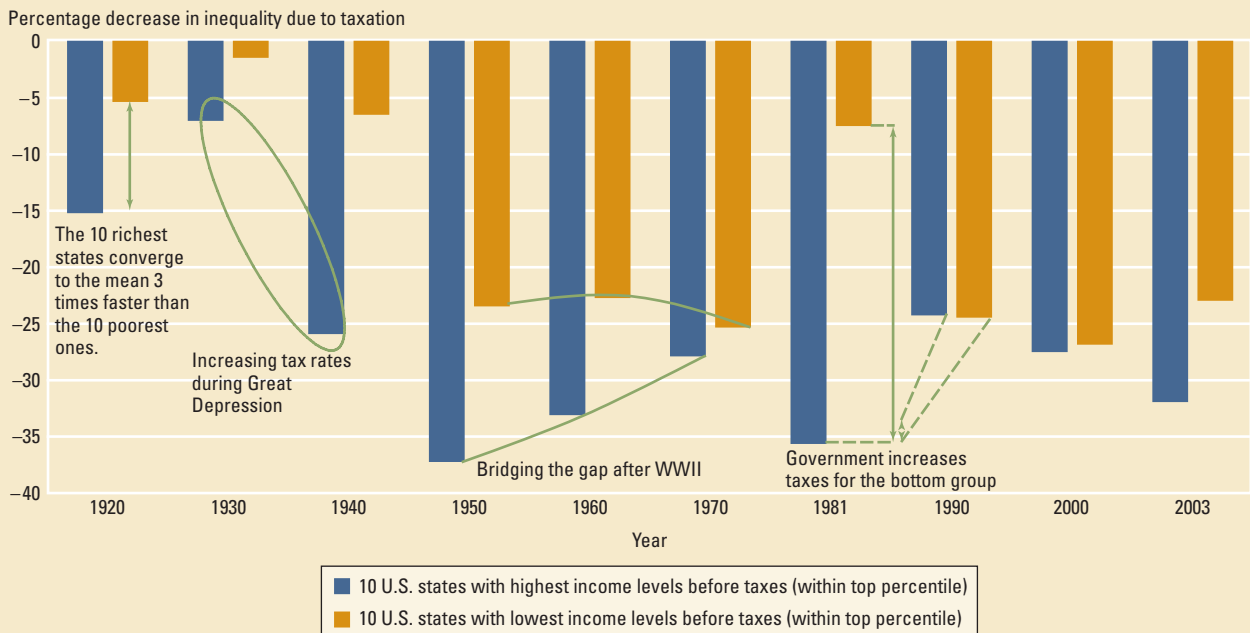
Never had the tax rate been higher than in 1918, at 77 percent to finance the war. After World War I, tax rates declined. Lowered to 24 percent in 1929, the tax rate for top incomes rose again during the Great Depression (-26 percent in 1940 versus -7 percent in 1930 for Group

1). When Congress introduced payroll withholding and quarterly tax payments during World War II, the progressive tax system was reinforced. But these inequality-reducing effects started fading away between 1950 and 1970. A brief rise in these effects during the late 1970s was followed by a fall in the 1980s and 1990s.

Source: WDR 2009 team.

a. Although both groups belong to the richest 1 percent of their respective states, keep in mind the sharp differences from one state to another. In 1940, for instance, an income of about \$47,000 made a tax filer part of the wealthiest 1 percent in Mississippi, but part of the wealthiest 10 percent in the District of Columbia.

Without an explicit spatial focus, U.S. federal income taxes reduce spatial disparities



Source: WDR 2009 team, based on analysis by Estelle Sommelier.

widespread informality in the economy will reduce the potential benefits of progressive taxes. But it is worth remembering that a century ago, when its tax system was introduced, the United States exhibited many of the attributes of a developing country today. Its population was mainly rural, with just 28 percent living in metropolitan areas in 1910.¹⁹ Wages were \$0.72 an hour in

the automobile industry in 1925.²⁰ The tax coverage and revenues were low, with only 10 percent of the households filing an individual tax return in 1916; today the ratio is 93 percent.

Some evidence from developing countries points to the fact that income redistribution through a progressive tax system is difficult, and that the targeting

of expenditures by individual or household income levels and the level of the average tax rate are more important for the post-transfer income distribution. Thus a high-yield proportional tax system may have a larger equalizing impact than a low-yield progressive tax system.²¹

Spatially blind tax and transfer policies will form the bedrock of public policies to integrate countries spatially and help them benefit from concentration and convergence. But these policies may not be enough. Depending on their conditions, nations need a broader range of instruments for domestic integration. The challenge of economic integration can be seen as reducing the distance between people—especially the poor—and economic opportunity. Misplaced population densities, and barriers to mobility of workers and entrepreneurs between leading and lagging areas posed by internal divisions, complicate the challenge.

In general, a policy framework for economic integration includes the following:

- **Institutions** (*spatially blind policies*). The term is used here to categorize policies that are not explicitly designed with spatial considerations, but that have effects and outcomes that may vary across locations. These include such national policies as the income tax system, inter-governmental fiscal relations, and governance of land and housing markets, as well as education, health care, basic water and sanitation, and other government initiatives.
- **Infrastructure** (*spatially connective policies*). The term is used here as shorthand to include all investments that connect places and provide basic business services, such as public transportation and utilities. These include developing inter-regional highways and railroads to promote trade in goods—and improving information and communication technologies to increase the flow of information and ideas.
- **Incentives** (*spatially focused policies*). The term is used here to include spatially targeted measures to stimulate economic growth in lagging areas. These include investment subsidies, tax rebates, loca-

tion regulations, local infrastructure development, and targeted investment climate reforms, such as special regulations for export processing zones.

These instruments for integration—institutions, infrastructure, and incentives—span the range between universal and geographically targeted policies. Each of the three categories can include taxes, public spending, and regulations.

Adverse physical geography generally increases economic distance, reducing trade of goods and services and the flow of labor, capital, and information, making delivery of public services harder. In Papua New Guinea, with the transport system fragmented by a rugged mountainous terrain, the average travel time from a rural community to the nearest road is two and a half hours, and to the nearest government station is more than three hours.²² In the more rugged parts of Peru, the coverage of public infrastructure is low.²³ Other such places include Chile's *Zonas Extremas*, western China, Upper Egypt, the outer areas of Nepal, and northeastern Russia. Because of adverse conditions, poverty rates can be high in these areas. But for the same reasons, unless prevented from leaving by government policies or sociopolitical reasons, or enticed into staying by incentives, not many people live in these areas.

Integration reduces the economic distance between lagging areas and more dynamic places. The most successful initiatives, which balance economic efficiency and political feasibility, are adapted to country circumstances. The circumstances that matter most are the population densities in lagging areas and the extent to which domestic divisions weaken market forces. Where few people live in lagging areas, as in northeastern Russia, integration policies should be different from those in places such as northeastern Brazil, where lagging areas are densely populated. Where lagging and leading areas share a common language and customs, as in Brazil and China, integration policies have to exert less effort than in areas where differences in language, ethnicity, or religion

divide one part of a country from another, as in India or Nigeria.

In Brazil the distance between the lagging northeast and the leading southeast is coupled with high population densities in the coastal areas of the northeast. But many *Nordestinos* have found opportunities by moving to the dynamic southeast. As many as 4 million residents of Greater São Paulo are *Nordestinos*.²⁴ This indicates the high population density in the northeast and the strong market forces of labor mobility, made possible by factors such as a common language and a strong national identity.

Recall the maps of India, where some lagging areas have a high poverty mass and high poverty rate (see map 8.3). Integrating these areas is especially challenging when subnational geographic groupings reflect ethnic, linguistic, or social differences.²⁵ The movement of people out of these areas has been limited because of local preferences and discrimination against particular groups (see chapter 5). Market forces of factor mobility have been weakened by internal political and social divisions—witness the hostility that Bihari workers have encountered in the more prosperous parts of India. In such nations, the integration challenge involves overcoming economic distance, misplaced density, and domestic division.

Using the spatial dimensions of distance, density, and division to characterize conditions in a country, a suggestive taxonomy can be developed to help countries tailor integration policies to their specific economic geography. At least three types of countries can be distinguished:

- **Type 1:** countries with sparsely populated lagging areas
- **Type 2:** unified countries with densely populated lagging areas
- **Type 3:** divided countries with densely populated lagging areas

This taxonomy can characterize lagging areas in most countries, but two qualifications are necessary. First, lagging areas in some countries may be sufficiently heterogeneous that it is difficult to neatly classify

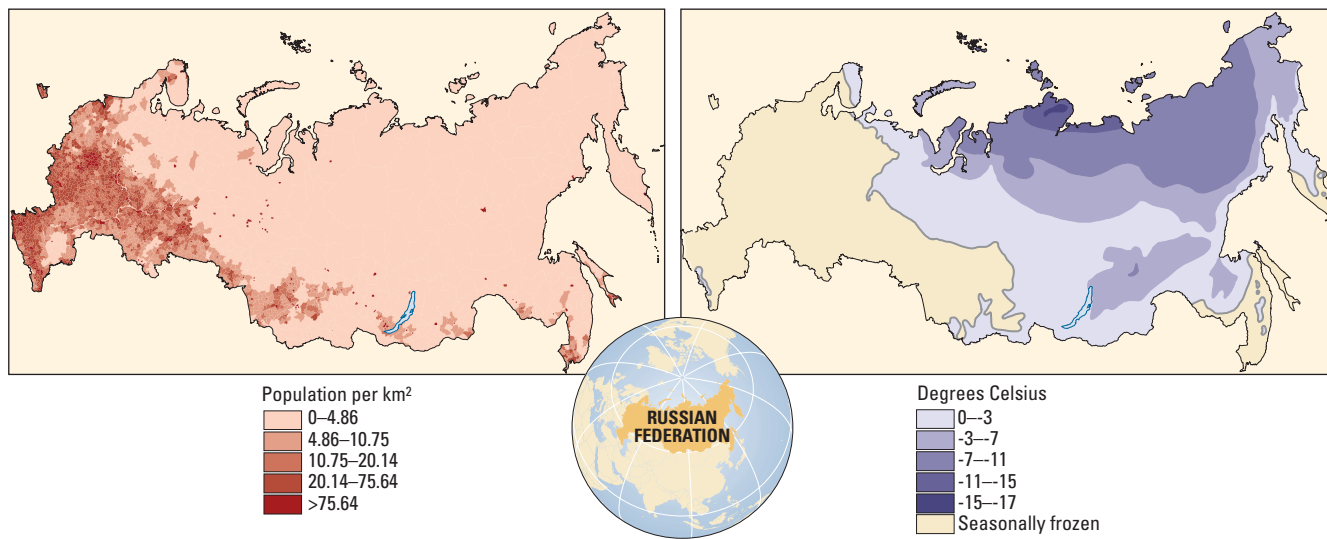
them into one of these types. In Thailand the northeast is densely populated and distant from the economically dense capital area, but the sparsely populated south is home to its Muslim minority. In India the lagging northeast is sparsely populated, whereas lagging areas in central India have almost two-thirds of India's poor. Second, countries classified as Type 1 (with sparsely populated lagging areas) can be unified or internally divided. But the strategies for integration in these two types of countries—unified countries with sparsely populated lagging areas such as Russia, or divided countries with sparsely populated lagging areas such as the Philippines—will not be different.

An instrument per dimension

Institutions to overcome distance. In countries with sparsely populated lagging areas, the integration challenge is mainly one of reducing economic distance. Policies that are universal—spatially blind in their design and national in their coverage—can shoulder much of the task of successful economic integration. Developing countries in this category include Chile, China, Ghana, Indonesia, Kenya, Mexico, Mongolia, Kazakhstan, Russia, Sri Lanka, Uganda, and Vietnam. The primary objective of these policies should be to encourage people migrate to places with economic opportunities. For example, as Russia moves further from plan to market, it will have to offset a legacy of policies industrializing its vast territory. Even today, millions of people are subsidized to live in “cold” and isolated places in the northeast (see map 8.4), where they cannot take advantage of new economic opportunities in the dynamic areas of the west.²⁶

Correcting land market distortions, removing restrictions on mobility, and providing essential services such as basic education, health care, water, and sanitation should be universal policy priorities. The costs associated with land sales—including fees, survey costs, and transfer fees—can make land transactions prohibitively expensive. In Russia the fees for private surveying are equivalent to two years' minimum wages. These costs could slow migration by

Map 8.4 In the Russian Federation, population densities are highest in the economically vibrant and warmer west, but a communist legacy has left some people in the cold interior



Sources: Population density: Fay, Felkner, and Lall 2008; Ice Thickness: National Snow and Ice Data Center 2007.

reducing the ability of less wealthy people to transact in land.²⁷ China’s household registration system (the *hukou* system) has been a barrier to rural-urban migration. Not having an urban *hukou* in urban areas means that migrants may not qualify for public education or health benefits. This can produce large interregional wage differences. Recent research indicates that removing such mobility restrictions would reallocate labor across areas, reduce wage differences, and lower income inequality.²⁸ But the benefits depend on the response of the urban housing market to additional demand from newcomers.

Some countries can have sparsely populated lagging areas and domestic divisions. In Lao People’s Democratic Republic, ethnic heterogeneity may make labor less mobile. Vientiane, the leading area, has a relatively low poverty rate, while the provinces in the north and south have higher rates (see map 8.5). But the poor are spread out quite uniformly across the country. In such cases, much of the policy response still should be spatially neutral, with special efforts to ensure equal access to public services to people in these areas. Afghanistan and Tajikistan are other examples of countries with divisions and sparsely populated lagging areas.

Other countries may have just a few lagging areas that are sparsely populated and divided. In Indonesia, an otherwise unified country, places like Aceh are considered lagging areas, with divisions that weaken labor and capital mobility. Policy makers may be tempted to provide economic incentives for firms in these areas to compensate for the lack of factor mobility, but the accompanying risk of creating enclaves of development and deepening existing divisions should be considered. Instead, initiatives that promote economic integration by increasing factor mobility may be better suited for both economic and political reasons. Examples include spatially targeted programs to improve education and equal opportunity legislation to ensure that workers from lagging areas do not face labor market discrimination in other parts of the country.

Institutions and infrastructure to overcome distance and density. When distance is coupled with high population densities in lagging areas, spatially connective infrastructure is also necessary. Countries in this category include Bangladesh, Brazil, Colombia, the Arab Republic of Egypt, Thailand, and Turkey. Isolation from markets in more dynamic parts of the country (or the world) can reduce consumer welfare, as residents face higher prices because of market fragmentation, and

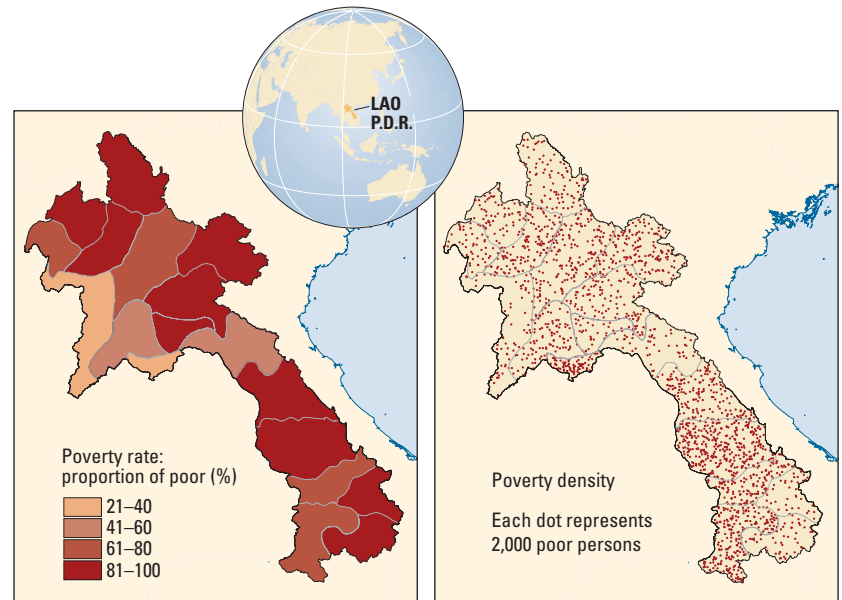
workers and producers have less access to markets. In principle, infrastructure investments that connect peripheral areas to markets should improve both consumer welfare and productive efficiency.

With sizable concentrations of the poor in lagging areas, spatially blind institutions that promote the mobility of labor and capital and ensure the provision of basic services must be aided by policies to improve the access of entrepreneurs in lagging areas to markets. Although migration will aid spatial efficiency and equity, with large numbers of the poor in lagging areas, this could take a long time (see chapter 5). Better infrastructural links between lagging and leading areas, by improving market access, may allow some activities to flourish in lagging areas. But they may increase the concentration of economic activity in *leading* areas, because firms that value agglomeration benefits will now be able to serve lagging area markets from farther away (see chapter 6). Activities that respond to better infrastructure in lagging areas are those that do not exhibit agglomeration economies—agriculture, agroprocessing, and labor-intensive manufacturing such as leather and wood products (see chapter 4).

A useful way to conceptualize how infrastructure investments improve connectivity is to think about a measure of market access that captures the size and density of market centers and the quality of transport networks that link different locations to these centers. The measure comes from the gravity model used to analyze trade between areas and countries, with the interaction between two places proportional to their size (population or economic density) and inversely proportional to the distance between them (see box 8.6).

Consider the Arab Republic of Egypt. The location of human settlements has been dictated by a dominant natural geography constraint—access to water. Most people, in leading areas around Cairo and Alexandria as well as lagging areas in Upper Egypt around Aswan and Qena, live along the Nile (see map 8.6). As in the densely populated coastal zone in Brazil, institutions to integrate Egypt need to be complemented with connective infrastructure to ensure both

Map 8.5 In the Lao People's Democratic Republic, the poverty rate is high outside the capital region, but poor people are scattered in remote communities



Source: Richter, van der Weide, and Souksavath 2005.

Note: Dots are placed randomly within each province and do not reflect population distribution.

spatial efficiency in production and spatially egalitarian living standards.

There is a long history of using connective infrastructure to integrate peripheral areas with national markets. When accompanied by institutions that integrate nations, such infrastructure investments can pay off. In the United States, the Congress passed the Appalachian Regional Development Act in 1965, relying on spatially blind institutions and connective infrastructure to integrate the 22 million people in this lagging area, which spans 13 states, with the rest of the country.²⁹ The basic strategy combined regionally coordinated social programs and physical infrastructure. The 1965 Act allocated 85 percent of the funds for highways—seen as critical to meeting other socioeconomic objectives—and, cumulatively, highways have accounted for more than 60 percent of the appropriated funds through the mid-1990s. Other investments included hospitals and treatment centers, land conservation, mineland restoration, flood control and water resource management, vocational education facilities, and sewage treatment works. Between 1965 and 1991, total personal income and earnings

BOX 8.6 *Low market access in Mexico's lagging south*

Quantitative information on regional or local market integration is scarce. Summary statistics—such as the road length in a state or province or the straight-line distance to ports or urban agglomerations—are poor proxies for the complexity of a national or regional transportation network. To improve on them, a geographic representation of Mexico's transport network is used to compute an index of accessibility for each *municipio* in the country as a simple measure of potential market integration.

This index summarizes the size of the potential market that can be reached from a particular point given the density and quality of the transport network in that region. For any point in the country, it is the sum of the population of urban centers surrounding that point, inversely weighted by the travel time to reach

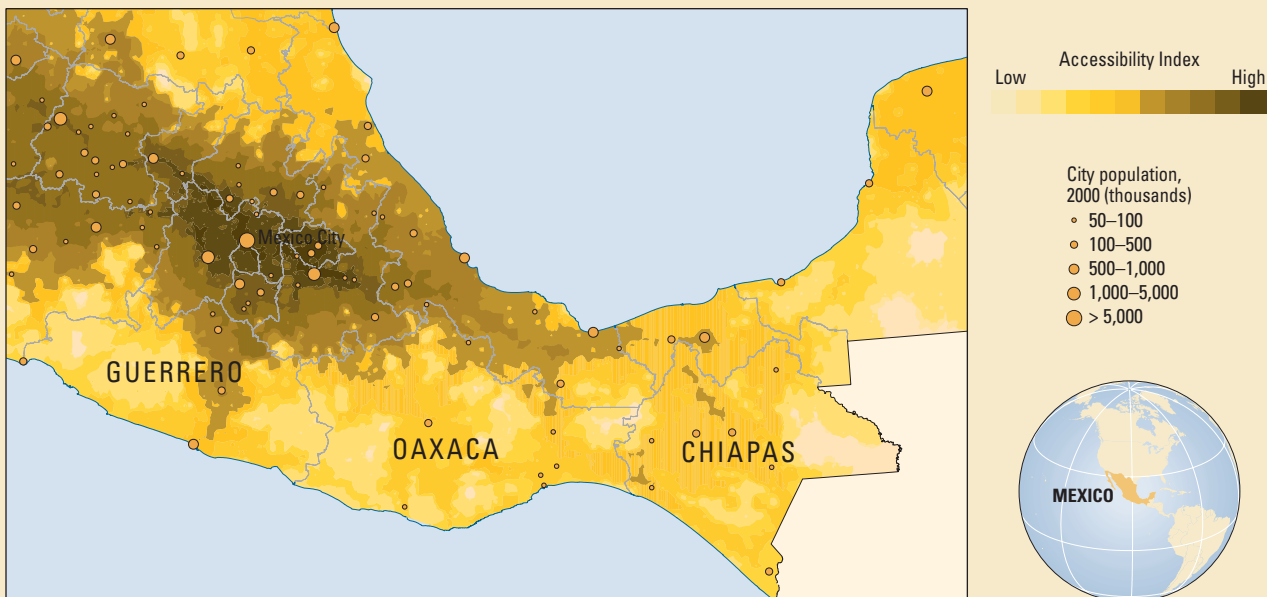
that center. It is computed using an up-to-date digital map of transportation infrastructure from the Mexican statistical agency (*Instituto Nacional de Estadística y Geografía*, INEGI).^a For each road segment, the database indicates the number of lanes and whether those lanes are paved or unpaved—and for railroad lines, the number of tracks. For each category of road or rail, average travel speeds are estimated to calculate how long it will take to traverse each segment in the transport network.^b Urban population data from the INEGI database indicate the location and population size of about 700 cities and agglomerations in Mexico. These urban centers accounted for about 68 million of Mexico's 97 million people in 2000.

The map of market access (below) shows high values of the index around

the federal district, thanks to concentrations of people and infrastructure. A quarter of Mexico's GDP is generated within two hours' travel time from the center of the Federal District. The southern states of Chiapas, Guerrero, and Oaxaca, the poorest areas, have low market access.

Source: Deichmann, Fay, Koo, and Lall 2004.
 a. The digital road and rail network includes 171,000 kms of roads, of which 84,000 kms are paved roads; 51,000 are unpaved; and 36,000 are paths and breaches. The rail network has an estimated total length of 14,000 kms. These values are calculated by a geographic information system (GIS) from 1:1 million scale digital maps and may not necessarily match official statistics.
 b. Using travel time on a transport network provides a more accurate measure of accessibility compared with the computationally much simpler straight-line distance, as employed, for example, by Hanson (1998).

Market access in Mexico is highest around the national capital and low in the lagging southern states



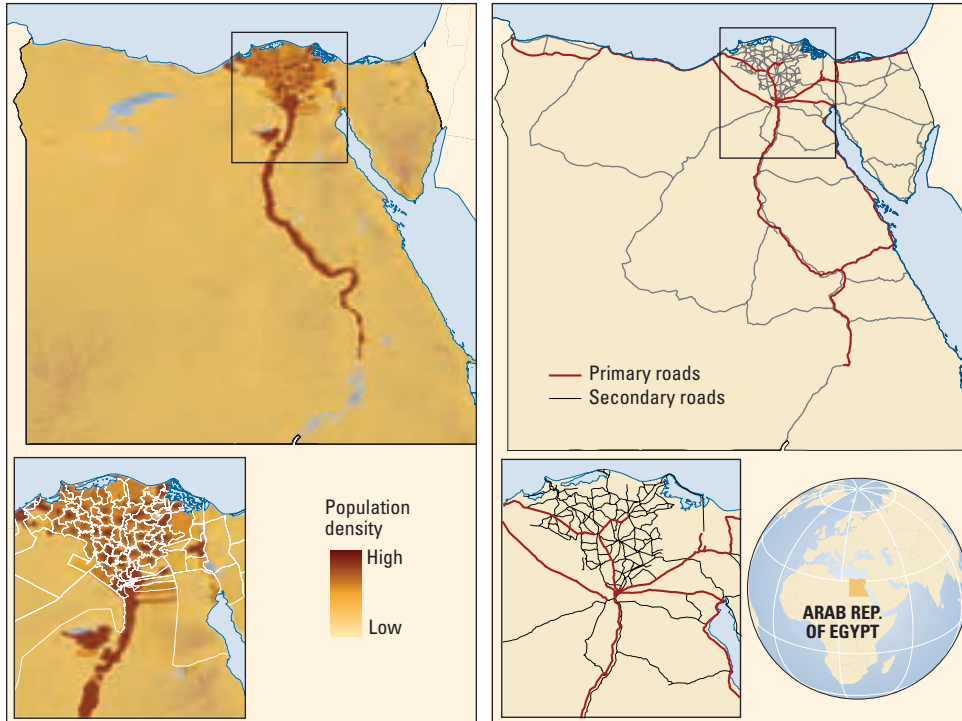
Source: Deichmann, Fay, Koo, and Lall 2004.

grew 48 percentage points faster on average in the Appalachian counties than in their economic “sisters,” population grew 5 points faster, and per capita income grew 17 points faster.³⁰

Institutions, infrastructure, and incentives to overcome distance, density, and division. When countries face divisions

caused by ethnolinguistic or religious heterogeneity, the forces of factor mobility can be weak even over relatively short distances. Examples include India and Nigeria. In such cases, spatially focused incentives may need to complement institutions and infrastructure to encourage economic production in lagging areas. Commonly used

Map 8.6 In the Arab Republic of Egypt, population densities are high in lagging areas, and connective infrastructure is needed to help spatial integration



Source: World Bank 2008b.

incentives include fiscal incentives and subsidies, special economic zones, industry location regulations, and investment climate improvements.

Only a few countries face the triple challenges of distance, density, and division. Nevertheless, incentives to promote economic development in lagging areas have been widespread. The experience has been disheartening.³¹ In good measure this has been because incentives have been used instead of, rather than in addition to, integrative institutions and infrastructure. More often than not, geographically targeted incentives would not even be necessary if the policy objective was to integrate leading and lagging areas, rather than promote industry in economically unfavorable places.

Table 8.1 summarizes policy options for domestic integration using a calibrated combination of institutions, infrastructure, and incentives. Policy makers should keep three points in mind in designing integration strategies. First, policies should focus primarily on improving the welfare

of people, encouraging them to seek economic opportunities *wherever they arise*. Second, they should help unify countries in the long term. Internal divisions may be a short-run constraint for economic integration, but the diminution of division should be a long-term objective. Third, policies that try to offset constraints posed by divisions should not inadvertently strengthen them. For example, making land and labor laws or school systems different in lagging areas may weaken economic and political integration.

The framework in action

This section uses the framework to discuss how countries have used specific policies to integrate lagging and leading areas.

Institutions that promote portable investments

Investing in human capital. Universal primary education and basic health are mandated across a broad range of developing countries, as shown by the review of national constitutions discussed earlier. For

Table 8.1 An instrument per dimension—a framework for area, territorial, or regional development policies

	Country type		
	Sparsely populated lagging areas	Densely populated lagging areas in united countries	Densely populated lagging areas in divided countries
Examples (countries)	Chile, China, Ghana, Honduras, Pakistan, Peru, Russian Federation, Sri Lanka, Uganda, Vietnam	Bangladesh, Brazil, Colombia, Arab Rep. of Egypt, Mexico, Thailand, Turkey	India, Nigeria
Dimensions of the integration challenge	Economic distance (1-D)	Economic distance High population densities in lagging areas (2-D)	Economic distance High population densities Internal divisions (3-D)
What policies should facilitate	Labor and capital mobility	Labor and capital mobility Market integration for goods and services	Labor and capital mobility Market integration for goods and services Selected economic activities in lagging areas
Policy Priorities			
Spatially blind institutions	Fluid land and labor markets, security, education and health programs, safe water and sanitation	Fluid land and labor markets, security, education and health programs, safe water and sanitation	Fluid land and labor markets, security, education and health programs, safe water and sanitation
Spatially connective infrastructure		Interregional transport infrastructure Information and communication services	Interregional transport infrastructure Information and communication services
Spatially targeted incentives			Incentives to agriculture and agro-based industry Irrigation systems Workforce training Local roads

Source: WDR 2009 team.

example, constitutions state that primary education should be free and universal, regardless of the place of residence, and supplementary national laws specify how many years of instruction are necessary to complete primary education. In conflict-driven or postconflict countries, basic education is viewed as a tool for national reconciliation and ensuring territorial integrity.

Despite such legislation, education, health, and poverty levels vary considerably among areas in many countries, particularly in Asia and Africa. In China, the human development index (a combination of education, health, and income levels) of the leading area in 2003 was 0.97, close to the Republic of Korea's index, and that of the lagging area was 0.59, about the same as Lao PDR's index (see figure 8.2). Chapter 2 pointed out that these gaps were even higher some years ago.

Developing human capital is essential whether policies aim to bring jobs to people or encourage the movement of people to jobs. One of the main gains comes from helping people in lagging areas migrate to areas with better opportunities. In Russia the large economic and physical distances

between lagging areas and potential destinations have deterred migration. Reducing economic distance, an additional year of education increases out-migration from remote areas by 40 percent.³² As Brazil transformed from an agricultural to a manufacturing economy, migration flows from the lagging northeast to the dynamic south and southeast increased between 1960 and 2000. In the northeast people who have at least a primary education migrate more frequently than less educated people.³³

One of the biggest success stories is in the United States, where a rise in the schooling of African Americans is believed to have been an important causal factor behind their "Great Migration" out of the South. In 1900, 90 percent of African Americans lived in the South, and only 4.3 percent of those born in the region were living elsewhere. By 1950 the proportion in the South had declined to 68 percent, and 19.6 percent of those born in the region had left it. Census data for 1900, 1940, and 1950 show that better-educated people were more likely to migrate because schooling increased their awareness of distant labor market opportunities and their ability to assimilate into a different social

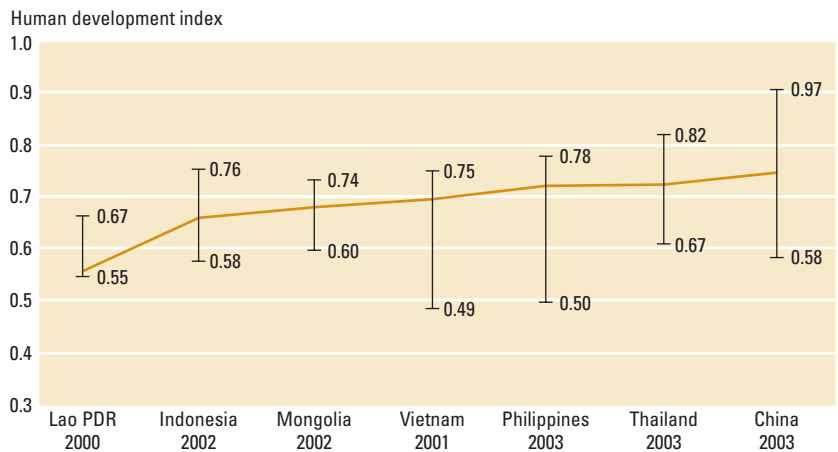
and economic environment, thus lowering the costs.³⁴ In another U.S. study of people tracked between 1968 and 1982, those with high education levels showed less inclination to change professions but were more likely to move geographically. A person with a college education was likely to move three times more often than a person with an eighth-grade education or less.³⁵

Opening options for migration stimulates greater human capital investments: people consider not only the local returns to education but also the returns in other locations. If schooling options are available in poor areas, potential migrants will invest in additional human capital, anticipating that jobs in leading areas require higher skills. Employers in those areas are likely to favor educated workers who signal themselves as more “able” than other workers from lagging areas. In the United States, African American school enrollment rates were significantly higher in southern states that previously had experienced high rates of out-migration. An increase in earlier migration rates explains 7.4 percent of the increase in African American enrollment rates between 1910 and 1930. As more African Americans migrated from the South, migration became more common and feasible, and school enrollments rose in response.

Schooling has a strong effect on welfare, as in Brazil. Nine states in the northeast have the worst education attainments, with gains smaller than in the rest of the country. Average illiteracy in the nine states fell 42 percent, less than the 49 percent in other states, and is still twice the national average (18 percent versus 9 percent). Differences in schooling explain more than half the income difference between the northeast and the leading southeast. If the local populace had the same education profile as people in the southeast, average incomes in the northeast would increase by more than half, moving from 62 percent of the Brazilian average to 93 percent.³⁶

Government programs, such as that for the universal primary education in Uganda, often reflect national priorities. Uganda’s program increased enrollments in the north—the country’s poorest area (see box 8.7). But more effort is needed to improve

Figure 8.2 Living standards can vary considerably between leading and lagging areas



Source: Gill and Kharas 2007.

education quality because of the higher costs of delivering services in the northern region. With poor implementation capacity and underspending in lagging areas, the gap between “regional needs” and allocations from higher levels of government becomes even wider. Although this could be seen as spatial targeting of public spending, an *outcome-oriented* policy framework would regard such efforts as spatially blind.

Transfer mechanisms for public services. Redistributive transfers from higher levels of government can reduce disparities in fiscal capacity and public service provision across subnational jurisdictions. At least three criteria motivate their allocation:

- **Need.** Areas with lower incomes would receive more investment, but richer areas may also demand more resources to meet the needs of population growth and congestion.
- **Efficiency.** Areas with higher returns to investment would receive more allocations.
- **Equality.** Spending is equalized across locations, so that public investments do not give an advantage to any single area.

Need-based transfers can improve public service delivery in lagging areas, because local tax bases may be inadequate to generate enough revenues. Intergovernmental transfers can help provide similar access to public services for residents anywhere in the country. Such transfers are particularly

BOX 8.7 *Universal primary education in Uganda increased access to schools in the northern areas*

President Museveni's decision to implement universal primary education (UPE) in 1996 made Uganda the first African country to institute such a policy. UPE abolished tuition and contributions to parent-teacher associations and school building funds. The impact on primary school enrollment has been large, with those in the poorest quintile gaining most and, within the poorest quintile, the enrollment of girls more than tripled between 1992–93 and 2002–03. In the lagging northern area, girls' enrollment rose from 40 percent to 73 percent.

UPE has had an equalizing effect in access but not in quality and performance. In the northern area, high rates of teacher absenteeism, low financial incentives to teachers, and limited education infrastructure and teaching materials produce low education performance. And the per capita budget allocations to the region do not always reflect the higher costs of delivering services there. A spatially blind program of education that emphasizes outcomes would not be geographically neutral.

Source: Bird and Higgins 2008.

important for subnational governments that depend heavily on federal transfers to cover spending. They finance about 60 percent of subnational spending in developing countries and transition economies, compared with about a third in member countries of the Organisation for Economic Co-operation and Development (OECD). In India central government transfers finance more than 30 percent of state spending. In China central-provincial and provincial-local transfers financed 67 percent of provincial, 57 percent of prefecture, and 66 percent of county and lower-level spending in 2003.³⁷

The allocation rules for transfers thus have a direct bearing on the potential for welfare improvement in different areas. But intergovernmental transfers that finance a large share of subnational expenditures are rarely made with spatial equity in mind. Indeed, the large transfers go to areas where people already receive high-quality services (see box 8.8).

Fiscal equalization transfers to lagging areas are financed by a net tax on the residents of leading areas. A common concern in the fiscal competition literature is that higher effective taxes in some areas will stimulate the out-migration of productive factors. The new economic geography provides some hope that tax-induced migration will be limited if residents (both firms

and households) benefit from agglomeration economies in leading areas. External economies induce mobile factors to cluster geographically and turn them into quasi-fixed factors. So if residents see benefits from locating near other similar residents, they become locked into these locations, less sensitive to tax differences. Moderate intergovernmental transfers financed by leading areas thus can finance public services in lagging areas.

Although transfers can bridge short-term fiscal constraints in lagging areas, fiscal dependency is a danger. If intergovernmental transfers finance a large share of expenditures, subnational governments are unlikely to improve local revenue collection or be accountable to local residents.³⁸ OECD countries have recognized these disincentives, and many have reduced the equalization component of revenues and grants (Italy and Spain, for example).

In India, where federal transfers redistribute resources to poor areas, average incomes in low-income states are 40 percent of those in high-income states. With local tax revenues linked to local incomes, the fiscal capacity of low-income states is worse than that of their high-income counterparts.³⁹ Compensating for this difference is a progressive fiscal redistribution system. Low-income states receive 48 percent of total central government transfers, compared with a 17-percent allocation to high-income states. The progressiveness of transfers is also evident per capita—Bihar, the poorest state receives Rs 501 per person in tax transfers. Maharashtra—a high-income state and home to India's leading urban center, Mumbai—receives only Rs 298 per person. But the translation of resources into services on the ground is not always visible in India's lagging areas.

Many developing countries are collecting and disseminating credible information on service entitlements to increase the accountability of service providers and improve outcomes. Increasing access to reliable quantitative information about service delivery outcomes makes it difficult for providers to ignore this information as anecdotal or irrelevant. Involving community members in identifying concerns and encouraging them to do their own monitoring can create

BOX 8.8 *Improving the spatial progressivity of Nigeria's intergovernmental transfers*

Poverty and service quality in Nigeria are worst in the north, particularly the north-east, and much better in the south, particularly the southwest.^{a,b} Nigeria's states rely on fiscal transfers from the center to provide most services. Nigeria's allocation of statutory grants (NGN 700 billion in 2006)^c is not targeted using a clear principle that supports poverty reduction: 54 percent of the funds are divided equally among all states regardless of population, land area, poverty, or other measures of need.^d Indicators of health care and education make up only 7 percent of the transfer.

The indicators chosen to direct that small percentage are regressive in that they favor states with the best service delivery and strongest infrastructure. Basing education transfers purely on enrollments favors states that already have education infrastructure and teachers, penalizing those that do not. Basing health transfers purely on hospital beds similarly supports better-off states that have the resources to build more hospitals.

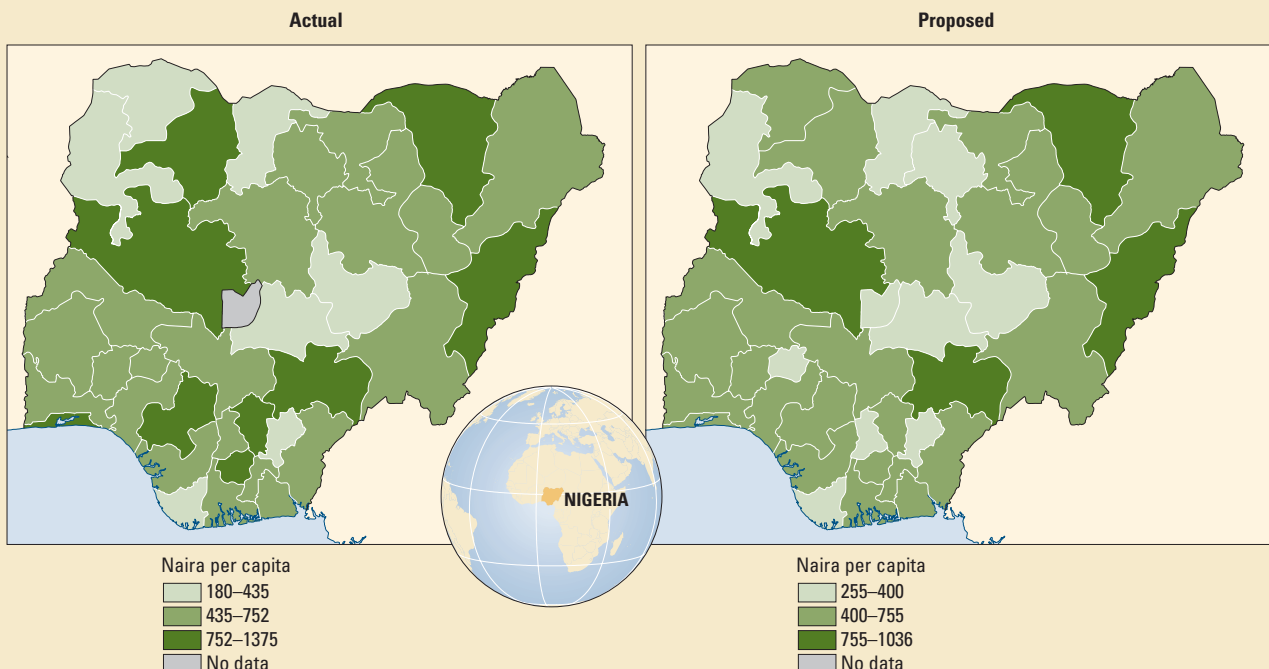
Per capita transfers to states in the north (about NGN 3,300 per person)

are lower than those in the southwest (3,700) despite the north's having the highest overall poverty and worst service delivery.^e To determine what would happen if transfers were spatially progressive, an illustrative policy experiment was developed by the World Resources Institute to identify the implications. Population and land area, reflecting demand for services, are used to allocate 50 percent of the statutory grant. Equal allocations are reduced to 5 percent (from 54 percent). Education and health care are split between measures to support current service levels and those to support progressive funding for states with the poor services. For education, school enrollment (increased from 4 to 5 percent) is used for the former purpose, and lack of access to schooling (increased from 0 to 5 percent) for the latter. Health care also received a 10 percent weight. The allocation for revenue effort is kept at 2.5 percent. Poverty was added as a category by weighting the number of poor and the poverty rate (headcount ratio) at 2.5 percent apiece.

The proposed changes would shift intergovernmental transfers toward states with the greatest need. The maps below show this shift in per capita terms.

- a. National Bureau of Statistics 2006.
- b. See numerous measures of service quality and access (National Bureau of Statistics 2006). Core Welfare Indicator Questionnaire (CWIQ). Data can be obtained from the Nigerian Bureau of Statistics electronically from <http://www.nigerianstat.gov.ng/cwiq/2006/survey0/index.html>.
- c. The 13 percent derivation of oil proceeds and disbursements from the oil fund (under which 9 of the 36 southern states where oil is produced receive 13 percent of oil revenues) represents about NGN 330 billion, or about one-third of total transfers to states in 2006. While the derivation strongly shapes Nigeria's overall transfers, this transfer is stipulated by the constitution, not by statute and so is not included here (Nigeria Federal Ministry of Finance, downloaded and compiled from <http://www.fmf.gov.ng/portal/detail.php?link=faac>).
- d. Revenue Mobilization Allocation and Fiscal Commission 2003.
- e. National Bureau of Statistics 2004.

Nigeria's statutory grant transfers per capita with actual transfers in 2006 (left) and with equity considerations (right)



Sources: World Resources Institute; www.funnelthemoney.org; Layke and Adam 2008.

a constituency of users willing to hold providers accountable.

Effective service delivery thus depends on having enough financial resources and translating them into outcomes on the ground. Investing in public goods in lagging areas reduces migration possibilities in the short term, because it improves the attractiveness of lagging areas. But targeted social investments to develop portable assets can improve the welfare of people and facilitate their longer-term mobility by making them better prepared for work in leading and intermediate areas.

Portable pension benefits. Even with portable assets, people may find it hard to move. In several countries, a lack of pension portability is likely to slow the pace of migration. Facing a potential loss in pension benefits because of differences in schemes or a lack of portability, workers may be less likely to move even when leading areas offer higher wages. The European Commission finds precisely this problem.⁴⁰

Better land market regulations. Well-functioning land markets make it possible for people to acquire land, exchange it with others, and use it effectively.⁴¹ And policies that set up defensible and tradable property rights for land and housing are likely to facilitate people's geographic mobility. The ability to defend rights legally rather than physically allows people to leave their land to take advantage of short-term opportunities. And the ability to use land as collateral or sell it allows them to finance migration costs and benefit from economic and social opportunities elsewhere.

Government involvement in managing land markets and enforcing property rights prevents households from wasting private resources. But too much government involvement can hurt efficiency. Large-scale public ownership can withhold land from the market and artificially increase prices, precluding many poor people from entering the market. And high direct costs and complicated procedures can reduce the incentive for people to formally exchange land.

Policies to safeguard the poor from rising land and housing costs often have hindered market functioning. In the Czech Republic, where there is a large rental market, de facto rent control has kept prices significantly

below the market rate and further restricted mobility. Tenants do not want to lose their favorable position in existing contracts.⁴² In Chile, meanwhile, the government's success in targeting housing subsidies to the poor in lagging areas has also created a strong incentive for people in these areas not to migrate, impeding convergence across locations even in a country that has a small population and homogenous society.

Institutions and infrastructure to connect lagging and leading areas

Transport infrastructure. Consider Bangladesh, a two-dimensional country, where the most lagging areas are distant from economic density but densely populated. Selected investments in corrective infrastructure can help greatly. The bridge over the Jamuna River opened market access for producers in the northwest around the Rajshahi division. Built at a cost of almost \$1 billion, this bridge provides the first road and rail link between the northwest, an intermediate area with the more developed east, which includes the national capital region. Better market access and reduced input prices encouraged farmers to diversify into high-value crops, such as modern varieties of rice and perishable vegetables.⁴³ The government has complemented connective infrastructure policies with spatially blind institutions to improve coverage of social services. The Expanded Program on Immunization aims to immunize all children less than one year old against the six vaccine-preventable diseases. The Health, Nutrition, and Population Strategic Investment Plan for 2003–10 improves coverage in districts with poor health indicators.⁴⁴

In the Islamic Republic of Iran, another two-dimensional country in the terminology of this Report, connective infrastructure improvements are necessary for spatial integration. In addition, spatially blind education policies of improving schools as well as conditional cash transfers for children to attend schools can improve welfare in lagging areas.⁴⁵ Turkey's lagging eastern areas have 44 percent of the land but only 5.7 percent of national motorways, and asphalt road coverage is 40 percent that

of the leading regions. The government's Village Infrastructure Support Project (KÖYDES) and Municipal Infrastructure Support Project (BELDES) have improved living standards in rural areas and small towns by paving roads and providing sanitation and drinking water networks.⁴⁶ And investments in human capital are likely to benefit potential migrants as well as those who stay behind.

Information and communication technologies. Mobile phones have driven down provision costs, boosting penetration and improving information flows. In 2003 China had more mobile phone users (269 million) than fixed-line users (263 million). For 29 areas in China between 1986 and 2002, telecommunication infrastructure was strongly associated with subnational GDP growth.⁴⁷ Because telecommunication investments are subject to diminishing returns, lagging areas can gain the most from them.

New technologies have lowered the costs of delivering financial services, making them more affordable. Many people in lagging areas have limited access to financial services, relying on cash-based transactions outside the banking system. But with rising international and national remittances, better access to financial services can help people in these areas overcome credit constraints. The proliferation of mobile services, even in remote areas, opens new opportunities to provide financial services over a mobile phone network (m-banking). Reports from the Philippines indicate that 3.5 million people have access to mobile phones that can transfer money.⁴⁸

Producers in lagging areas can receive better information on prices they can get for their products. In Kerala, India, mobile phones reduced the dispersion of market prices so much that prices differed only by the transport cost between markets.⁴⁹ And in Peru, a ubiquitous but often undervalued communication system is connecting small producers with markets—the postal service (see box 8.9).

Greater benefits in intermediate areas. Intermediate areas closer to centers of economic mass are likely to gain more from connectivity-enhancing infrastructure, and lagging areas are likely to gain less and at a

slower pace. Transport connectivity improvements in China's intermediate areas can be economically beneficial for lagging areas. By reducing the transport cost from the west to the coast, infrastructure investments in the central (intermediate) transportation hubs in Henan, Hubei, and Hunan provinces may well have greater effects on the west's development than improvements in the western area itself. But if China's overall growth is the main objective, infrastructure investments in the dynamic economic centers along the coast—Hebei, Jiangsu, and Shandong—could still provide the highest payoffs.⁵⁰

In Brazil improvements to the road network between the 1950s and 1980s did reduce transport and logistics costs. But most of the economic gains accrued to the center-west, with only small gains to the lagging northeast. During this time, its share of the national network increased from 15 percent to 25 percent. Even so, such investments did bring economic density closer to the lagging northeast.

In Colombia, with water and land suitable for agriculture, the mountainous topography makes freight transport difficult. So some intermediate areas are not well integrated

BOX 8.9 *Exporting by mail in Peru—connecting small producers to markets*

In many countries small enterprises are often excluded from export chains because they operate in villages or small towns or do not have the needed information to export. In Peru a trade-facilitation program called "Easy Export" connects small producers to markets. The key to this program is the most basic of transport networks—the national postal service.

How does it work? An individual or firm takes a package to the nearest post office, which provides free packaging. The sender fills out an export declaration form, and the post office weighs the package and scans the export declaration form. The sender pays the fee for the type of service desired. Goods with values of \$2,000 or less can be exported. The main benefit is that the exporter does not

need to use a customs agent, logistics agent, or freight forwarder or to consolidate the merchandise; even the packaging is provided. Firms or individuals need only to go to a post office with a scale and a paper scanner and to use the Internet to complete the export declaration for the tax agency.

Has it made a difference? Within six months of inception, more than 300 firms shipped goods totaling more than \$300,000. Most users are new exporters—microentrepreneurs and small firms, producing jewelry, alpaca and cotton garments, food supplements (natural products), cosmetics, wood art and crafts, shoes and leather, and processed food. And many of them are in the poorest areas of the country.

Source: Guasch 2008.

with large domestic and international markets. Casanare, the nation's largest rice producing area, has good potential for biofuels from corn and palm oil. But it takes 18 hours to reach Bogotá and 50 hours to access a main port. Improving road quality would increase market access and help the area's economy. La Mojana, an area with 5,000 square kilometers of flatlands, close to the Atlantic ports and most Colombian cities, is often flooded, because it lies in the buffer zone of two major rivers. Improving ecosystem management along with transport connectivity would improve its access to cities and ports.⁵¹

Interregional infrastructure improvements can bring higher economic concentration. The potential benefits of improving market access for peripheral areas may instead accrue to firms in larger agglomerations.⁵² And improving transport connectivity can further concentrate economic activity. Roads and rails run both ways—better transport connectivity not only provides market access to firms in lagging areas, but also allows firms in leading areas to reach markets. A decline in transport costs helps competitive firms in leading areas easily scale up production to reach these new markets at lower cost relative to local producers in lagging areas. So improving market access may hurt the production of standardized goods in lagging areas. But lower prices and better access to new products are likely to improve consumer welfare.

Experience validates this conjecture. In Italy reducing transport costs between the north and south in the 1950s deprived *Mezzogiorno* firms of their previous protection and accelerated their deindustrialization.⁵³ And in France, where transport costs within the country fell by 38 percent between 1978 and 1993, the geographic concentration of employment increased.⁵⁴

In addition to growth effects that vary across areas, it is also useful to consider the distributional effects of infrastructure improvements. Are the benefits of infrastructure improvements large enough and distributed progressively enough to reduce overall income inequalities, with more benefits accruing to the poor than the non-poor? Empirical evidence on this question is limited, but a study from Nepal shows that

the development of extensive rural road networks led to significant economic benefits, with considerable gains to the poor. But the poor's share often is not large enough to significantly reduce income inequality, because the benefits from road extension could be greater for the rich.⁵⁵ In Ghana the benefits of improving access to infrastructure by the poor could be increased by complementary spatially blind policies, such as education and health improvements, which would boost the use of that infrastructure.⁵⁶

Institutions, infrastructure, and incentives to overcome the 3-D challenge of distance, density, and division

Incentives to promote economic investments in lagging areas have been widely used by countries to accelerate national economic growth and balance growth outcomes across places. They seem to work better when they reinforce market signals and address coordination failures. They are less successful when governments pick the places to support growth. The following lesson seems to emerge: let markets pick the place, while governments help to push the pace.

Incentives that exploit geographic advantages are more likely to succeed. To stimulate economic growth, many governments have offered tax holidays, reliable infrastructure, and improvements to the business environment. Often the incentives are geographically focused—in special economic zones—to quickly create enclaves of growth, leaving nationwide infrastructure and governance shortfalls to the longer term. There is an ongoing debate over whether focused incentives slow the pace of economic reforms, but the interest here is in identifying where these incentives are more likely to succeed. Is it desirable to provide incentives in areas that already have good geography and human capital? Or should they be remedial measures to offset market forces and help develop lagging areas?

In China and India, spatially targeted incentives are most likely to succeed when they reinforce geographic advantages, particularly in areas advantaged by good access

to domestic and international markets (see box 8.10). In Uganda the returns from infrastructure development in highways and power supply are highest in areas that already have a skilled labor force and a diverse mix of industrial activities.⁵⁷ These happen to be along the corridor linking the country's two main agglomerations, Kampala and Jinja. Using infrastructure to spread out manufacturing, instead of facilitating its concentration, can slow national economic growth.

Incentives that enhance market links and improve agriculture performance in areas with good natural geography can be a part of development strategies for densely populated lagging areas where factor mobility is constrained. But before offering incentives, agriculture needs to be assessed as an economic driver in the local economy. *World Development Report 2008* provides a useful diagnostic technique to identify sub-national areas as agriculture based, transforming, or urbanized—a country's “three worlds” of agriculture—based on the share of aggregate growth originating in agriculture and the share of aggregate poverty in the rural sector. Applying this technique can help identify whether agriculture will remain a prominent feature of lagging areas in the short to medium term.

Consider Malaysia, where agriculture is important in the regional economies of the lagging areas, which account for more than 40 percent of the country's people (Sabah and Sarawak are home to more than 2 million).⁵⁸ To encourage agricultural development in the eastern peninsula, the national government has been offering reinvestment allowances for capital expenditures related to farming, providing cold-chain facilities and services for perishable agricultural produce and exempting food processing from tax.⁵⁹

But in Ghana, where the lagging north is mostly in the arid Savannah zone and population densities are low, expanding agriculture is less likely to facilitate territorial integration. Without allowing for large-scale migration or structural transformation, even a sharp acceleration in productivity growth in groundnuts and other northern staples is insufficient to bring the north up to par with the south in the medium term.⁶⁰

Let markets pick the places. The Republic of Korea is one of the few success stories involving spatially targeted incentives. To support economic growth in specific areas, the national government worked with the private sector to identify areas offering production advantages. Consistency between national industrial policy and regional policy objectives was instrumental. Although deconcentrating economic activity from the Seoul metropolitan region was an implicit policy objective in the government's tax sharing, decisions to promote export-oriented “strategic industries” were at the core of industrial and regional policies.⁶¹

Spatial equity did not guide national industrial policies. In fact, areas picked by the market in different phases of industrialization were encouraged. In the 1960s and 1970s, national industrial policies created new industrial cities—Ansan, Changwon, Kumi, Kwangyang, Pohang, and Ulsan. The private sector (*chaebols*) established large branch plants with imported technology and borrowed foreign capital. Market-driven industrial and regional policy led to different specializations across the country, with chaebol headquarters concentrating in Seoul, and production functions decentralized to areas outside the capital. Since the mid-1980s, industrial policy to support high-technology activities triggered industrial reconcentration in the capital region.

To speed the growth, incentives were complemented by infrastructure investments that connected the southeast to the capital region. The Gyeongbu expressway, which connects Busan, Daegu, Daejeon, and Seoul, enabled industries in the southeast to reach the capital region within five hours. Thus industries producing standardized intermediate goods in the capital and southeast regions benefited from considerable cost reductions. In the Republic of Korea, it may be fair to conclude that markets picked the place and governments pushed the pace.⁶²

Many countries have offered incentives to create economic mass in lagging areas. The idea is that to attract firms, lagging areas need to offset higher transport and logistics costs, weaker infrastructure, higher factor prices, and lower levels of public services. European countries have a long history of

BOX 8.10 *Special economic zones bring growth if they exploit advantages in natural and economic geographies*

Many developing countries have locations where infrastructure conditions and economic regulations are more hospitable than those typical in the rest of the country. These locations, often called special economic zones (SEZs), enhance industry competitiveness, attract foreign direct investment, and diversify exports. Recent estimates suggest that there are 2,300 such zones in developing and transition countries.^a

Look at China

The earliest developing-country SEZs were established in China under Deng Xiaoping's leadership in the early 1980s. In 1978 the government decided to open the country's economy to the outside world. SEZs and "open" coastal cities were integral to this process. In 1980 SEZs were established along the southeastern coast in Shenzhen, Zhuhai, and Shantou in Guangdong Prov-

ince and Xiamen in Fujian Province (see the map below). In 1984 14 coastal cities opened their doors to overseas investment, and in 1988 the entire island of Hainan was assigned SEZ status. Around the same time, the coastal belt around the Yangtze River Delta, the Pearl River Delta, and the Xiamen-Zhangzhou-Quanzhou Triangle in south Fujian opened for business with the world. In the early 1990s the government opened up 11 border cities and six ports along the Yangtze River. The developments reflected a strategy of exploiting the best locations to access external markets.

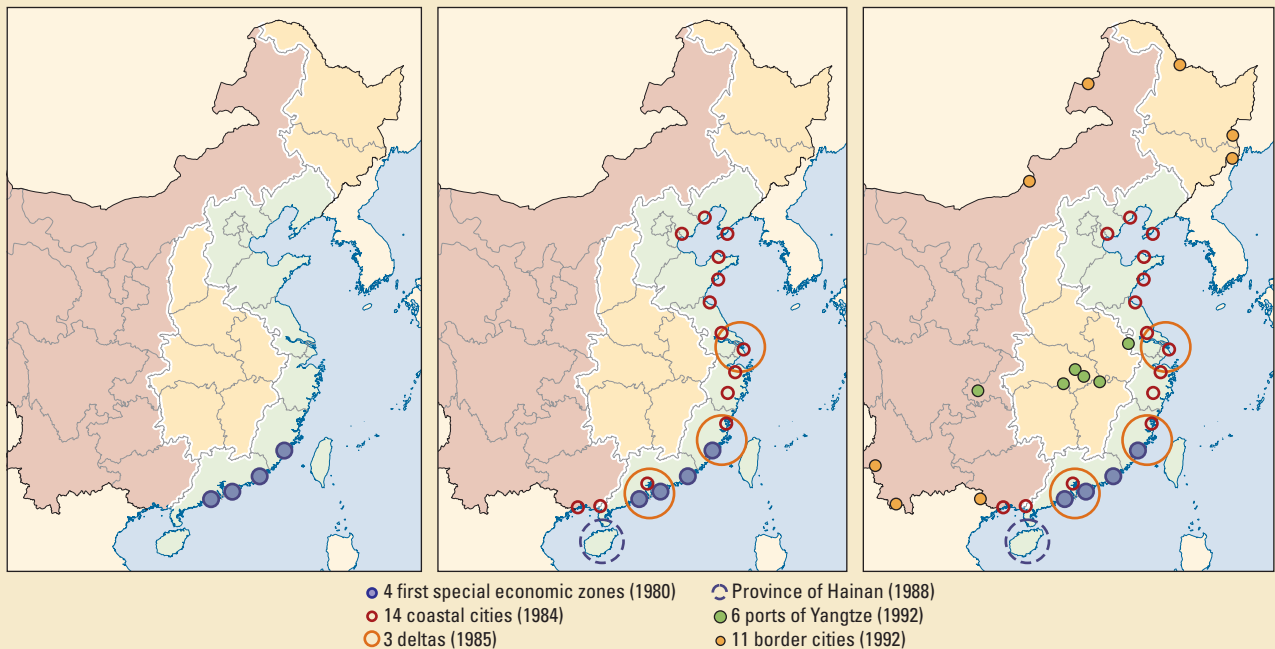
And at India

A cursory glance at India's SEZs suggests that they were not nearly as well located. In 2007 SEZs were approved in coastal states of Andhra Pradesh, Gujarat, Maharashtra, and Tamil Nadu, as well as inte-

rior states of Haryana, Karnataka, Punjab, and Rajasthan. Even in the coastal states, many SEZs are not along the coast.^b

Closer inspection reveals considerable diversity across product specialization, which range from standardized manufacturing to information technology and pharmaceuticals. Compared with standardized manufacturing products, human capital-intensive products depend more on reliable telecommunication infrastructure and access to airports, not harbors. Moreover, India's economic zones also target the large domestic market. Take Gurgaon, a satellite town a stone's throw from Delhi's international airport, which 20 years ago was a cluster of villages (*gaon* is the Hindi word for village). Now it is one of the main service-oriented corridors in the country, sitting in the middle of India's largest consumer market. It houses such infor-

China's special economic zones opened the country to external markets



Source: WDR 2009 team, based on Huang and Luo forthcoming.

BOX 8.10 *Special economic zones bring growth if they exploit advantages in natural and economic geographies—continued*

mation technology service providers as IBM and Microsoft, along with such consumer goods providers as Coca-Cola, Gillette, and Nestlé.

Unlike China's government-led SEZs, India's are being developed by the private sector, by such companies as Infosys and HCL, promoting information technology development,^c reflecting broader global trends. Of SEZs in developing countries, 62 percent are private, up from 25 percent

in the 1980s. They are generally more profitable and have better social and environmental track records than public zones, except in East Asia's government-run zones.

Location is the key: poor location is the main obstacle to success. It seems to matter more where the zones are located, not who owns and operates them. The lesson from China and India is that spatially directed interventions are more likely to succeed when they exploit

geographic advantages rather than try to offset them.

Source: WDR 2009 team.

a. SEZs take a variety of forms, which include free trade zones, export processing zones, enterprise zones, freeports, and specialized zones (Gauthier 2007).

b. Location of SEZs is based on SEZ INDI-AWEB at http://www.sezindiaweb.com/SEZ_map.html.

c. Information on SEZs in India is drawn from the Indiastat database.

using industrial policies to attract firms to lagging areas. But fiscal incentives, while politically efficient, have not transformed the economic fortunes of lagging areas:⁶³

- In Italy one of the main objectives of the national economic program begun in 1965 was to eliminate development gaps between the south and the rest of the country. To support this program, financial incentives were provided to firms in the south through partial exemptions of welfare contributions. Through 1992 public infrastructure and financial incentives promoted industrial development in the region.
- In France the Fifth National Plan (1966–70) provided assistance to agriculture and began to direct industrial investment away from Paris toward low-income areas in the west. Light industries—with lower transport costs and higher labor intensity—were targeted for relocation.
- The United Kingdom has supported economic development in northern England, Scotland, Wales, and northern Ireland. During World War II, wartime building controls directed industry out of the south of England and into northern and peripheral areas. During the postwar recession in 1958, employment in coal mining, textiles, and shipbuilding declined, renewing interest in bringing jobs to the north. The 1960s saw regionally differentiated investment

incentives and building grants to lagging areas through the Local Employment Act, along with relocation of 250,000 manufacturing jobs from prosperous to lagging areas.

A common theme in traditional regional policies focusing on taxes, subsidies, and regulations is that they were mainly central government initiatives to create employment and provide infrastructure with the objective of dispersing (or fighting the concentration of) economic activity. They targeted specific firms in the hope that they would become anchors in the local economy and have large multiplier effects.⁶⁴ But for the most part, these incentives have not stimulated sustained growth in the lagging areas, imposing large costs on taxpayers.

Most European countries now focus more on “soft” interventions, such as investing in innovation and supporting research institutes and science and technology parks (see table 8.2).⁶⁵ Central government programs have been replaced by greater cooperation between the public and private sectors. And rather than target specific firms, coordinated measures are attracting clusters of interrelated firms. Rigorous evaluations of these programs are hard to come by. But innovation policies that bring new information and technologies to lagging areas should in principle help in the long term.

Table 8.2 The OECD's experience with incentives to stimulate lagging areas has been evolving

Strategy	"Traditional" regional policies	"New" regional policies	The economic perspective
Objective	Create jobs and provide large-scale infrastructure	Provide complementary services, subsidize the cost of innovation—research institutes, science and technology parks	Incentives should be provided only to "new" activities—products new to the local economy and new technologies to produce existing products
Main players	Central government	Public-private partnerships	Public sector has limited information on what firms want
Focus area	Incentives to attract individual firms	Encourage development of clusters—both sectors and business development	Public sector support must target activities, not sectors; subsidized activities must have strong spillovers

Source: WDR 2009 team.

The U.S. federal government is also involved in smaller "economic development" programs. A recent review identifies 180 programs of U.S. federal agencies addressing issues as diverse as planning and economic development strategies, industrial parks, infrastructure repair, and building renovation. The agency with the greatest visibility in this group is the Economic Development Administration (EDA) of the U.S. Department of Commerce.⁶⁶ The EDA has spent more than \$188 billion on economic development, but with little coordination among initiatives, or a common policy objective. The EDA reports that its investments leverage about \$37 in private sector investment for every dollar that it spends.⁶⁷ No independent evaluation of these programs is available.

Area incentives, popular in developing countries, have produced mixed results at best (see table 8.3). In Brazil, where the goal has been to attract "dynamic" industries to the lagging north and northeast by providing fiscal incentives, expenditures have reached \$3 billion to \$4 billion a year. A recent impact evaluation shows that the allocation of these "constitutional funds" did induce the entry of footloose manufacturing establishments into lagging regions—but incentives were not attractive enough for vertically integrated industries.⁶⁸ Between 1970 and 1980 the Mexican government used fiscal incentives to promote industrial development outside the three largest urban agglomerations. Firms

locating outside these three large cities were eligible for a 50- to 100-percent reduction in import duties and income, sales, and capital gains taxes, as well as accelerated depreciation and lower interest rates. Their impact on economic decentralization was insignificant because import duties on raw materials and capital goods were low to begin with, so the reductions had no effect on location decisions and lost revenues.⁶⁹

In India the Industrial Policy Resolution of 1956 set up a strict licensing system to direct investment into lagging areas. The Indian government decided that no licenses would be issued to new industrial units in the vicinity of large metropolitan areas. And state governments and financial institutions were asked to deny support to new industries in metropolitan areas even when they did not require an industrial license. Large public sector projects (steel plants, for example) were located in the lagging states of Bihar, Madhya Pradesh, and Orissa. Industrial estates (or growth centers) received infrastructure investments and financial incentives for private industrial investment in designated lagging districts. The policies effectively stifled growth in areas that had good market access and human capital and did not allow exit of unproductive activities from lagging areas. Even after more than 30 years of draconian regulation, few districts in backward areas became major industrial centers.

The economic reforms in 1991 scrapped these licensing policies. The decline of production in inland areas continued, and places with good market access and good local business environments flourished. The ten best-performing industrial districts are now located south of the Vindhya mountain range, which divides north from south.⁷⁰

Similarly, in the former Soviet Union, central planners decided where firms would locate and tried to spread economic activity throughout the country's landscape. They spread production facilities across the former Soviet Union's millions of square kilometers. Far from markets and lacking specialization, their productivity suffered. How did the transition to markets change things? New firms located closer to markets and old ones

in remote areas closed down. The result was a 2.5 percent gain in firm productivity annually between 1989 and 2004.⁷¹

Coordinating local and national incentives. Incentives for lagging areas are best coordinated with national sectoral policies: taking stock of various national economic promotion initiatives and aligning spatial interventions with these policies can help. For instance, spatially targeted subsidies represent only 12 percent of Brazil's export promotion and industrialization subsidies, which favor the industrial southeast. Estimates suggest that these industrial subsidies cost \$42 billion in 1999, or 4.4 percent of GDP.⁷² In Brazil initiatives to recruit firms into the northeast clearly were fighting an uphill battle against broader industrial incentives that were better aligned with market forces.

In India, too, common pricing policies to reduce overall inequalities hurt the economic prospects of lagging areas. The Freight Equalization Policy of 1956 standardized the prices for transporting "essential" items such as coal, steel, and cement nationwide regardless of distance. Lost in the process were the location-based advantages of resource-rich areas. The affected areas included southern Bihar, eastern Madhya Pradesh, and western Orissa, each among the poorest, least industrialized parts of the country. The policy weakened the incentives for private capital to locate production in lagging areas.

Decentralization often has been accompanied by the efforts of subnational governments to create economic mass to meet expenditure responsibilities. They offer fiscal incentives and tax expenditures to attract firms to their jurisdictions. But if not coordinated, these incentives can be wasteful and counterproductive.

Look at the competition between states in Brazil, where Bahia and Rio Grande do Sul competed to attract a Ford Motor Company plant in the 1990s. Rio Grande do Sul offered a package of incentives to Ford that included a R\$210 million (around US\$200 million) loan from the state at extremely favorable conditions (6 percent interest, 15 years to repay), additional state expenditures of R\$234 million on infrastructure

Table 8.3 A range of instruments has been used by governments to create economic mass in lagging areas, with modest results

Instrument	Examples
Investment subsidies	Brazil: Constitutional funds (interest rate subsidies)—induced entry of footloose firms, but not for firms in vertically integrated industries (Carvalho, Lall, and Timmins 2005)
Tax holidays	Thailand: Income tax exemptions; sales tax reductions for firms locating in secondary cities in the 1970s—unsuccessful as deductions from taxable profits did not induce firms to locate in unprofitable locations (World Bank 1980)
Reductions in import duties	Mexico: Import duty and tax exemptions for deconcentrating manufacturing out of the three largest agglomerations—unsuccessful as tax rates were low to begin with (World Bank 1977, Scott 1982)
Industrial estates/free trade zones	Chile: Free trade zones in <i>zonas extremas</i> with exemptions for customs, value added tax, corporate profit, and real estate taxes—successful in the high-tax, high-tariff period until the mid-1990s, performance declined with national import duty reduction from 35 percent in the 1980s to 6 percent in 2000 (World Bank 2005b)
Regulation	India: Preference to backward areas in industry licensing (1956 industrial policy), with public sector–led industrial growth in lagging areas and regulations to stop industrial expansion in leading areas—few backward areas took off, and when regulations were relaxed, these lagging areas declined further (Chakravorty and Lall 2007)

Source: WDR 2009 team.

and public works, an assured loan from the national development bank of R\$500 million, and exemptions from local taxes for 10 years. When the state government tried to renegotiate the deal fearing that it was too generous, Ford moved to Bahia, which offered a package similar to the original one. Evaluations show that these "fiscal wars" cost Brazilian taxpayers around \$172,000 per job created—five times the cost of job creation in a General Motors plant in Tennessee.⁷³

Thinking through the design of incentives. Before using incentives to promote economic development in lagging areas, national and subnational governments should first find out why some areas are being bypassed by the market. Is it because of the low social returns to economic production in these places, the low ability to capture these returns, or the high cost of finance?⁷⁴ Have policies actively or inadvertently blocked local economic growth? The success of incentives depends on how well the problem is diagnosed, perhaps starting with area-specific natural, human, and infrastructure endowments.⁷⁵ "Know thy economy," a phrase used in the *World Development Report 2000/01*, should be the motto of subnational governments. Good information can promote constructive

debate on development options and build consensus around a development strategy.

If the information and subsequent analysis points to specific opportunities for growth, the next step is to identify whether the planned incentives are to subsidize capital formation or to promote innovation. If they are to attract firms with potential local multipliers, it is important to know whether the product lines value agglomeration economies, which would reduce the power of the incentives. For firms in sectors in which economies of scale and agglomeration are important for production, it is less likely that spatially targeted interventions will attract them to lagging areas. Industrial surveys in Brazil, China, India, Indonesia, and Mexico show that manufacturing firms in many product lines value both internal scale economies from market access and agglomeration economies in deciding their location.⁷⁶ Firms producing standardized products serving local markets, and those specializing in natural resources, are less likely to value agglomeration economies than are those depending on skilled labor, business services, and access to information.

And from a national growth perspective, it is important to find out whether relocating “targeted” industries produces net additional employment and output nationally. If not, local efforts of attracting industry may be zero-sum games. If the relocated industries are less productive, policy makers may face a negative sum. If incentives are being used to promote innovation, it is important to ensure that local production processes can accommodate the innovations.

Avoiding Balkanization: the political benefits of economic integration

Economic and political objectives can clash, but more often they coincide. In the Western Balkans, the former republic of Yugoslavia became a federation after World War II but disintegrated when its republics declared themselves independent in the early 1990s. Fueling the disintegration was rising autarky and fragmentation in Yugoslavia since the mid-1970s, with barriers to movements of people and capital across

republican borders, limited interrepublic trade, and duplicated economic production. In 1987, for example, 70 percent of all production in Serbia was consumed in the local market.⁷⁷

As discussed in chapter 5, analysis suggests that factor mobility equalizes welfare across areas, weakening incentives to break away from an economic and political union.⁷⁸ By contrast, persistent inequalities across areas fuel disintegration movements. Unity, not uniformity, is the valid principle for both political and economic integration.

This chapter has provided a framework for integrating lagging and leading areas as countries address economic distance, misplaced density, and internal divisions. Economic forces are likely to produce spatial divergence in growth outcomes. Economic models of geography and growth show that increasing returns to scale and agglomeration economies can start and sustain a virtuous circle of growth and investment in a few areas.

For valid reasons, though, policy makers are concerned with reducing geographic imbalances soon, sometime between now and the long term. And sometimes, political pressures can be such that widening divergence at any point is unacceptable. The typical territorial development policy response has emphasized targeted incentives and large-scale infrastructure to encourage economic production in lagging areas. However, the evidence reviewed in this chapter shows that many such policies have led to waste. In the meantime, policies that address institutional bottlenecks that can help people seize opportunities elsewhere or improve their living standards locally may be ignored.

Even with such compromises, the biggest part of the policy challenge lies in identifying the outcomes that can be realistically sought, that is, which depend on the stage of development and the fiscal and institutional capacities of a country. Where incomes are low, it may be feasible only to reduce spatial disparities in poverty rates and in access to essential shelter, water, health, nutrition, and education services. China’s 11th Five-Year Plan passed by the National People’s Congress in 2006 states

that “the construction of public finance system should be accelerated . . . to gradually equalize basic public services.” In October 2007 the 17th Congress again pointed out that, to narrow regional disparities, equalization of basic public service provision would be the priority. Upper-middle-income countries can be more ambitious in equalizing basic consumption indicators across areas, and developed countries such as those in the EU more ambitious still. Reducing spatial inequality in disposable incomes may be the relevant target for high-income countries.

But at all stages of development, forcing economic production to spread evenly across areas is both elusive and expensive. Growth generally is unbalanced, but it always brings more resources for societies to balance development outcomes. Policy makers should identify and execute strategies that balance development outcomes across areas by means other than resisting the forces of unbalanced growth—because that is tantamount to fighting economic growth itself.

The framework in this chapter is intended to help policy makers identify the policies best suited to addressing domestic integration. The suggested solutions consider country-specific conditions. The main points? First, integration strategies should increase the access of the poor in lagging areas to opportunities, through a set of spatially blind institutions. Second, infrastructure that connects lagging to leading areas is needed when the problem of distance between lagging and leading areas is coupled with misplaced population density in the lagging areas. Third, when the problem of economic distance comes accompanied by both misplaced

Table 8.4 Assessing the performance of area development policies

Performance criteria	Reduce inequalities across regions? (interregional equity)	Pro-poor? (interpersonal equity)	Avoid tradeoff with spatial efficiency?
Institutions	Yes	Yes	Yes
Infrastructure	No	No	Yes
Incentives	No	No	No

Source: World Bank 2008b, based on country-specific case studies.

density and division, targeted incentives are necessary.

This framework was tested using country-specific case studies of spatial integration, which included Brazil, Ghana, India, Mexico, Russia, and Uganda. Each set of integration policies is examined using three criteria: (1) Do they reduce economic distance across subnational areas? (2) Are these policies pro-poor? (3) Are these policies spatially efficient (that is, do these policies avoid tradeoffs with spatial efficiency)? Table 8.4 summarizes the findings. Efforts to strengthen institutions fare well on all three criteria. Although infrastructure investments may not reduce economic distances or help the poor, they can be spatially efficient. Geographically specific incentives do not fare well.

Perhaps most important, the chapter identifies the point at which all discussions of territorial development policies should start—with spatially blind institutions. Infrastructure that connects lagging areas to markets can help nations integrate. Sometimes, not always, these discussions should include spatially targeted incentives. The right mix of integration instruments will bring the benefits that come from both unbalanced growth and inclusive development.